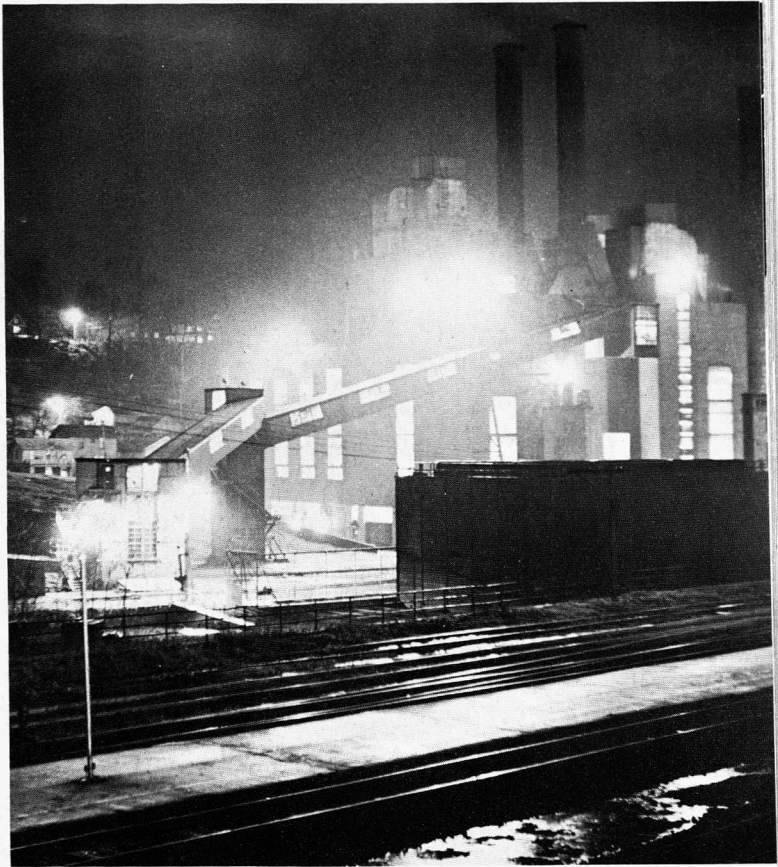


MAY 11 1962

GOVERNMENT DOCUMENT

71st **ANNUAL REPORT**



for the year ended
September 30, 1961

BOARD OF PUBLIC UTILITIES
ALBANY, NEW YORK

operators of your municipal electric and water systems

Board of Public Utilities
City of
Jamestown, New York

DIVISION OF
WATER, LIGHT AND POWER

To the Board of Public Utilities
City of Jamestown
Jamestown, New York

Gentlemen:

The annual reports of the Jamestown municipal
water and electric utility systems for the year of
1961 are submitted herewith as required by Section
129 of the Charter of the City of Jamestown.

Respectfully submitted,

Merle W. Smedberg

Superintendent

Leslie A. Price

Secretary

Jamestown, New York

BOARD OF
PUBLIC
UTILITIES
1961

Carl F. Sanford, President

Carl J. Fagerstrom, Chairman

Leonard A. Bergman

Carl G. Pearson

Lloyd A. Cummings

Melvin O. Swanson

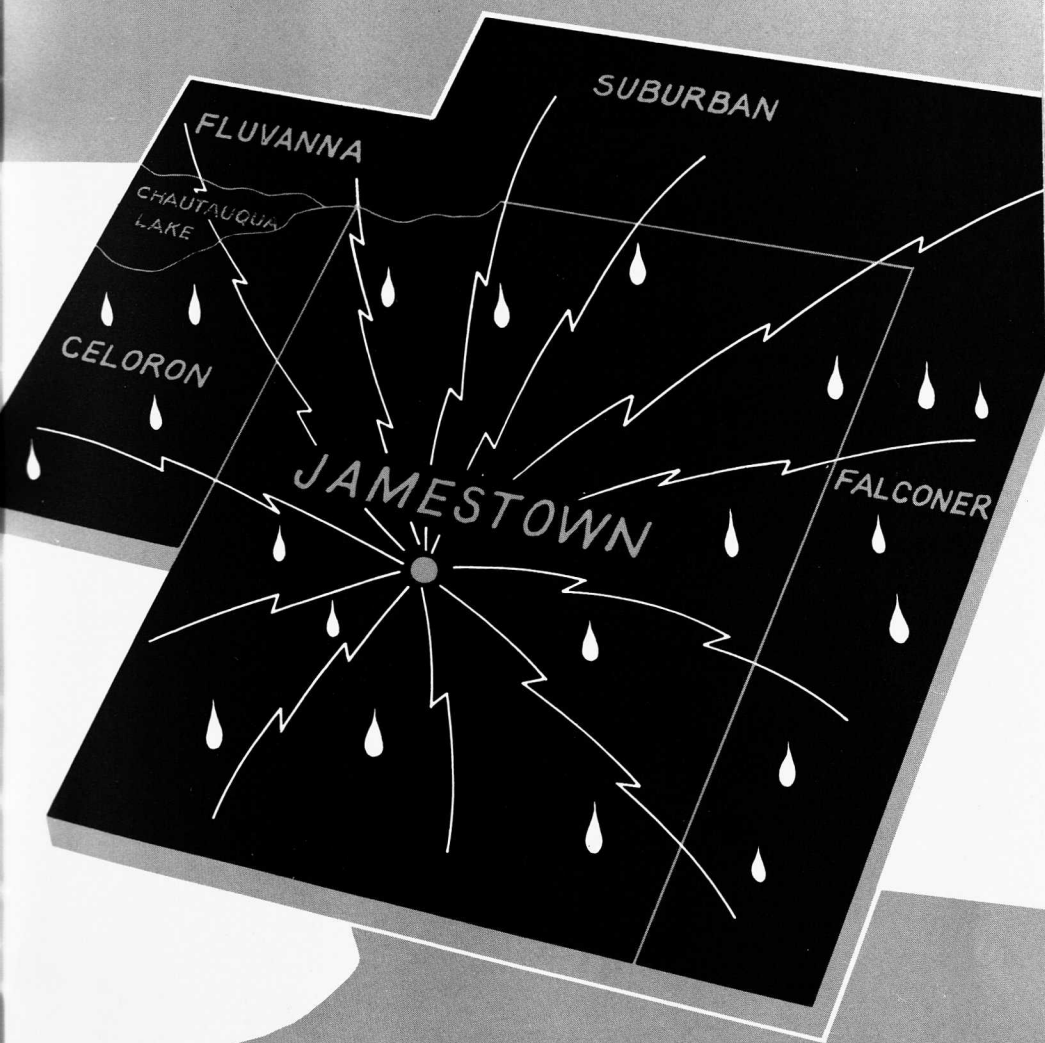
Trygve B. Lindahl

William A. Taylor

Leslie A. Price, Secretary

Merle W. Smedberg, Superintendent

JAMESTOWN and SUBURBAN AREA SERVED



NEW YORK STATE

PENNSYLVANIA



OUT THE
ECTRIC
VISION

353
 2 POLES
 192
 ET LIGHTING ONLY
 2794
 EGROUND CONDUIT
 142
 UDERGROUND CABLE
 7.901
 EAD COMMERCIAL LINE
 576
 SERVICES
 156
 E TRANSFORMERS
 328
 SERVICE

DO YOU KNOW?
IN 1960 IT PAID \$53.
MADE A CASH CONTRIB
JAMESTOWN OF \$400.00
PAID PROPERTY TAXES ON

**ABOUT
WATER
DIVISION**

NINETEEN
 CITY 14 MIL
 AGE RESI
 6,500 C
 METERS
 |
 MILES OF M
 |
 HYDRANT:
 |
 PUMPA
 (904) 407-

This yearly showing of household goods, buildings and building materials attracts thousands of area residents, offering an opportunity to explain the services of the Public Utilities.

Under the sponsorship of the Board of Public Utilities, local radio stations and area merchants, a 2nd Annual Cooking School was held, attended by over 4,000 area residents.

Co-sponsored Cooking School attracted over 4,000 attendance



A.P.P.A.

The Electric System is continuing its active membership in the American Public Power Association and has received a great deal of information from this organization. Board Member Melvin O. Swanson was reappointed a member of the Atomic Energy Committee. Corporation



Counsel Daniel A. Isaacson was reappointed a member of the Legislative and Resolutions Committee; and Board Secretary Leslie A. Price was reappointed to the Accounting and Finance Section. Merle W. Smedberg, Superintendent, was elected to the Board of Directors of A.P.P.A. at the Annual Convention held in April, 1961.

REACTOR PROGRAM

On March 2, 1961, we received information from the Atomic Energy Commission that all proposals for the small pressurized water reactor project were not acceptable and that there would be no further negotiations concerning this size nuclear reactor. This announcement closed a chapter of our operations covering approximately fifteen months.

On December 17, 1959, the Board submitted a proposal to the Atomic Energy Commission, in response to a general request, containing our offer to purchase steam from a nuclear reactor at a certain price. This and a later proposal received preliminary approval, and negotiations continued resulting in a draft of the contract outlining the payments to be made for the steam and the base for operation. However, A.E.C.'s Advisory Committee on Reactor Safeguards felt, that while in general the proposed site was satisfactory, a more remote location should be considered. A proposal was then submitted to A.E.C. based on a site east of Jamestown. The additional costs required through use of this site resulted in a much lower price that could be offered for the steam to be used in operating the turbine generator unit. Following a review of this proposal by the A.E.C., we were informed that this particular phase of the reactor program was being withdrawn.

WORK IN PROGRESS 1961



Relocating wires on new poles for street widening. Picture shows East side of Washington Street looking North from Second Street.

As part of a planned program to meet the growing requirements for electricity, construction work started on two distribution substations—one on Huxley Street and the other on English Street. The substations have been placed on their foundations and most of the underground conduit work was completed before the end of the year. This construction work will continue during 1962 and the two substations will be placed in operation as soon as the construction work is completed.

Two State Highway projects have required considerable moving of electric distribution lines and work on the water mains and services. One of these projects—the widening of Main Street in Falconer—has been completed and all of the poles and electric lines have been moved to their new locations back of the new curbs. A good number of iron water services were replaced with copper service lines in order to avoid excavating in the new street to repair leaking services. It was also necessary to relocate all of the water curb boxes to locations back of the new curbs. The other project entailed moving of electric lines along Fluvanna Avenue and Washington Street. This work was partially completed during the year and will be completed in 1962. New street lighting using mercury vapor street lights has been installed on Fluvanna Avenue



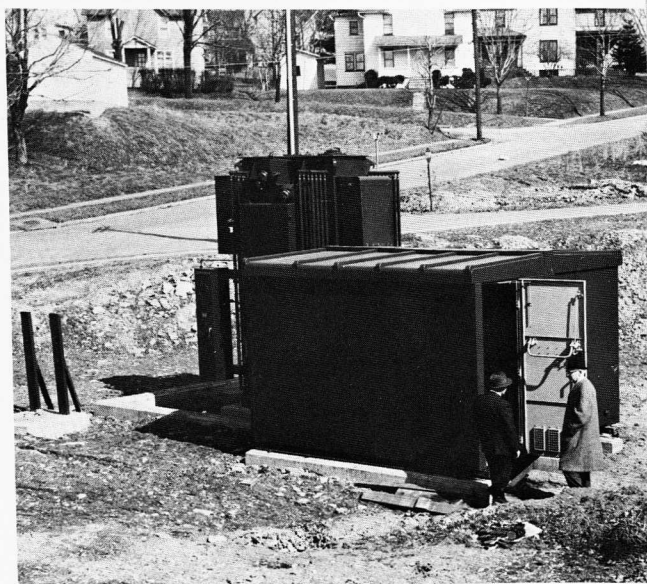
Huxley Street
Substation
during construction.

A new installation
on the West side
of the City.

and will be installed on Washington Street as the work progresses. This is part of a planned program to provide better street lighting on the main thoroughfares of the City. Considerable work was required on the water mains on Washington Street inasmuch as the new storm sewers cross the mains in a good many places and required the lowering of the water mains so that adequate drainage for the storm sewers could be maintained. The nonbetterment costs of both of these projects will be paid by the State as part of the highway widening costs.

Installation of the electric driven pump at the Cassadaga Valley Pumping Station was completed and the pump has been placed in operation.

In addition to this work, the normal expansion of both the electric and water distribution systems has taken place.



English Street Substation during construction. This will supply heavier demand on the City's southeast side.

BALANCE SHEET

As of December 31, 1961-1960



ASSETS

FIXED ASSETS:

Operating Property—Electric	
Construction Work in Progress	
Non-operating Property	

DECEMBER 31

1961

\$16,505,723.07
198,740.24
21,356.03

DECEMBER 31

1960

\$16,235,815.20
19,505.05
21,356.03

INVESTMENTS:

Miscellaneous Investments	
---------------------------------	--

508,297.10

98,094.44

CURRENT ASSETS:

Cash—General	
Working Funds	
Material and Supplies	
Receivables from Municipality	
Accounts Receivable	
Interest Accrued	
Prepayments	
Special Deposits	
Clearing Accounts	
Miscellaneous Suspense	

58,897.26

153,932.52

650.00

650.00

214,584.66

207,703.59

16,828.90

15,361.08

177,239.38

180,811.63

4,729.66

393.46

18,368.35

24,300.15

—

8,310.60

290.56

1,050.70

—

1,144.14

TOTAL ASSETS

\$17,725,705.21\$16,968,428.59

LIABILITIES

LONG TERM DEBT:

Bonds	
-------------	--

\$ 1,035,000.00

\$ 1,150,000.00

CURRENT and ACCRUED LIABILITIES:

Payables to Municipality	
Accounts Payable	
Customers' Deposits	
Interest Accrued	
Advance Billings and Payments	
Miscellaneous Current Liabilities	

419.49

522.51

93,012.78

86,408.05

4,379.84

5,044.84

6,950.60

7,849.95

209.10

209.10

109,044.22

116,994.16

RESERVES:

Depreciation Reserve—Operating Property	
Depreciation Reserve—Non-operating Property	
Contributions for Extensions	
Reserve for Uncollectible Accounts	

8,425,567.84

7,901,769.16

16,278.98

15,803.30

73,390.89

69,221.30

2,286.57

2,003.09

DEFERRED CREDITS

6,525.05

7,285.25

SURPLUS

7,952,639.85

7,605,317.88

TOTAL LIABILITIES and SURPLUS

\$17,725,705.21\$16,968,428.59

OPERATING STATEMENT

As of December 31, 1961-1960



OPERATING INCOME:

Operating Revenues—Electric	\$2,844,207.96
Other Revenues:	
Steam Sales	\$ 19,184.05
Miscellaneous	1,507.90
Total Other Electric Revenues	\$ 20,691.95
Total Operating Revenues	<u>\$2,864,899.91</u>

OPERATING EXPENSES:

Production	\$1,314,281.77
Transmission and Distribution	126,822.47
Street Lighting	18,314.65
Consumers' Accounting and Collecting	85,227.90
Sales Expense	6,013.28
Administrative and General	151,847.78
Depreciation	529,329.15
Taxes on Property Outside the City	22,125.19
Uncollectible Revenues	2,606.93
Contributions to City in Lieu of Taxes	245,000.00
Total Operating Expenses	<u>\$2,501,569.12</u>

NET ELECTRIC OPERATING INCOME

\$ 363,330.79

OTHER INCOME:

Non-operating Rents	\$ 2,400.00
Interest	9,391.57
Total Other Income	<u>\$ 11,791.57</u>

GROSS INCOME

\$ 375,122.36

INCOME DEDUCTIONS:

Interest on Long Term Debt	\$ 17,633.33
Other Income Deductions	(80.80)
Total Income Deductions	<u>\$ 17,552.53</u>

NET INCOME TRANSFERRED TO SURPLUS

\$ 357,569.83

SURPLUS ACCOUNT

Surplus as at January 1, 1961	\$7,605,317.88
Add:	
Net Income—1961	357,569.83
	<u>\$7,962,887.71</u>
Deduct:	
Miscellaneous Contributions—	
City (Net)	\$ 960.12
Cancellation of Nuclear Reactor Project	9,287.74
	<u>10,247.86</u>
Surplus as at December 31, 1961	<u>\$7,952,639.85</u>

DECEMBER 31

1961

DECEMBER 31

1960

\$2,778,737.51

\$ 18,195.28
1,913.51

\$ 20,108.79

\$2,798,846.30

\$1,353,902.50

139,105.71

21,511.49

83,569.04

2,856.23

144,611.93

434,808.11

21,002.15

1,246.92

245,000.00

\$2,447,614.08

\$ 351,232.22

\$ 2,400.00

1,476.66

\$ 3,876.66

\$ 355,108.88

\$ 19,473.33

(117.97)

\$ 19,355.36

\$ 335,753.52

OPERATING REVENUES

As of December 31, 1961-1960

	DECEMBER 31, 1961		DECEMBER 31, 1960	
	K.W.H. SOLD	REVENUE	K.W.H. SOLD	REVENUE
Residential Sales	39,099,499	\$ 898,519.73	37,692,184	\$ 875,596.00
Commercial Sales	39,940,776	755,546.34	39,083,454	744,647.69
Industrial Sales	71,439,844	960,205.51	71,979,420	957,006.74
Public St. Lighting— Jamestown	1,849,024	58,731.21	1,810,070	60,312.44
Public St. Lighting— Other	322,100	20,555.28	301,900	20,402.64
Other Sales to City of Jamestown	7,485,452	106,003.81	5,817,708	88,704.95
Other Sales to Other Public Authorities	2,494,141	44,646.08	1,696,856	32,067.05
TOTAL	162,630,836	\$2,844,207.96	158,381,592	\$2,778,737.51

MISCELLANEOUS ELECTRIC REVENUES

	1961	1960
Value of Cinders Supplied to City— Department of Public Works	\$ 227.90	\$ 311.98
Value of Steam Supplied to City Departments	19,184.05	18,195.28
Meter Reconnection Charges	1,098.00	1,251.00
Temporary Service Charges	111.00	153.00
Other Miscellaneous Revenues	71.00	197.53
TOTAL	\$ 20,691.95	\$ 20,108.79

TAXES — DIRECT AND TAX EQUIVALENTS

	1961	1960
Town of Ellicott—State and County Tax	\$ 7,994.80	\$ 7,277.11
Town of Ellicott—School Tax	10,289.39	10,155.81
Villages of Celoron and Falconer—Village Tax	3,841.00	3,569.23
City of Jamestown—Contributions in Lieu of Taxes	245,000.00	245,000.00
TOTAL	\$267,125.19	\$266,002.15
Percentage to Electric Service Revenues	9.39	9.57

COMPARATIVE STATEMENT

Year	Total Electric Operating Revenues	Net Permanent Improvements and Extensions	Total K.W.H. Generated and Purchased	Average Cost Coal Burned Per Ton	Operation and Maintenance Cost with Depreciation and Interest	Surplus
1920	\$ 226,018.00	77,693.65	6,770,392	\$7.50	\$ 199,162.93	\$ 309,216.5
1930	533,475.96	396,909.50	24,536,700	3.73	348,984.46	2,008,302.60
1940	981,413.72	15,288.62	66,383,000	3.96	766,053.60	3,258,222.32
1950	1,709,419.72	1,105,665.15	124,339,400	7.55	1,504,711.00	5,104,306.45
1955	2,514,485.09	419,467.62	162,802,670	7.58	2,228,608.46	5,772,763.36
1960	2,798,846.30	2,029,578.60	183,666,148	7.53	2,466,969.44	7,605,317.86
1961	2,864,899.91	269,907.87	188,702,235	7.59	2,519,121.65	7,952,639.85

PRODUCTION STATISTICS

1961

Year Ended December 31, 1961

STATION OUTPUT and COSTS:

Maximum System Demand—July 31, 1961, 11-12 Noon	40,908 K.W.
Cost of Generation Including Power Plant Depreciation	\$1,534,339.60
Cost of Electricity Purchased	158,198.50
Purchased Electricity Expense	835.46
Total Production Cost	\$1,693,373.56

Fuel Consumed:

Kind of Fuel—Bituminous Coal	
Quantity Used for Generation	93,494.15 T.
Cost of Coal Consumed	\$709,717.87
Average Cost per Ton Consumed	\$7.59
Pounds of Coal per Kilowatt Hour (Gross Generation)	1.07

Summary of Production and Sales:

K.W.H. Generated	175,117,400
K.W.H. Purchased	13,584,835
K.W.H. Generated and Purchased	188,702,235
Less: K.W.H. All Station Uses	14,022,200
K.W.H. Available for Distribution	174,680,035

Disposal of Energy:

	CUSTOMERS END OF YEAR	K.W.H.
Residential Service	15,677	39,099,499
Commercial Service	3,020	39,940,776
Industrial Service	162	71,439,844
Street Lighting—Other Municipalities	5	322,100
Other Sales to Other Public Authorities	57	2,494,141
Used by City of Jamestown:		
Municipal Street Lighting	1	1,849,024
Other Municipal Purposes	136	7,485,452
Within Electric Department		350,615

TOTAL SUPPLIED and USED	19,058	162,981,451
Lost and Unaccounted For		11,698,584
TOTAL TO BALANCE		174,680,035

Per Cent of Lost and Unaccounted For	6.7%
1961 Average Units Used per Residential Customer	2,494 Hrs.
1961 Average Annual Residential Bill	\$57.31
1961 Residential Revenue per K.W.H.	2.30c
Population of Localities Served—1960 Federal Census	51,650

FACTS OF INTEREST

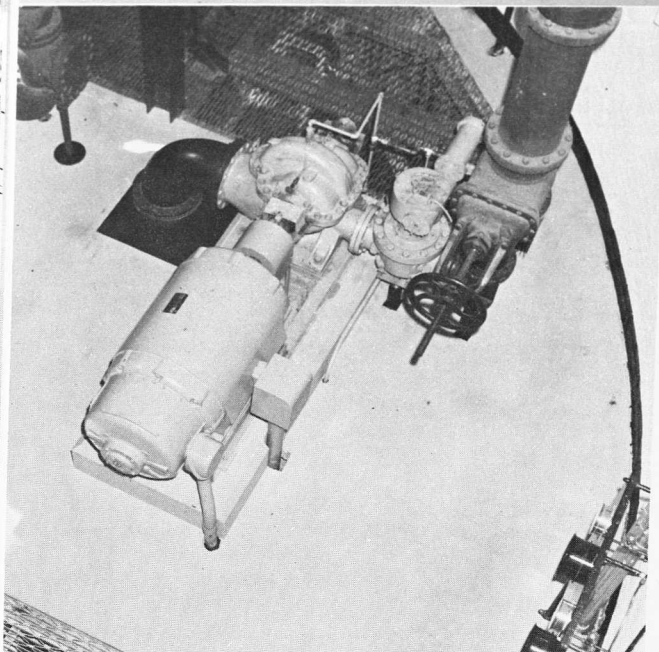
1961

During 1961 the Municipal Electric System provided service to 51,650 area residents through 19,058 active meters. The system paid its 114 local employees a total of \$654,095. In lieu of taxes, the City of Jamestown received a contribution of \$245,000 from the system, while the areas outside the city were paid taxes of \$22,129.19.

The Samuel A. Carlson Generating Plant received 425 visitors in 1961 through groups of students and visits prearranged by organizations to tour the facility.

In addition, over 500 people toured the plant during an open house held the Sunday following the Samuel A. Carlson dedication.

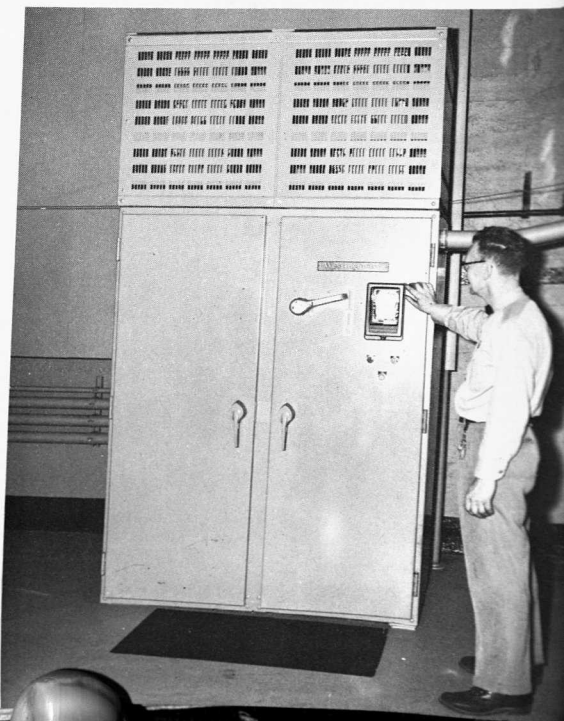
HIGHLIGHTS OF 1961



New 6 Million Gallon per Day Worthington Pump installed in 1961 at Cassadaga Valley Pumping Station. This replaced a less efficient, smaller capacity steam driven pump.

Employees of the United States Geological Survey continued their work during the summer months. It is expected that they will complete their work during the summer of 1962 and have a report available for us on the ground water conditions in the area surrounding the City. This work is being done under a contract that was entered into between the Board and the Department of Interior in July 1960.

Electric Control panel for 6 MGD pump shown above



BALANCE SHEET

As of December 31, 1961-1960

ASSETS

FIXED ASSETS:

Water Plant in Service	\$3,902,514.51	\$3,799,016.39
Other Physical Property	3,847.05	3,847.05
Construction Work in Progress	11,587.71	17,145.67

INVESTMENTS:

Depreciation Fund	1,277,304.10	1,307,528.36
-------------------------	--------------	--------------

CURRENT and ACCRUED ASSETS:

Cash—General	31,133.54	9,062.44
Cash—Water Rebate Fund	11,115.00	9,493.00
Special Deposits	—	2,912.34
Working Funds	83.29	83.29
Accounts Receivable—Consumers	84,461.48	84,307.77
Accounts Receivable—Miscellaneous	1,418.84	2,152.57
Receivables from Municipality	13,088.09	12,907.73
Interest Receivable	14,881.37	18,883.94
Materials and Supplies	67,182.30	52,601.75
Prepayments	9,246.66	9,203.18

TOTAL ASSETS	<u>\$5,427,863.94</u>	<u>\$5,329,145.48</u>
--------------------	-----------------------	-----------------------

LIABILITIES

CURRENT and ACCRUED LIABILITIES:

Payables to Municipality	\$ 3,656.39	\$ 3,053.99
Accounts Payable	3,818.18	2,793.96
Customers' Deposits	11,146.00	9,524.00
Wages Accrued	1,326.15	1,434.84
Other Current Liabilities	30,446.47	32,993.78

RESERVES:

Reserve for Depreciation of Water Plant ..	1,783,813.82	1,741,069.32
Reserve for Uncollectible Accounts	57.47	57.47

CONTRIBUTIONS IN AID OF CONSTRUCTION:

Federal Government Grants Not Subject to Repayment	80,142.93	77,897.76
Contributions in Aid of Construction—Other	22,328.17	22,328.17

SURPLUS	3,491,128.36	3,437,992.19
---------------	--------------	--------------

TOTAL LIABILITIES AND SURPLUS	<u>\$5,427,863.94</u>	<u>\$5,329,145.48</u>
-------------------------------------	-----------------------	-----------------------

OPERATING STATEMENT

As of December 31, 1961-1960



OPERATING REVENUES:

Sales of Water
Other Water Revenues

TOTAL OPERATING REVENUES

OPERATION and MAINTENANCE:

Source of Supply Expenses
Power and Pumping Expenses
Transmission and Distribution Expenses
Customers' Accounting & Collecting
Expenses
Administrative and General Expenses
Depreciation
Operating Taxes—Outside City
Contributions to the City in Lieu of Taxes

TOTAL OPERATING REVENUE
DEDUCTIONS

NET OPERATING REVENUES

OTHER INCOME:

Interest Revenues

TOTAL OTHER INCOME

GROSS INCOME

INCOME DEDUCTIONS:

Interest on Long Term Debt

TOTAL INCOME DEDUCTIONS

NET INCOME

SURPLUS

Surplus as at January 1, 1961

Add: Net Income—December 31, 1961

Surplus as at December 31, 1961

DECEMBER 31

1961

\$582,391.51

817.36

\$583,208.87

\$ 24,529.84

126,867.37

85,339.61

29,814.08

42,068.29

77,818.09

30,941.64

155,000.00

\$572,378.92

\$ 10,829.95

\$ 42,306.22

\$ 42,306.22

\$ 53,136.17

\$ —

\$ —

\$ 53,136.17

DECEMBER 31

1960

\$584,244.19

6,467.90

\$590,712.09

\$ 15,711.11

137,639.77

66,505.17

27,262.92

39,544.99

78,165.39

29,801.53

155,000.00

\$549,630.88

\$ 41,081.21

\$ 46,900.16

\$ 46,900.16

\$ 87,981.37

\$ 175.00

\$ 175.00

\$ 87,806.37

\$3,437,992.19

53,136.17

\$3,491,128.36

OPERATING REVENUES

Year Ended December 31, 1961

	Number of Customers	No. of M Gals. Sold	Revenue
Residential Metered Sales	12,078	780,196	\$285,407.35
Commercial Metered Sales	1,017	287,123	103,341.11
Industrial Metered Sales	121	404,746	128,614.11
Private Fire Protection—Metered	44	5,287	1,701.27
Private Fire Protection—Unmetered	10		2,260.00
Public Fire Protection—City of Jamestown—Hydrant Rental	1		31,243.15
Public Fire Protection—Other (Hydrant Rental)	4		7,335.00
Other Sales to Public Authorities	29	9,264	3,475.13
Sales to Operating Municipality	* 58	62,102	19,014.39
TOTAL SALES OF WATER	13,362	1,548,718	\$582,391.51
Customers' Forfeited Discounts			\$ 4,445.02
Merchandise and Jobbing			(4,260.86)
Service Reconnection Charges			123.00
Meter Repair Charges			510.20
TOTAL OTHER WATER REVENUES			\$ 817.36
TOTAL OPERATING REVENUES—WATER			\$583,208.87

*Each active service connection.

TAXES—DIRECT AND TAX EQUIVALENTS—1961-1960

	1961	1960
Town of Ellicott—State and County Tax	\$ 12,579.05	\$ 11,345.50
Town of Ellicott—School Tax	14,824.34	15,141.09
Villages of Celoron and Falconer—Village Tax	3,538.25	3,314.94
City of Jamestown—Contributions in Lieu of Taxes	155,000.00	155,000.00
TOTAL	\$185,941.64	\$184,801.53
Percentage to Total Operating Revenues	31.88%	31.28%

COMPARATIVE STATEMENT

Year	Total Water Operating Revenues	Net Permanent Improvements and Extensions	Gallons Pumped	Operation and Maintenance Cost with Depreciation and Interest	Surplus
1920	\$149,890.85	\$208,152.99	1,207,682,800	\$103,409.71	\$ 974,435.07
1930	296,319.04	164,798.75	1,204,295,000	136,148.31	1,951,980.97
1940	221,747.62	(6,714.88)	1,170,089,000	189,323.12	1,565,006.89
1950	425,738.75	82,500.33	1,679,684,000	285,995.55	2,395,014.26
1955	460,442.22	118,478.75	1,837,989,000	359,781.64	3,011,905.16
1960	590,712.09	98,256.13	1,904,407,000	549,805.88	3,437,992.19
1961	583,208.87	103,498.12	2,010,821,000	572,378.92	3,491,128.36

SUMMARY OF STATISTICS

	DECEMBER 31 1961	DECEMBER 31 1960
Population Supplied—1960 Federal Census	49,400	49,400
Total Pumpage for Year—Gallons	2,010,821,000	1,904,407,000
Maximum Daily Consumption	7,327,000	6,862,000
Average Daily Pumpage—Gallons	5,509,099	5,203,200
Gallons per Day to Each Inhabitant on Total Pumpage	111.5	105.5
Water Supply—Wells in Use	19	19
Area of Water Shed—Square Miles	140	140
Coal Consumed for Pumping—Source of Supply	2,557,000 lbs.	5,566,900 lbs.
Number of Gallons Pumped per Pound of Coal— Primary Station	345.16	342.00
Number of Gallons Pumped per K.W.H. Electricity— Booster Station	904.47	925.50
Storage Reservoirs—Total Capacity in Gallons	6,500,000	6,500,000
Active Services—End of Year	13,192	13,060
Hydrants in Service—End of Year	1,059	1,050
Meters in Service—End of Year	14,057	13,900
Percentage of Active Services—Metered	99.8%	99.8%
Range of Pressure in Mains—Lbs.	30 to 140	30 to 140
Miles Cast Iron Mains in Service—End of Year	144.644	142.700
Miles W.I. & Copper Mains in Service—End of Year	17.753	18.200



OTHER FACTS OF INTEREST

During 1961 the Municipal Water System provided service to 49,400 area residents through 13,362 active meters. The system paid its 40 local employees a total of \$198,297.89. In lieu of taxes, the City of Jamestown received a contribution of \$155,000 from the system, while the areas outside the city were paid taxes of \$30,941.64.

Over 100 students toured the Cassadaga Valley Pumping Station while the Buffalo street facilities were visited by 25 Jamestown area students during prearranged visits.

JAMESTOWN MUNICIPAL UTILITIES

Brief Outline of Facts Since Founding in 1890

- 1890—Electric plant constructed under jurisdiction of City Council.
- 1891—Street Light Service established to 140 street lamps.
- 1895—Plant commenced supplying service to commercial customers.
- 1903—Water works purchased from private interests for \$600,000.
- 1913—English Hill Reservoir of five million gallon capacity constructed.
- 1923—New water supply system in Cassadaga Valley placed in operation.
- 1923—Board of Public Utilities created by Chapter 665, Laws of New York, 1923, to assume control and jurisdiction of municipal utility systems.
- 1923—Levant Pumping Station and water supply removed from service.
- 1925—Buffalo Street Reservoir of one and one-half million gallons capacity constructed.
- 1926—Motor-driven pumps installed in Buffalo Street Pumping Station.
- 1928—Ornamental street lighting system in central section of city completed.
- 1931—Electric system of Niagara, Lockport, and Ontario Power Company acquired by purchase.
- 1933—Harrison Street and Allen Street Substations completed.
- 1934—Warehouse and service building for use of electric utility completed.
- 1938—Power electrical generating capacity increased to 38,500 kilowatts by installation of a 15,000 K.W. turbo-generator. Electric rates reduced.
- 1941—3,000 k.v.a. unit type substation installed at 30 Jones & Gifford Avenue, Jamestown.
- 1942—3,000 k.v.a. unit type substation installed at 254 Harrison St., Jamestown. Contract entered into for sale of water with West Ellicott Water District No. 1.
- 1943—Electric service to railways for car propulsion discontinued September 1, 1943.
- 1945—Contracted for 2-60,000 lb. per hr. boilers for Electric Plant. 196-15 k.v.a. capacitors installed.
- 1947—Supplemental system of seven well units equipped with individual electrically-driven deep well pumps completed. 20,000 kilowatt expansion to Steele Street Power Plant initiated.
- 1948—Properties at 110-126½ Steele Street acquired for power plant expansion purposes. Supplementary water well system approved by Water Power and Control Commission. Schedule of increased water rates made effective October 1, 1948.
- 1950—Replaced pressure parts of three boilers at Cassadaga Valley Pumping Station.
- 1951—20,000 K.W. extension to Steele Street Station, three new substations and connecting underground conduit and transmission system completed and placed in operation. 6 m.g.d. turbine driven pump installed to replace 5 m.g.d. pump at Cassadaga Valley Pumping Station.
- 1953—Schedule of increased electric rates made effective January 1, 1953.
- 1954—New substations at New York Avenue and Dow Street, Falconer, complete with transmission lines to new switchgear at Allen Street Substation.
- 1955—New system of protective relaying inaugurated.
- 1956—Direct current eliminated. Newland Avenue Substation completed. Well No. 8 added to water system. Schedule of increased water rates made effective September 1, 1956.
- 1957—Harrison Street Substation No. 3 placed in operation. Replaced 6 m.g.d. steam driven pump with 6 m.g.d. electric driven pump and rehabilitated the structure at Buffalo Street Pumping Station.
- 1958—Two-way radio equipment installed for use of both the Electric and Water Divisions.
- 1960—New No. 11 boiler (150,000 lbs. per hour capacity) was put in operation to provide full use of present generating facilities at all times at Steele Street Generating Plant.
- Entered contract with U. S. Department of Interior for a 3-year study of underground water resources.
- 1961—6 m.g.d. electric pump was put into operation at Cassadaga Valley Pumping Station.



The two views of the Samuel A. Carlson Generating Plant that appear on the front and back covers of this report are the work of Joseph Frangione, a Junior at Jamestown High School.