

HUDSON LIGHT AND POWER DEPARTMENT 2017 ANNUAL REPORT

MESSAGE FROM THE BOARD

It is Hudson Light and Power's mission to provide its consumers with the most reliable, economical and environmentally responsible energy possible. During 2017, we reached our goals and set the benchmark even higher for future progress in these three important areas.

The reliability of Hudson Light's system performed well above the rest of the nation during 2017. On average, we restored service about 31% faster than utilities nation-wide and the frequency of outages on our system was about a third the national average. Hudson Light continues to upgrade its existing system with an eye towards enhancing reliability. The near future will see the addition of a state of the art metering system that will allow for immediate diagnosis and response to service interruptions, and instantaneous data flow for improved customer service and budget planning.

Hudson Light achieved an elusive economic goal during 2017 - providing the average customer with the lowest net bills in Massachusetts and New England.¹ Fiscal responsibility in the day-to-day operations of the Department coupled with success in predicting load and purchasing energy in the wholesale markets landed Hudson Light in the coveted position. Wholesale market and transmission costs beyond our control are expected to impact utilities across New England in the coming years. We will take every step possible to ameliorate the impact on our customers and maintain rates that are among the lowest in New England.

Hudson Light tracks its carbon emissions to ensure that it meets its environmental responsibilities. In 2017, 86% of the electricity purchased and generated by the Department was from sources that do not generate greenhouse gases. We replaced inefficient street lighting with more cost-effective energy-conserving LED lights, partnered with business in the launch of a new ~6 mega-watt solar generator in Hudson, and expanded our incentive rebate programs. While Hudson Light already surpasses emissions standards that the State has set for 2050, we have joined forces with our fellow municipal utilities to set a course whereby the Public Power in Massachusetts will become the standard bearer for environmental responsibility.

Daniel Murphy, Chairman

John Monteiro, Clerk

Justin Provencher, Member

¹ Based upon quarterly rate studies conducted by the Massachusetts Municipal Wholesale Electric Company during 2017 and response to a 2017 New England-wide study conducted in-house.

GENERAL MANAGER'S REPORT

Hudson Light and Power Department congratulated Justin Provencher on being elected to the Municipal Light Board in May of 2017. Mr. Provencher served the Town of Hudson most recently as the Chairman of the Finance Committee and is a welcomed asset to the Light Department.

In 2017, the Department successfully maintained over 400 miles of electric circuits resulting in total system availability or "up-time" of 99.91%. Our reliability statistics far exceed those of the national averages in terms of the outage restoration time and the total number of outages.

In October, the Department assisted the Town of Wolfeboro, New Hampshire in restoring power after a violent storm that brought heavy rain and winds over 60 mph. Two trucks and four line workers were dispatched for almost a week to assist in rebuilding their infrastructure. This type of mutual aid is critical to the success of public power utilities and we were happy to assist.

Progress was made in Eversource's Sudbury to Hudson Transmission Line project proposal as the Massachusetts Energy Facility Siting Board (EFSB) heard testimony from all interested parties. The Department hosted an EFSB visit to the Forest Avenue substation, attended public hearings, provided witnesses, and responded to EFSB questions throughout the year. The Department supports the project due to its reliability and cost benefits but has not taken a position on the proposed routing of the line.

The Department continued to invest capital into infrastructure improvements. Multiple neighborhoods were converted from old primary voltages to the standard 13,800 volts. This work included setting new poles, installing new wires and replacing old transformers on the following streets in Hudson and Stow: Pope, Felton, Birchwood, Rice, Lincoln, Randle, Johnson, Bertha, Harvey, Edgewood, Mareldor, White Pond, Wilkins, Gleasondale, Municipal Drive, Lee, Herman, and Woodrow. On-going capital projects include a redesign of the 115KV switchyard related to the new transmission line, new substation circuit breakers, new underground duct bank along Forest Avenue, and a new Advanced Metering Infrastructure system.

Using the Renewable Energy and Energy Conservation Incentive Funds along with a Massachusetts Department of Energy Resources grant, a project to replace all street lights with new LED type is in progress. This project is expected to save the Town of Hudson about \$70,000 per year upon completion. These REECIP funds were also used to install the first commercially available electric vehicle charging station in our territory on South Street in Hudson.

In 2017, the Department celebrated the retirements of Karen Sawyer after 32+ years of service and Ricky Peck after 34+ years of service. As Administrative Secretary, Karen was an invaluable resource to both the Department and to the Municipal Light Board as she had attended almost all of the Light Board public meetings throughout her career. Ricky was a valued asset in the Meter Department and on the line crew. The Department thanks both for their dedicated service and wishes them a long, healthy and happy retirement.

In accordance with Chapter 164, Section 57 of the Massachusetts General Laws, attached are the estimated income and estimated receipts and expenditures from the sales of electricity:

Estimated Income from Sales of Electricity - 2018

From Sales to Municipal Customers	\$	1,263,517
From Sales to Domestic Customers		10,724,432
From Sales to Commercial Customers		3,021,792
From Sales to Power Customers		7,057,555
From Street Lights: Stow and Other Communities		4,069
Hudson		67,642
Total Income	\$	22,139,007

Estimated Expenditures - 2018

Production, Generation, Purchased Power*	\$	15,584,236
Distribution and Transmission		2,328,622
General		2,505,874
Depreciation		1,440,000
Total Expenditures	\$	21,858,732

The estimated cost of electricity to be used by the Town of Hudson
for all purposes for the year ending June 30, 2018 is: \$ 810,025

The financial statistics of the Hudson Light and Power Department are shown in the following pages.

Brian R. Choquette, General Manager

*In addition to Production, Generation and Purchased Power Costs, are MMWEC's accelerated debt service recovery and transfers from the Rate Stabilization Fund.

DEFINITIONS

Accrual Basis of Accounting: revenue is recognized when it is realized and expenses are recognized when incurred, without regard to the time of receipt of payment. The focus of accrual accounting is on the realization of revenue, the incurrence of costs, and the matching of revenue with costs incurred. This "matching" concept requires that the cost incurred to create revenues be accounted for at the same time. Consequently, if revenue is accounted for during a period, the "matching" costs must be accounted for even if it requires an estimation of these costs. Hudson Light and Power Department utilizes Accrual Basis of Accounting.

Audited Financial Statements: The current year financial statements shown in this report are unaudited. Prior year financial statements have been updated using the most recent audit findings.

Balance Sheet: A Balance Sheet is a concise statement of the assets, liabilities and equity of a business as of a given date.

Assets: Anything owned that has monetary or utility value is an Asset. Assets are divided into Plant or Property Assets, Current Assets, Deferred Assets or Other Assets. Property Assets are buildings, generation equipment, transmission equipment, distribution equipment, etc. in use. Construction Work In Progress is Plant under Construction which has not been completed as of the date of the statement. Current Assets are cash, receivables, inventories of generation fuel, gasoline, lube oil, poles, etc., prepayments, unbilled utility revenues and other miscellaneous assets. Deferred Assets represent expenditures for preliminary surveys, plans, and investigations made for the purpose of determining the feasibility of utility projects under consideration.

Liabilities: Liabilities consist of debts outstanding (unpaid bills) and in the process of accruing. They are usually classified as to Current Liabilities, Deferred Liabilities, or Long-Term Debt.

Current Liabilities are Short-Term Liabilities. They generally consist of obligations which are to be liquidated within a year from the balance sheet date and include amounts accrued to date or those liabilities which accumulate from day to day. The most common Current Liabilities are accounts payable (bills owed as of a specific date), accrued salaries and wages, accrued interest, etc.

Deferred Liabilities: Advance billings for services rendered, etc.

Long-Term Debt: Debts incurred through borrowing such as bonds and notes or other financial obligations which are payable over a long period of time.

Equity: The amounts paid on loans over the Department's existence, moneys invested by the Town in the Department, and the earnings retained in the Department as represented by property.

Income Statement: An Income Statement is a report in summary form of the revenue earned by a particular business during a specified period, together with the related costs and expenses and the losses for that same period and the resulting net income (or net loss).

COMPARATIVE BALANCE SHEET

ASSETS

	2017	2016	Increase (Decrease)
Electric Utility Plant (Net)...			
Intangible Plant	\$ 3,909.66	\$ 3,909.66	\$ -
Production Plant in Service	893,010.82	1,014,088.45	(121,077.63)
Nuclear Fuel	56,515.14	75,680.22	(19,165.08)
Transmission Plant in Service	1,056,438.48	1,168,336.22	(111,897.74)
Distribution Plant in Service	6,355,224.42	6,300,840.51	54,383.91
General Plant in Service	1,463,322.84	1,290,409.12	172,913.72
Construction Work In Progress	399,750.05	53,213.59	346,536.46
Total Utility Plant In Service	<u>\$ 10,228,171.41</u>	<u>\$ 9,906,477.77</u>	<u>\$ 321,693.64</u>
Other Property & Investments...			
Investments in Assoc. Companies	\$ 53,580.92	\$ 16,355.92	\$ 37,225.00
Other Investments	-	-	-
Total Other Property & Investments...	<u>\$ 53,580.92</u>	<u>\$ 16,355.92</u>	<u>\$ 37,225.00</u>
Cash Assets...			
Operation Cash	\$ 8,419,887.41	\$ 4,296,519.36	\$ 4,123,368.05
Miscellaneous Cash	-	1,450,385.01	(1,450,385.01)
Depreciation Fund Investment	7,649,264.44	6,107,310.49	1,541,953.95
Insurance Escrow Reserve	71,395.39	70,980.93	414.46
Petty Cash	500.00	500.00	-
Deposit Interest Account	-	-	-
Customer Deposits Account	1,429,845.74	1,315,653.16	114,192.58
Total Cash Balances	<u>\$ 17,570,892.98</u>	<u>\$ 13,241,348.95</u>	<u>\$ 4,329,544.03</u>
Other Current and Accrued Assets...			
Customer Account Receivables	\$ 1,779,932.76	\$ 1,997,025.47	\$ (217,092.71)
Other Accounts Receivables	146,811.27	107,237.58	39,573.69
Material and Supplies	1,176,758.85	1,125,469.18	51,289.67
Prepayments	1,032,301.35	3,336,377.42	(2,304,076.07)
Prepaid Pension	2,905,354.67	-	2,905,354.67
Int. & Dividends Receivable	-	-	-
Misc. Current & Accrued Assets	-	-	-
Total Other Current & Accrued Assets	<u>\$ 7,041,158.90</u>	<u>\$ 6,566,109.65</u>	<u>\$ 475,049.25</u>
Deferred Assets...			
Preliminary Survey Charges	\$ -	\$ 35,265.00	\$ (35,265.00)
Deferred Outflow Pension	3,345,180.91	2,332,972.01	1,012,208.90
Total Deferred Assets	<u>\$ 3,345,180.91</u>	<u>\$ 2,368,237.01</u>	<u>\$ 976,943.90</u>
Total Assets	<u><u>\$ 38,238,985.12</u></u>	<u><u>\$ 32,098,529.30</u></u>	<u><u>\$ 6,140,455.82</u></u>

EQUITY AND LIABILITIES

Equity...	2017	2016	Increase (Decrease)
Loans Repayment	\$ 1,925,000.00	\$ 1,925,000.00	\$ -
Invested by Town	20,093.39	20,093.39	-
Retained Earnings	<u>13,011,788.59</u>	<u>12,536,967.39</u>	<u>474,821.20</u>
Total	\$ 14,956,881.98	\$ 14,482,060.78	\$ 474,821.20
 Current & Accrued Liabilities...			
Accounts Payable	\$ 1,582,338.01	\$ 1,050,231.21	\$ 532,106.80
Customer Deposits	1,261,683.42	1,160,542.53	101,140.89
Customer Deposits-Interest	156,176.70	163,312.92	(7,136.22)
Tax Collections Payable	(570.49)	(6,679.07)	6,108.58
Old Stow Rd Solar Collateral	250,000.00	-	250,000.00
Accrued OPEB Liability	205,637.00	209,806.00	(4,169.00)
Accrued REECIP Liability	208,458.70	355,523.96	(147,065.26)
Accrued RCS Liability	56,655.79	113,707.54	(57,051.75)
Misc. Current & Accrued Liabilities	406,514.07	(4,016,568.68)	4,423,082.75
Net Pension Liability	15,523,769.84	13,476,751.84	2,047,018.00
Deferred Pension Inflow	28,508.00	-	28,508.00
Customer Advances for Construction	<u>436,583.39</u>	<u>61,719.51</u>	<u>374,863.88</u>
Total Current & Accrued Liabilities	\$ 20,115,754.43	\$ 12,568,347.76	\$ 7,547,406.67
 Deferred Credits...			
Misc. Deferred Credits	\$ -	\$ -	\$ -
Deferred Credit-Power Adj Charge	<u>1,400,849.54</u>	<u>3,459,167.60</u>	<u>(2,058,318.06)</u>
Total Deferred Credits	\$ 1,400,849.54	\$ 3,459,167.60	\$ (2,058,318.06)
 Reserves...			
Injuries and Damages Reserve	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total Reserves	\$ -	\$ -	\$ -
 Contributions in aid of Construction...			
Total Contributions in aid of Construction...	<u>\$ 1,765,499.17</u>	<u>\$ 1,588,953.16</u>	<u>\$ 176,546.01</u>
Total Equity & Liabilities	<u>\$ 38,238,985.12</u>	<u>\$ 32,098,529.30</u>	<u>\$ 6,140,455.82</u>

STATEMENT OF EQUITY

Retained Earnings on January 1, 2017	\$ 12,536,967.39
Net Income or (Loss)	698,649.41
Miscellaneous Credits to Retained Earnings	<u>64,779.77</u>
Total	\$ 13,300,396.57
Appropriation of Retained Earnings Returned to Towns	\$ 288,607.98
Miscellaneous Debits to Retained Earnings	<u>-</u>
Total	\$ 288,607.98
 Total Retained Earnings on December 31, 2017	 <u>\$ 13,011,788.59</u>

Comparative Income Statement

Operating Statement

	2017	2016	Increase (Decrease)
Operating Revenue	\$ 23,403,097.77	\$ 27,770,597.24	\$ (4,367,499.47)
Operating Expense...			
Production	\$ 765,594.45	\$ 674,675.31	\$ 90,919.14
Purchased Power Expense	9,173,087.43	14,585,739.92	(5,412,652.49)
Transmission Expenses	5,122,764.49	5,007,080.56	115,683.93
Distribution Expenses	895,268.51	947,625.32	(52,356.81)
General Expenses	5,406,017.87	4,787,328.05	618,689.82
Depreciation	1,414,350.84	1,374,205.03	40,145.81
Taxes	21,276.50	19,113.68	2,162.82
Total Operating Expenses	<u>\$ 22,798,360.09</u>	<u>\$ 27,395,767.87</u>	<u>\$ (4,597,407.78)</u>
Net Operating Revenues	\$ 604,737.68	\$ 374,829.37	\$ 229,908.31
Other Income...			
Income From Contract Work	\$ -	\$ -	\$ -
Interest & Dividend Income	114,631.45	65,094.19	49,537.26
Misc. Nonoperating Income	2.00	19.00	(17.00)
Total Other Income	<u>\$ 114,633.45</u>	<u>\$ 65,113.19</u>	<u>\$ 49,520.26</u>
Miscellaneous Income Deductions...			
Other Income Deductions	70.00	129.00	\$ (59.00)
Total Income Deductions	<u>\$ 70.00</u>	<u>\$ 129.00</u>	<u>\$ (59.00)</u>
Inc. Before Interest Charges	\$ 719,301.13	\$ 439,813.56	\$ 279,487.57
Interest Charges...			
Other Interest Expense	\$ 20,651.72	\$ -	\$ 20,651.72
Total Interest Charges	<u>\$ 20,651.72</u>	<u>\$ -</u>	<u>\$ 20,651.72</u>
Net Income Before			
Return to Towns	\$ 698,649.41	\$ 439,813.56	\$ 258,835.85
Less Return to Towns	<u>288,607.98</u>	<u>283,897.66</u>	<u>4,710.32</u>
Net Income (Loss)	<u><u>\$ 410,041.43</u></u>	<u><u>\$ 155,915.90</u></u>	<u><u>\$ 254,125.53</u></u>

Income Statement Detail

Operating Revenue

January 1, 2017 to December 31, 2017

Sales to Residential Consumers	\$ 6,259,212.16
Sales to Commercial Consumers	1,615,763.47
Sales to Power Consumers	3,391,672.88
Private Property Lighting Sales	90,304.05
Municipal Sales...	
Hudson Street Lights	121,924.34
Hudson Municipal Buildings	70,118.15
Hudson Municipal Power	310,464.82
All Electric Municipal Buildings	-
Stow & Berlin Street Lights	5,605.35
Stow, Maynard & Other Municipal Service	257,016.07
Sales for Resale	-
Total Revenue from Sales of Electricity	<hr/> \$ 12,122,081.29
Power Adjustment Charges...	
Residential Sales	\$ 3,989,252.07
Commercial Sales	1,135,182.68
Power Sales	3,384,934.09
Private Property Lighting	21,788.94
Municipal Power Adjustment Charges...	
Street Lighting Stow et al	-
Municipal Power Hudson	257,822.95
Municipal Commercial Hudson	49,662.02
Municipal Power Stow et al	207,581.04
Municipal Commercial Stow et al	12,842.69
Municipal All Electric	-
Miscellaneous Electric Sales	2,058,318.06
Total Power Adjustment Charges	<hr/> \$ 11,117,384.54
Total Revenue From Sale of Electricity	<hr/> \$ 23,239,465.83
Other Income...	
Other Electric Revenues (RCS, etc.)	<hr/> \$ 163,631.94
Total Income	<hr/> <hr/> \$ 23,403,097.77

Income Statement Detail

Expenses

January 1, 2017 to December 31, 2017

Production

Nuclear Power Generation

Operation Supervision	\$ 25,396.00
Fuel	46,572.08
Coolants and Water	4,150.00
Steam Expenses	5,325.00
Electric Expenses	-
Miscellaneous Nuclear Power Expenses	52,697.00
Maintenance Supervision	4,602.00
Maintenance of Structures	5,891.00
Maintenance of Reactor Plant Equipment	23,509.00
Maintenance of Electric Plant	6,442.00
Maintenance of Miscellaneous Nuclear Power	17,403.00
Total Nuclear Power Production Expenses	\$ 191,987.08

Other Power Generation...

Operation Supervision	\$ 30,295.91
Fuel Oil	21,619.95
Fuel Natural Gas	6,292.17
Generation Expense	144,406.23
Generation Expense-Lube	2,104.42
Miscellaneous Other Power Generation Expenses	91,401.45
Maintenance Supervision	22,028.88
Maintenance of Structures	149,766.89
Maintenance of Generation and Electric Plant	105,314.84
Maintenance of Miscellaneous Generation Plant	376.63
Total Other Production Expenses	\$ 573,607.37

Purchased Power Expenses...

Purchased Power-Entitlement	\$ 5,326,389.71
Purchased Power-ISO	3,839,672.61
System Control and Load Dispersion	7,025.11
Other Expenses Purchase Power	-
Total Purchased Power	\$ 9,173,087.43

Distribution Expenses...

Operation Supervision and Engineering	\$ 25,682.32
Station Expenses	134,989.99
Overhead Line Expenses	38,736.10
Underground Line Expenses	3,052.90
Street Lighting & Signal Expenses	17,672.28
Meter Expenses	134,926.75

Income Statement Detail

Expenses (continued)

Distribution Expenses (cont.) ...

Customer Installation Expense	71,028.63
Miscellaneous Distribution Expenses	68,498.39
Rents	388.01
Maintenance of Supervision and Engineering	24,601.36
Maintenance of Station Equipment	15,037.93
Maintenance of Overhead Lines	327,596.28
Maintenance of Underground Line	11,157.45
Maintenance of Line Transformer	12,277.39
Maintenance of Street Lighting	5,937.10
Maintenance of Meters	69.65
Maintenance of Miscellaneous Distribution Plant	3,615.98

Total Distribution Expenses \$ 895,268.51

Transmission Expense \$ 5,122,764.49

General...

Supervision	\$ 25,657.16
Meter Reader Expenses	29,388.30
Customer Records and Collection Expenses	467,292.35
Advertising Expense	77.40
Miscellaneous Sales Expense (RCS)	-
Administrative and General Salaries	596,144.13
Office Supplies and Expenses	19,905.47
Administrative Expenses Transferred	-
Outside Services Employed	137,218.34
Property Insurance	43,272.00
Injuries and Damages	105,639.42
Employee Pension and Benefits	3,578,941.50
Regulatory Commission Expenses	-
General Advertising Expense	11,133.66
Miscellaneous General Expenses	43,043.47
Maintenance of General Plant	253,947.82
Transportation Expenses	94,356.85
Depreciation Expense	1,414,350.84

Total General and Depreciation Expenses \$ 6,820,368.71

Real Estate and Other Taxes \$ 21,276.50

Total Operation Expenses \$22,798,360.09

FOOTNOTE TO FINANCIAL STATEMENTS

The Hudson Light and Power Department's accounting policies are in conformity with generally accepted accounting principles and conform to the uniform system of accounts prescribed for Public Utilities by the Federal Energy Regulatory Commission as modified by the Massachusetts Department of Public Utilities for municipal owned lighting plants.

Revenues are computed on the basis of monthly billings to customers. Unbilled revenues from the sale of energy are not accrued as of the end of the calendar year. Miscellaneous electric sales adjustment is for over-billed or under-billed power adjustment charges.

Electric Utility Plant Assets are stated at net cost. The provision for depreciation is determined by the straight-line method based on a 3% annual depreciation rate. The cost of maintenance and repairs is expensed as incurred; renewals, replacements and betterments are capitalized.

Preliminary Survey Charges (Deferred Assets) incurred for proposed projects through MMWEC are deferred pending bonding of the proposed facility. Funds relating to MMWEC projects are refunded to the Department after bonding. Charges relating to projects, which are undertaken by the Department, are transferred to Construction Work in Progress and eventually to Utility Plant upon completion. Projects abandoned by MMWEC or the Department are charged to expense.

Projects started but not completed are charged to **Construction Work In Progress**. Any project abandoned is charged directly to retained earnings.

Investments of the Depreciation Fund are in Certificates of Deposit and U.S. Government and Agency Securities as prescribed by law. Further, interest earned on these funds can only be used in the same manner as depreciation funds as prescribed by the Massachusetts General Laws.

Inventories: Cost of materials, supplies and fuel are valued at average cost.

Segregated Funds: The Depreciation Fund is restricted to additions and replacements of plant, property and equipment under the General Laws of the Commonwealth of Massachusetts and regulations of State agencies.

Pensions: The Department's employees are members of the Middlesex County Retirement System. The Municipal Light Board has established the Hudson Municipal Light Department Employee's Retirement Trust Fund to reimburse the Town of Hudson for retirement costs of its employees. This fund is maintained by the transfer of funds from the Department to the Trust based on actuarial studies performed by a professional actuarial consultant. An amount equal to \$1,200,597.93 was transferred from the Trust Fund as payments to the Town.

Other Post-Employment Benefits Trust: The Municipal Light Board has established this Trust Fund to directly reimburse the Town of Hudson for retirement costs, other than pensions, attributable to Light Department retirees. On the basis of actuarial studies, sufficient funds will continue to be set aside to meet the future retirement obligations of the Town for persons currently employed by the Municipal Light Department.

Rate Stabilization Trust: The Municipal Light Board has established this Trust to fund municipal power supply costs, so as to stabilize power supply costs and other presently ascertainable obligations, in order to remain competitive within the electric industry and for other power-related issues which the Trustees designate by vote. In 2016, the HLPD financial statements include an accrued transfer from the Rate Stabilization Trust fund of \$4.3 million. The actual cash movement will take place in 2017 and will be reflected in the 2017 Rate Stabilization Trust Fund financial records.

Commitments and Contingencies: The Hudson Light and Power Department has purchase contracts with the following sponsor companies and receives kilowatt-hour amounts from the entitlements listed:

	Yearly Cost \$	Energy kWh
PASNY- Niagara River	\$ 279,061.49	11,957,365
MMWEC- Wyman #4	88,167.14	312,283
MMWEC - Nuclear Mix #1	241,117.72	5,846,539
MMWEC - Millstone #3	239,888.44	4,968,370
MMWEC - Seabrook #4	642,863.27	18,310,415
MMWEC - Seabrook #5	81,101.77	2,039,368
MMWEC - Seabrook #6	2,647,150.20	138,654,388
Taunton - Cleary #9	656,865.87	2,534,992
FPL / NEXTERA	100,040.00	1,312,000
Sycarpha Stow	189,915.40	2,967,414
Southern Sky Solar	179,219.65	4,070,644
SHELL	113,760.00	3,200,000
Solar - Local Customers	23,422.64	561,832
	<u>\$5,482,573.59</u>	<u>196,735,610</u>
ISO-NE	<u>\$3,839,672.61</u>	<u>25,925,905</u>
Total	<u><u>\$9,322,246.20</u></u>	<u><u>222,661,515</u></u>

Hudson obtains 962.7 kW of Seabrook Unit #1 on a direct ownership basis, for which the Department uses 100% equity financing. Hudson's ownership share of Seabrook Unit #1 is 0.07737%. On June 30, 1990, Seabrook was declared operational. Under the Joint Ownership Agreement, the joint owners are obligated to pay their pro rata share of Seabrook's operating cost. In addition, should any other joint owner fail to make any payment, the other owners may be required to increase their payments and correspondingly their equivalent percentage ownership of Seabrook capacity. Hudson is one of three, minority non-operating owners of Seabrook Station.

The Town of Hudson acting through its Light Department is a Participant in certain Projects of the Massachusetts Municipal Wholesale Electric Company (MMWEC).

MMWEC is a public corporation and a political subdivision of the Commonwealth of Massachusetts, created as a means to develop a bulk power supply for its Members and other utilities. MMWEC is authorized to construct, own or purchase ownership interests in, and to issue revenue bonds to finance, electric facilities (Projects). MMWEC has acquired ownership interests in electric facilities operated by other entities and also owns and operates its own electric facilities. MMWEC sells all of the capability (Project Capability) of each of its Projects to its Members and other utilities (Project Participants) under Power Sales Agreements (PSAs). Among other things, the PSAs require each Project Participant to pay its *pro rata* share of MMWEC's costs related to the Project, which costs include debt service on the revenue bonds issued by MMWEC to finance the Project, plus 10% of MMWEC's debt service to be paid into a Reserve and Contingency Fund. In addition, should a Project Participant fail to make any payment when due, other Project Participants of that Project may be required to increase (step-up) their payments and correspondingly their Participant's share of that Project's Project Capability to an additional amount not to exceed 25% of their original Participant's share of that Project's Project Capability. Project Participants have covenanted to fix, revise and collect rates at least sufficient to meet their obligations under the PSAs.

MMWEC has issued separate issues of revenue bonds for each of its eight Projects, which are payable solely from, and secured solely by, the revenues derived from the Project to which the bonds relate, plus available funds pledged under MMWEC's Amended and Restated General Bond Resolution (GBR) with respect to the bonds of that Project. The MMWEC revenues derived from each Project are used solely to provide for the payment of the bonds of any bond issue relating to such Project and to pay MMWEC's cost of owning and operating such Project and are not used to provide for the payment of the bonds of any bond issue relating to any other Project.

MMWEC operates the Stony Brook Intermediate Project and the Stony Brook Peaking Project, both fossil-fueled power plants. MMWEC has a 3.7% interest in the W.F. Wyman Unit No. 4 plant, which is operated and owned by its majority owner, FPL Energy Wyman IV, LLC, a 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), the majority owner and an indirect subsidiary of Dominion Resources, Inc. DNCI also owns and operates the Millstone Unit 2 nuclear unit. The operating license for the Millstone Unit 3 nuclear unit extends 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 (NextEra Seabrook) the majority owner and an indirect subsidiary of NextEra Energy Resources LLC. The operating license for Seabrook Station extends to March 15, 2030. NextEra Seabrook 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 costs are being funded through monthly Project billings. Also, the Project Participants are liable for their proportionate share of the uninsured costs of a nuclear incident that might be imposed under the Price-Anderson Act (Act). Originally enacted in 1957, the Act has been renewed several times. In July 2005, as part of the Energy Policy Act of 2005, Congress extended the Act until the end of 2025.

The Hudson Light and Power Department has entered into PSAs and PPAs with MMWEC. Under both the PSAs and PPAs, the Department is required to make certain payments to MMWEC payable solely from Municipal Light Department 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 is involved in various legal actions. In the opinion of management, the outcome of such litigation or claims will not have a material adverse effect on the financial position of the company.

As of December 31, 2017, total capital expenditures amounted to \$1,583,481,000, of which \$170,444,000 represents the amount associated with the Department's Project Capability. MMWEC's debt outstanding for the Projects from Power Supply System Revenue Bonds totals \$10,680,000, of which \$1,734,000 is associated with the Department's share of Project Capability. As of December 31, 2017, MMWEC's total future debt service requirement on outstanding bonds issued for the Projects is \$11,425,000, of which \$1,881,000 is anticipated to be billed to the Department in the future.

The aggregate amount of Hudson Light And Power Department's required payments under the PSAs and PPAs, exclusive of the Reserve and Contingency Fund billings, to MMWEC at December 31, 2017 and estimated for future years is shown below.

	<u>ANNUAL COSTS</u>	
For years ended December 31,	2018	\$ 174,000
	2019	1,707,000
	TOTAL	\$1,881,000

In addition, under the PSAs, the Department is required to pay to MMWEC its share of the Operation and Maintenance (O&M) costs of the Projects in which it participates. The Department's total O&M costs including debt service under the PSAs were \$10,116,000 and \$14,847,000 for the years ended December 31, 2017 and 2016, respectively.

Statement of Changes in Financial Position

January 1, 2017 to December 31, 2017

Funds were provided from . . .

Operations . . .

Net Income	\$ 719,301.13
Miscellaneous Credits to Surplus	-
Return of Investment	<u>(37,225.00)</u>

Total Funds Provided \$ 682,076.13

Funds were used for . . .

Increase (Decrease) to Utility Plant	\$ 321,693.64
Miscellaneous Debits to Surplus	912,164.13
Return to Town of Hudson	225,000.00
Return to Town of Stow	63,607.98
Other Interest Expense	<u>20,651.72</u>

Total \$ 1,543,117.47

Increase (Decrease) in Working Capital \$ (861,041.34)

Increase (Decrease) in Working Capital Represented by . . .

Cash	\$4,329,544.03
Receivables	(177,519.02)
Materials and Supplies	51,289.67
Prepayments	601,278.60
Interest Receivable	-
Accrued Utility Revenues	-
Miscellaneous Deferred Debits	1,506,908.17
Miscellaneous Accrued Liabilities	(6,634,327.41)
Accounts Payable	(532,106.80)
Injury Reserve	-
Taxes Payable	<u>(6,108.58)</u>

Total \$ (861,041.34)

Revenue from Sale of Electricity

January 1, 2017 to December 31, 2017

	HUDSON	STOW	OTHER	TOTAL
Res. Service "A"	\$ 3,404,943.89	\$ 1,186,490.70	\$ 72,799.69	\$ 4,664,234.28
Res. Wtr. Heater "E"	401,880.74	428,603.80	27,828.79	858,313.33
All Elec. Service "F"	542,738.95	187,449.93	6,475.67	736,664.55
Com. Htg. & Air Cond.	-	-	-	-
Com. Service "C"	1,297,276.85	312,038.11	6,448.51	1,615,763.47
Large Power "D"	2,920,771.84	470,901.04	-	3,391,672.88
Municipal All Elec.	-	-	-	-
Municipal Service "C"	70,118.15	17,764.85	756.87	88,639.87
Municipal Power "D"	310,464.82	238,494.35	-	548,959.17
Street Lighting	121,672.85	5,815.92	40.92	127,529.69
Yard Lighting	76,294.63	11,850.40	2,159.02	90,304.05
Power Adjustment Charges...				
Res. Service "A"	\$ 2,043,979.59	722,467.22	44,619.70	2,811,066.51
Res. Wtr. Heater "E"	291,552.96	319,237.58	20,838.40	631,628.94
All Elec. Service "F"	400,060.66	141,629.39	4,866.57	546,556.62
Com. Htg. & Air Cond.	-	-	-	-
Com. Service "C"	917,624.60	214,851.41	2,706.67	1,135,182.68
Large Power "D"	2,911,405.61	473,528.48	-	3,384,934.09
Municipal All Elec.	-	-	-	-
Municipal Service "C"	257,585.46	207,581.04	237.49	465,403.99
Municipal Power "D"	49,899.51	12,605.20	-	62,504.71
Street Lighting	-	-	-	-
Yard Lighting	18,309.63	2,956.08	523.23	21,788.94
Total Rev. Each Zone	\$ 16,036,580.74	\$ 4,954,265.50	\$ 190,301.53	\$ 21,181,147.77
Misc. Electric Sales				2,058,318.06
Total Revenue from Sale of Electricity				\$ 23,239,465.83
Res. Service "A"		\$ 7,475,300.79		
Res. Service "E" Wtr Htr		1,489,942.27		
All Elec. Service "F"		1,283,221.17		
Com. Htr. & Air. Cond		-		
Com. Service "C"		2,750,946.15		
Large Power "D"		6,776,606.97		
Municipal All Elec.		-		
Municipal Service "C"		554,043.86		
Municipal Power "D"		611,463.88		
Street Lighting		127,529.69		
Yard Lighting		112,092.99		
Total		\$ 21,181,147.77		

STATISTICS
KILOWATT-HOURS GENERATED, PURCHASED, SOLD and USED

January 1, 2017 to December 31, 2017

Kilowatt-hours Generated	8,021,329
Kilowatt-hours Purchased	<u>222,661,515</u>
Total Generated & Purchased	230,682,844

	HUDSON	STOW	OTHER AREAS
Kilowatt-hours Sold..			
Residence Service "A"	51,206,502	18,099,053	1,116,267
Service "E" (wtr htr)	7,295,440	7,991,673	521,734
All Electric Service "F"	9,980,808	3,538,121	121,212
Htg. and Air Cond. for Business	0	0	0
Commercial Service "C"	22,023,597	5,158,640	65,039
Large Power "D"	70,021,765	11,363,720	0
Departmental Usage	200,265	0	0
Municipal All Electric	0	0	0
Municipal Service "C"	1,191,934	302,621	5,741
Municipal Power "D"	6,192,426	1,324,640	3,656,800
Street Lighting	1,080,343	49,683	350
Yard Lighting	<u>440,869</u>	<u>71,114</u>	<u>12,585</u>
Total Kilowatt-hours Each Zone	169,633,949	47,899,265	5,499,728
Total Kilowatt-hours distributed			223,032,942
Kilowatt-hours sold for resale			0
Kilowatt-hours used at Station and misc.			1,275,829
Kilowatt-hours lost in Distribution Lines			<u>6,374,073</u>
Total			230,682,844
Percent lost in station		0.5531%	
Percent lost in Distribution Lines		2.7631%	

Five-Year Comparative Electric Sales Data

	2017	2016	2015	2014	2013
Customer Count...					
Residential	11187	11008	10930	10853	10780
Commercial	1453	1436	1366	1364	1327
Industrial	137	134	134	127	155
Municipal	124	125	126	152	128
Others	167	168	167	171	173
Total*	<u>13068</u>	<u>12871</u>	<u>12723</u>	<u>12667</u>	<u>12563</u>
 Kilowatt-hour Sales...					
Residential	99,870,810	99,357,377	101,025,852	100,088,012	100,870,082
Commercial	27,247,276	28,023,902	27,478,920	27,918,808	29,304,245
Industrial	81,385,485	95,427,950	153,956,119	204,920,680	198,738,759
Municipal	13,804,538	13,139,118	13,711,988	13,270,903	12,227,229
Other	524,568	611,907	617,711	1,903,351	587,497
Total **	<u>222,832,677</u>	<u>236,560,254</u>	<u>296,790,590</u>	<u>348,101,754</u>	<u>341,727,812</u>
 Revenues Billed..					
Residential	\$ 10,161,560.19	\$ 11,840,258.86	\$ 13,751,126.37	\$ 15,136,443.37	\$ 13,437,383.33
Commercial	2,736,540.67	3,293,005.00	4,137,534.28	4,336,705.09	3,558,382.74
Industrial	6,879,892.73	9,183,479.02	16,378,139.85	25,533,891.24	20,389,329.73
Municipal	1,290,780.34	1,391,456.97	1,658,038.30	1,988,972.60	1,703,842.69
Other	112,373.84	111,841.70	123,601.31	137,448.88	125,019.45
Total ***	<u>\$ 21,181,147.77</u>	<u>\$ 25,820,041.55</u>	<u>\$ 36,048,440.11</u>	<u>\$ 47,133,461.18</u>	<u>\$ 39,213,957.94</u>

*Number of customers was based on annual average.

** Does not include Hudson Light & Power Department usage.

***Does not reflect accounting adjustments for power charges shown as misc electric sales.

Consumers Statistics

December 31, 2017

Hudson

Hudson Residential Consumers	8,316
Hudson Commercial Consumers	1,070
Hudson Power Consumers	121
Hudson Municipal Consumers	95

Total Hudson Consumers 9,602

Stow and Maynard

Stow Residential Consumers	2,742
Stow Commercial Consumers	328
Stow Power Consumers	16
Stow and Maynard Municipal Consumers	23

Total Stow and Maynard Consumers 3,109

Boxboro, Bolton, Berlin, Marlboro, etc.

Boxboro, Bolton, Berlin, Marlboro, Etc. Residential Consumers	184
Boxboro, Bolton, Berlin, Marlboro, Etc. Commercial Consumers	26
Boxboro, Bolton, Berlin, Marlboro, Etc. Municipal Consumers	6

Total Boxboro, Bolton, Berlin, Marlboro, Etc. Consumers 216

Total Consumers on the System * 12,927

* Does not include street & yard lighting.

**HUDSON LIGHT AND POWER DEPARTMENT
RETIREMENT TRUST FUND**

The purpose of this Fund is to directly reimburse the Town of Hudson for retirement costs attributable to Light Department retirees for whom the Town is assessed annually by the Middlesex County Retirement System. On the basis of actuarial studies, sufficient funds will continue to be set aside to meet the future retirement obligations of the town for persons currently employed by the Municipal Light Department.

Balance of Retirement Fund as of January 1, 2017	\$ 16,168,380.17
Cash transferred to HLPD Retirement Trust Fund	\$ 1,791,372.00
Gain on Sales	3,095.46
Interest, dividends and Principal received	82,554.02
Total Additions to the Fund	\$ 1,877,021.48
Payments to the Town of Hudson	\$ 1,200,597.93
Loss on Sales	2,234.31
Total Reductions to the Fund	\$ 1,202,832.24
 Balance of Retirement Fund as of December 31, 2017	 \$ 16,842,569.41

FIXED INVESTMENTS	COST BASIS	EQUITY INVESTMENTS	COST BASIS
AVIDIA BANK MONEY MARKET	\$ 735,583.89	(ABT) ABBOTT LABS	\$ 318,697.36
MORGAN STANLEY MONEY FUNDS	168,493.50	(MO) ALTRIA GROUP INC	327,607.74
GNMA	242.48	(AIG) AMERICAN INT'L GROUP INC.	48,134.97
GNMA	252.27	(AIG) AMERICAN INT'L GROUP INC. WT	358.38
NORFOLK SOUTHERN CORP.	201,937.38	(BAC) BANK OF AMERICA CORPORATION	351,341.89
VIRGINIA ELECTRIC & POWER	217,763.27	(BMJ) BRISTOLMYERS SQUIBB	332,313.35
AT&T INC 100K	101,552.25	(KO) COCA COLA	413,255.03
FLORIDA POWER & LIGHT 430K	437,846.73	(ED) CONS EDISON	404,355.27
SOUTH CAROLINA ELECTRIC & GAS	540,101.32	(LLY) ELI LILLY & CO	463,152.79
AT&T INC 80K	380,134.04	(EMR) EMERSON ELECTRIC CO.	427,421.59
PUBLIC SERVICE OKLAHOMA	137,530.82	(GE) GENERAL ELECTRIC CO.	475,411.02
DUKE ENERGY INDIANA 276K	286,828.13	(GIS) GENERAL MILLS INC.	421,225.02
BURLINGTON NORTH SANTA FE 200K	208,511.54	(HPQ) HEWLETT PACKARD CO.	399,637.78
KENTUCKY UTILITIES COMPANY 250K	670,948.28	(JNJ) JOHNSON & JOHNSON	490,264.69
PROGRESS ENERGY INC 270K	284,263.77	(KMB) KIMBERLY CLARK	406,745.45
WESTERN MASS ELECTRIC CO.	626,719.56	(MCD) MCDONALDS CORP	328,676.28
GENERAL ELECTRIC CAPITAL CORP	329,303.97	(MRK) MERCK & CO	369,085.68
VERIZON COMMUNICATIONS 370K	383,484.99	(PEP) PEPSICO INC.	330,320.07
BALTIMORE GAS & ELECTRIC	672,510.05	(PFE) PFIZER INC.	351,529.52
FED NATL MTG ASSN FLOATER	585,292.31	(PG) PROCTER & GAMBLE CO.	409,003.55
FED HOME LN BK STEP 10/19/17	708,231.00	(ROK) ROCKWELL AUTOMATION INC	446,050.16
FED NATL MTG ASSN STEP 4/18/2021 03.50	870,005.87	(SO) SOUTHERN CO	450,705.68
		(UN) UNILEVER	329,738.72
Total	\$ 8,547,537.42		\$ 8,295,031.99

Note: Figures do not reflect Unrealized Gains or Losses.

**Hudson Light and Power Department
Rate Stabilization Trust Fund**

The purpose of this Fund is to fund future power supply costs so as to stabilize power supply costs and other presently ascertainable obligations, in order to remain competitive within the electric industry and for other power supply-related issues which the Trustees designate by vote.

Balance of the Rate Stabilization Fund as of January 1, 2017	\$ 12,211,047.31
Interest, Dividends and Principal Received	178,875.04
Gain on Sales	17,163.20
Total Additions to the Fund	\$ 196,038.24
Loss on Sales	18,143.57
Early Withdraw Pealty	13,607.69
Transfer to Operation Cash	4,300,000.00
Total Reductions to the Fund	\$ 4,331,751.26
Balance of the Rate Stabilization Fund as of December 31, 2017	\$ 8,075,334.29

FIXED INVESTMENTS	COST BASIS	EQUITY INVESTMENTS	COST BASIS
A VIDIA BANK MMKT	\$ 403,753.66	(ABT) ABBOTT LABS	\$ 86,600.97
MORGAN STANLEY MMKT	135,943.55	(MO) ALTRIA GROUP, INC.	78,072.43
A VIDIA BANK CD	969,330.80	(AIG) AMERICAN INT'L GROUP INC.	17,838.68
A VIDIA BANK CD	796,078.19	(AIG) AMERICAN INT'L GROUP INC. WT	130.32
CENTURY BANK CD	679,034.40	(BAC) BANK OF AMERICA CORP	114,311.12
CENTURY BANK CD	621,594.50	(BMY) BRISTOL MYERS SQUIBB CO	78,131.30
CENTURY BANK CD	621,594.50	(KO) COCA COLA	103,654.92
NORFOLK SOUTHERN CORP	151,618.51	(ED) CONS ED	98,323.52
UNION PACIFIC CORP CD	205,305.07	(LLY) ELI LILLY & CO	119,022.25
DUKE ENERGY CAROLINAS	288,269.22	(EMR) EMERSON ELECTRIC CO	104,056.57
PUBLIC SERVICE ELECTRIC	166,265.35	(GE) GENERAL ELECTRIC CO.	115,327.61
AT&T	213,943.39	(GIS) GENERAL MILLS INC.	108,916.60
VERIZON COMMUNICATIONS	356,025.77	(HPQ) HEWLETT PACKARD CO.	87,422.64
GOLDMAN SACHS GROUP INC	372,370.24	(JNJ) JOHNSON & JOHNSON	118,733.23
		(KMB) KIMBERLY CLARK	102,493.43
		(MCD) MCDONALDS CORP	74,508.68
		(MRK) MERCK & CO INC	87,513.67
		(PEP) PEPSICO INC.	89,205.36
		(PFE) PFIZER INC.	86,994.39
		(PG) PROCTER & GAMBLE CO.	101,142.80
		(ROK) ROCKWELL AUTOMATION INC	118,910.72
		(SO) SOUTHERN CO.	111,678.40
		(UN) UNILEVER	91,217.53
Total	\$5,981,127.15		\$ 2,094,207.14

Note: Figures do not reflect Unrealized Gains or Losses.

**HUDSON LIGHT AND POWER DEPARTMENT
OTHER POST EMPLOYMENT BENEFITS (OPEB) TRUST FUND**

The purpose of this Fund is to directly reimburse the Town of Hudson for retirement costs, other than pensions, attributable to Light Department retirees. On the basis of actuarial studies, sufficient funds will continue to be set aside to meet the future retirement obligations of the town for persons currently employed by the Municipal Light Department.

Balance of the Other Post Employment Benefit Fund as of January 1, 2017	\$ 1,137,658.44
Interest, Dividends and Principal Received	\$ 35,725.74
Transfers from Operations Cash	228,000.00
Gain on Sales	1,326.02
Total Additions to the Fund	\$ 265,051.76
Transfers to Operations Cash	\$ -
Loss on Sales	292.24
Total Reductions to the Fund	\$ 292.24
Balance of the Other Post Employment Benefit Fund as of December 31, 2017	\$1,402,417.96

FIXED INVESTMENTS	COST BASIS	EQUITY INVESTMENTS	COST BASIS
A VIDIA BANK MONEY MARKET	\$ 19,045.56	(ABT) ABBOTT LABS	\$ 26,068.67
MORGAN STANLEY CASH	8,597.40	(MO) ALTRIA GROUP, INC.	30,853.19
ANHEUSER-BUSH INBEV	93,067.31	(BAC) BANK OF AMERICA CORP	30,141.45
AMGEN INC	94,876.37	(BMJ) BRISTOL MYERS SQUIBB	25,970.93
COOPER US	93,889.70	(KO) COCA COLA	36,206.11
AMERI SOURCEBERGEN CORP	122,633.33	(ED) CONS ED	36,313.30
CITIGROUP	187,832.12	(LLY) ELI LILLY & CO	38,724.23
FED NATL MTG ASSN	116,001.63	(EMR) EMERSON ELECTRIC CO.	34,654.46
		(GE) GENERAL ELECTRIC CO.	27,807.85
		(GIS) GENERAL MILLS INC.	31,096.11
		(HPQ) HEWLETT PACKARD CO.	39,528.40
		(JNJ) JOHNSON & JOHNSON	29,076.89
		(KMB) KIMBERLY CLARK CORP	25,384.29
		(MCD) MCDONALDS CORP	38,331.71
		(MRK) MERCK & CO INC	26,497.96
		(PEP) PEPSICO INC.	29,044.56
		(PFE) PFIZER INC	23,941.47
		(PG) PROCTER & GAMBLE CO.	34,457.29
		(ROK) ROCKWELL AUTOMATION INC	30,190.84
		(SO) SOUTHERN CO.	35,615.27
		(UN) UNILEVER	36,569.56
Total	\$ 735,943.42		\$ 666,474.54

Note: Figures do not reflect Unrealized Gains or Losses.