

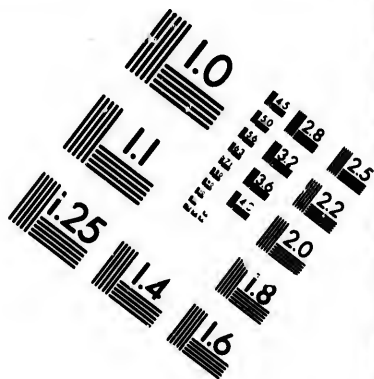
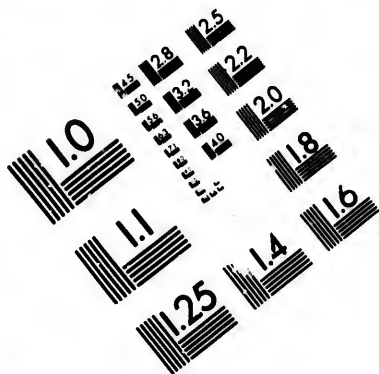
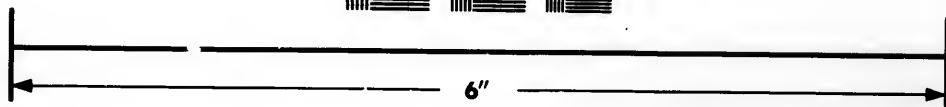
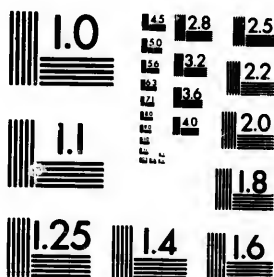


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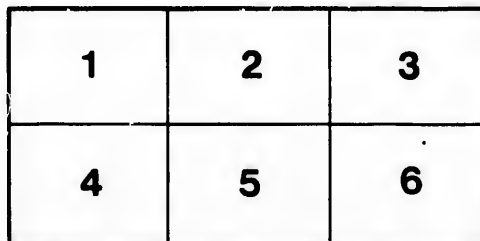
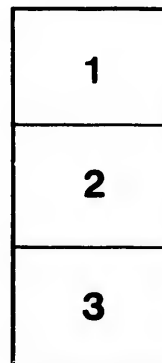
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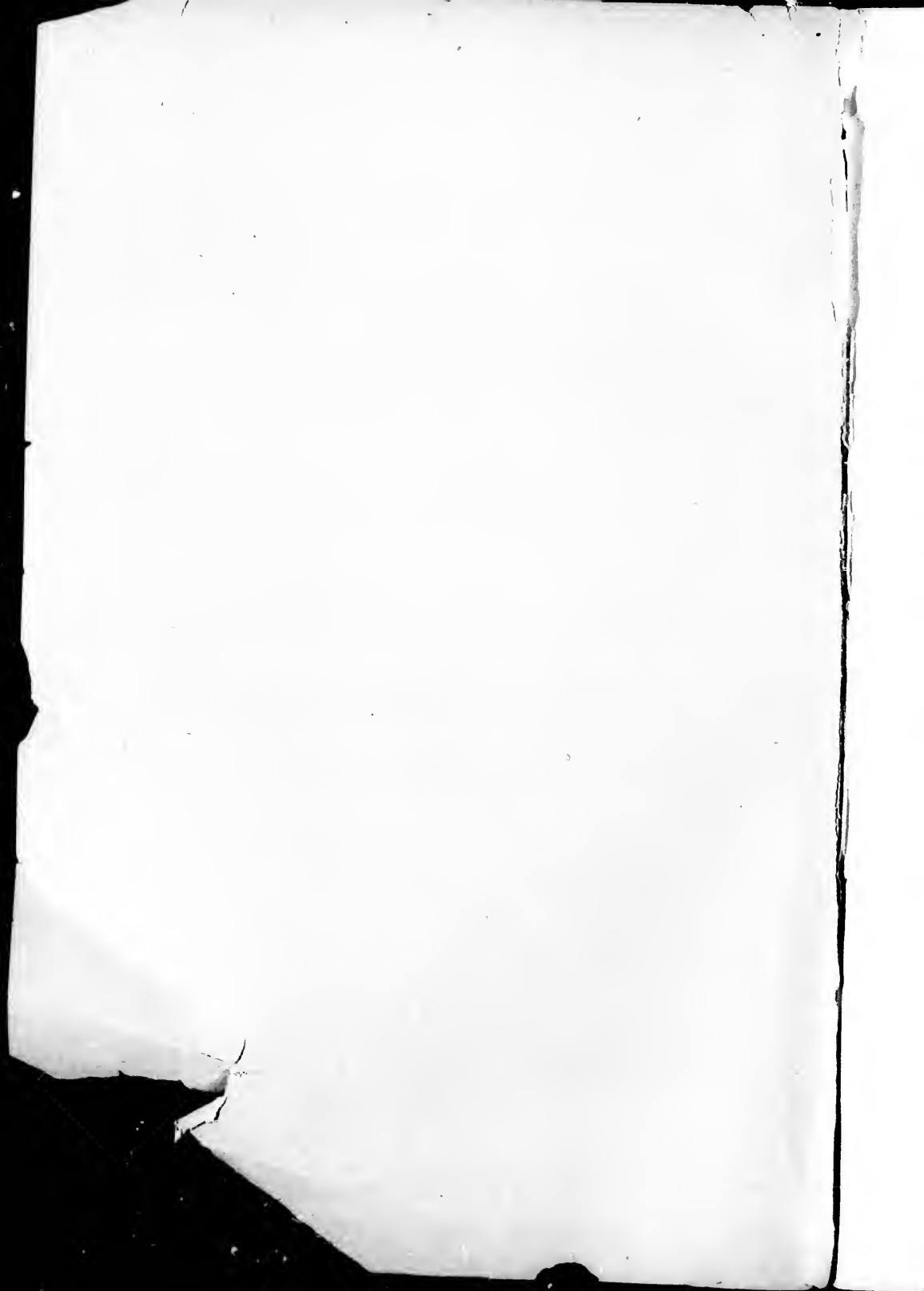
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REPORTS

OF THE

MUNICIPAL ELECTRIC LIGHT PLANT COMMITTEE

1898



REPORT OF SPECIAL COMMITTEE ON MUNICIPAL ELECTRIC LIGHTING.

To His Worship the Mayor and Aldermen of the City of Hamilton.

GENTLEMEN,—

The Special Committee on Municipal Electric Lighting present their 1st report.

Your Committee had copies of the following circular sent to several cities in the United States and Canada where Municipal Electric Plants are in operation, with the object of procuring information as to the results of such operation. The information obtained has been tabulated, and is submitted herewith for the consideration of the Council.

Respectfully submitted,

City Hall, June 27th, 1898.

WM. McANDREW, *Chairman.*

CITY HALL, Hamilton, Canada, May 18th, 1898.

To the City Clerk.

.....
 DEAR SIR,—The Council of the City of Hamilton has in contemplation the establishment of an Electric Light and Power Plant. We are informed that your City has a municipal electric plant in operation. If not putting you to too much trouble, might I ask you to favor me by answering the following questions and furnishing any printed report or other information you may consider would be useful respecting the same.

Anticipating your kindness, I convey to you the thanks of the Committee having charge of the matter.

I remain, yours very truly.

S. H. KENT, *Sec'y Committee.*

QUESTION.

Cost of construction of plant.....\$.....
 Capacity of plant in horse power
 Annual cost of operation.....
 If annual cost does not include interest, insurance and depreciation,
 state per cent. to be added
 Power used (steam or water)

Class of coal used
 Price per ton
 Class of engine used, compound or single
 Number of street lamps used, Arc Candle power
 Incandescent " "
 Are lamps lighted every night or on moonlight schedule,
 Arc lamps lighted all night,

COMMERCIAL LIGHTING.

Number of lamps supplied consumers, Arc
 Incandescent
 Charge to consumers per arc lamp per night,
 or per hour,
 Charge to consumers per Incandescent lamp per night,
 or per hour,
 Is electric energy supplied to manufacturers,
 Charge to consumers for energy per horse power per annum
 Population

GENERAL REMARKS.

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Chairman.

"Domville"

COST OF ELECTRIC LIGHTING AND CO

PLACE.	Cost of Plant.	Capacity in H. P.	Annual Cost of operation	% to be added for interest, etc.	Power used.	Class of Coal.	Price per ton.	Class of Engine.	Number of Arc Lamps.	Candle Power.	Number Incandescent Lamps.	Candle Power.	M. S.
*Ashtabula, Ohio	\$92,000	.....	\$16,000	.....	Steam...	Soft Lump...	\$1 70	.....	98	2000	.....	.....	..
Aurora, Ill.....	51,460	175	10,301	.....	"	Egg and Soft	1 70	.....	206	2000	7	50	w
Alleghany, Pa.....	359,000	1,500	72,597	4%	"	Soft, Nut & Slack	1 00	Compound	1150	2000	5000	16	..
Arlington, Min.....	3,500	50	1,250	10%	"	Soft	4 50	Single	4	400	220	16	..
Bloomington, Ill.....	73,000	350	15,573	.....	"	Soft	1 65	"	307	2000	.....	.....	A
Bangor, Me.....	35,000	.....	6,000	.....	Water...	.....	.....	W W Engine	156	2000	.....	.....	..
Bay City, Mich	42,543	425	8,848	11½%	Steam...	Slack	1 50	Single	220	2000	800	16	w
Chatham, Ont	15,500	65	only run 8 m'nths 110,141	.....	"	Hocking	3 05	Compound	104	1600	.....	.....	..
Detroit, Mich.....	729,222	1,700	.....	.....	"	Lump, Slack and Pea.	.....	.....	1600	2000	3064	16	..
Decatur, Ill.....	35,000	175	4,500	10%	"	Pea	60 to 90c	W W Engine	156	2000	.....	.....	..
Fairfield, Ia	6,000	.....	1,217	.....	"	Lump	2 00	W W Engine	15	2000	.....	.....	..
Goshen, In	20,000	300	.....	.....	"	Soft	2 25	Compound	125	2000	700	16	w
Huntington, In	12,500	.....	3,200	11%	"	Natural Gas ..	10c M ft.	"	57	2000	.....	.....	..
Jamestown, N. Y.....	62,000	400	14,500	.....	"	Lump and Nut.	1 60	"	283	1200	35	32	..
Jacksonville, Fla	125,000	1,400	26,000	5%	"	Wood	2 50 crd	"	120	2000	340	30	..
Little Rock, Ark	35,000	250	8,753	.....	"	Lump and Slack {	3 20 1 90	Hamilton Corliss	212	2000	.....	.....	wh
Peabody, Mass.....	74,986	400	18,912	.....	"	Cumberland ..	3 00	Single	166	1600	90	32	..
Topeka, Kan.....	60,600	235	10,363	7%	"	Lump and Slack {	2 65 2 00	"	260	2000	.....	.....	..
Titusville, Pa	16,320	.....	.....	.....	"	Natural Gas ..	9c M ft.	"	114	2000	.....	.....	..
Windsor, Ont.....	25,000	260	6,784		"	Natural Gas .	annual cost \$2046.00	Compound	132	2000	80	50	..

*Information incomplete

Class of coal

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REPORT OF THE SPECIAL COMMITTEE ON MUNICIPAL
ELECTRIC LIGHT PLANT.

To His Worship the Mayor and Aldermen of the City of Hamilton :

GENTLEMEN.—

The Special Committee on Municipal Electric Light Plant present their 2nd report.

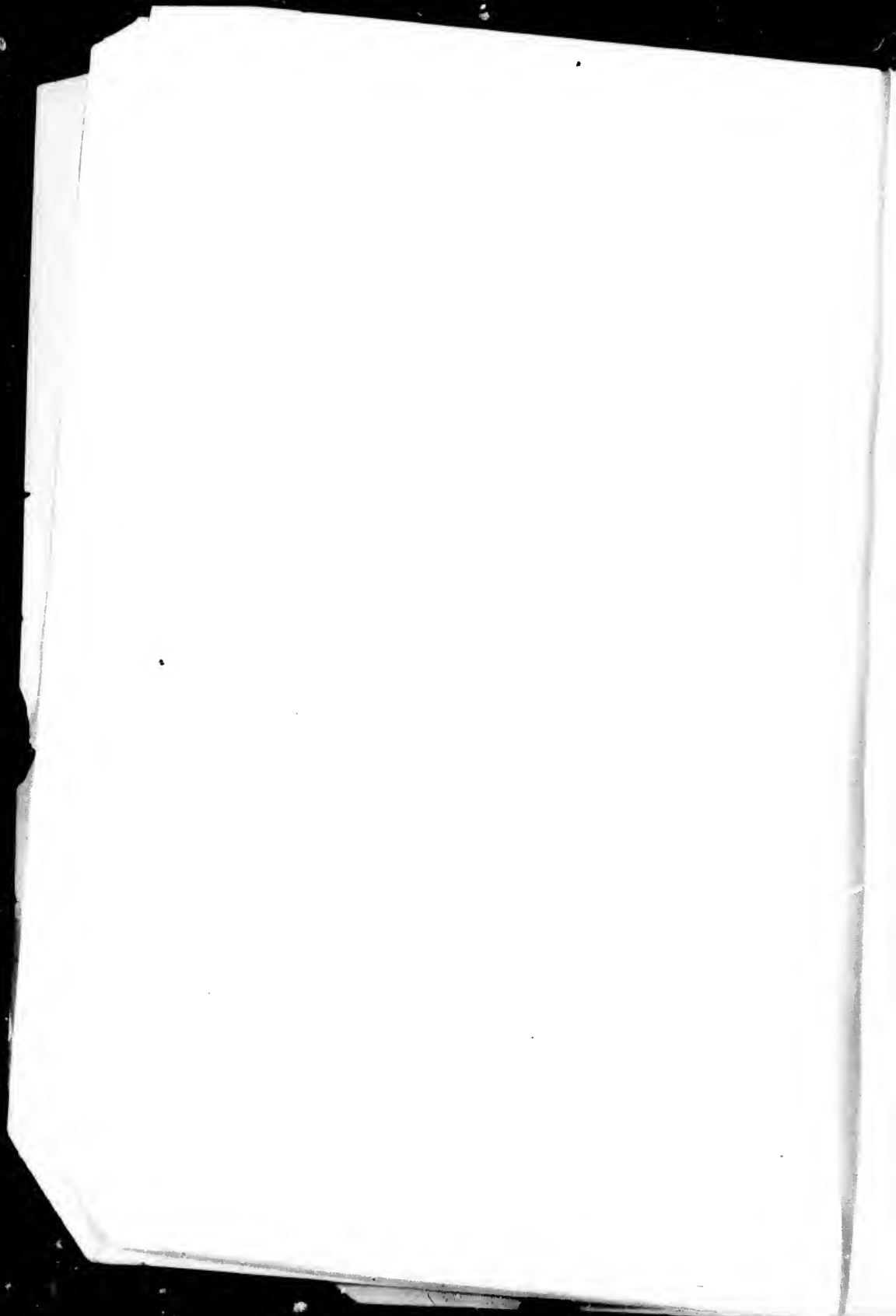
The Committee ask authority to engage *Mr. J. Roderick Parke, Electrical Engineer, to prepare a report on the cost of installing a Municipal Electric plant of sufficient capacity to meet the requirements of the City for arc and incandescent lamps for the next twenty years; also a report on the cost of installing an Electric plant for City and Commercial purposes, with a view of the City supplying the Citizens with electric energy and electric light, the plant to be of sufficient capacity to meet the City's requirements for the above named period. Each report to include an estimate of the annual cost of operation and be complete in every detail; the Engineer agreeing to confer with and advise the Committee from time to time on all matters connected with the installation of the plant. The cost of the said reports not to exceed \$100, and the bona fide hotel expenses of the Engineer while actually engaged in this City on work in connection with these reports.

Respectfully submitted,

CITY HALL, 25th July, 1898.

WM. McANDREW, *Chairman.*

* The name of " J. Roderick Parke " struck out and the name of " Percy Domville " substituted. See folio 201.



REPORT OF THE SPECIAL COMMITTEE RE MUNICIPAL ELECTRIC
PLANT.

To His Worship the Mayor and Aldermen of the City of Hamilton :

GENTLEMEN.—

The Special Committee re Municipal Electric Plant present their 3rd report.

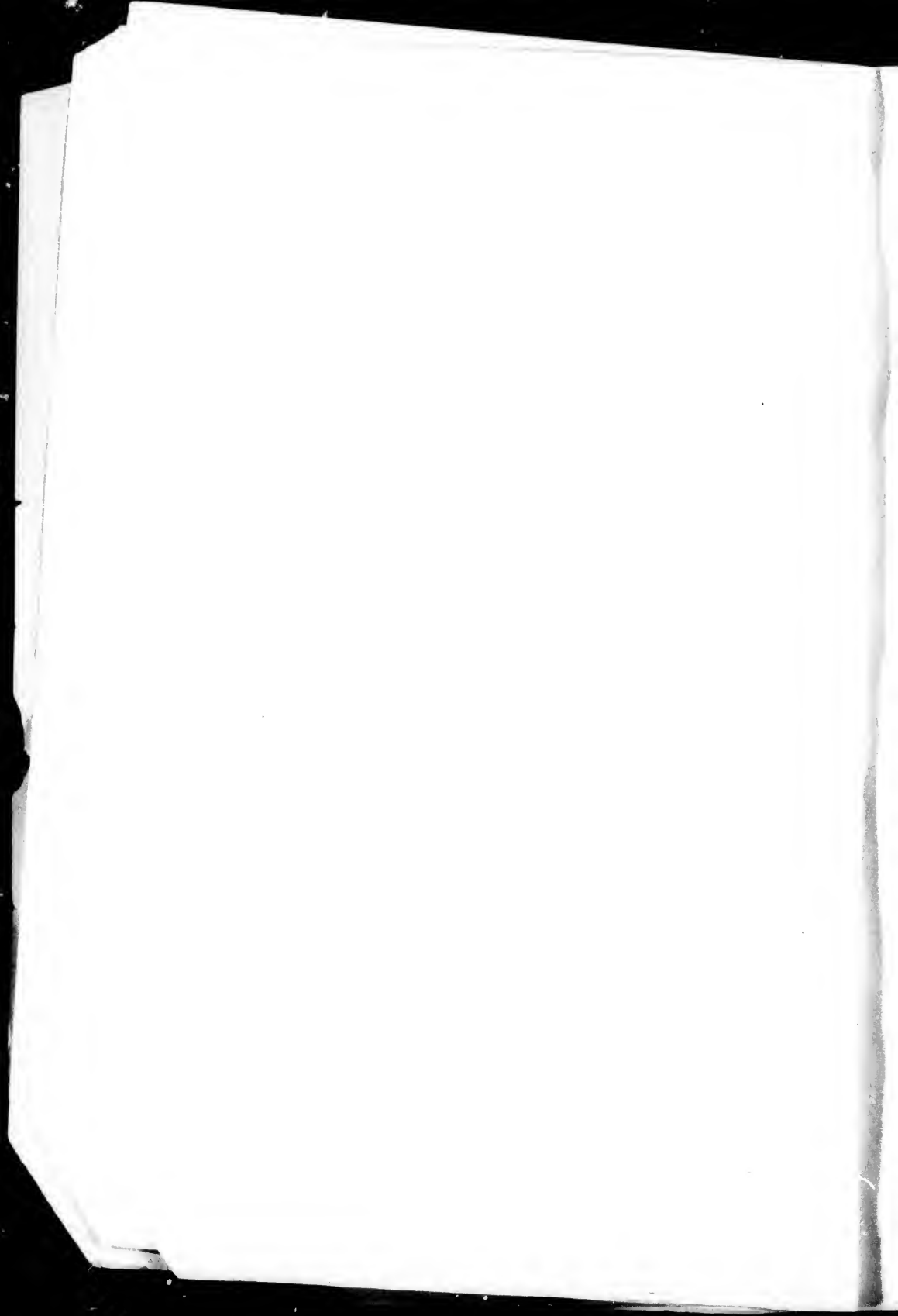
The question of Municipal ownership of an electric plant for street and public building lighting has been carefully considered. Your Committee are of the opinion that the City should own and control the plant. As there is a probability of the Cataract Power Company being able to supply the City with electric power at a less cost than it can be produced by steam, it is recommended that they be requested to give a tender for supplying the City with electric power sufficient to run a Municipal plant of the capacity of 500 arc and 1,000 incandescent lamps, and, with the object of enabling the Company to thoroughly consider the matter, that the time for receiving the tender be extended to February 1st, 1899.

Submitted herewith is the report of Percy Domville, Electrical Engineer, on the cost of installing and operating a Municipal electric plant; a statement prepared by the City Treasurer showing the annual cost and saving to the City by the operation of its own electric plant, based on the report of Percy Domville, Electrical Engineer; a report from the Building Inspector showing the number of incandescent and gas lights used in the public buildings; and a letter from the Cataract Power Company respecting street lighting.

Respectfully submitted,

WM. McANDREW, *Chairman.*

City Hall, 12th December, 1898.



DESCRIPTION OF PROPOSED ELECTRIC LIGHTING PLANTS FOR THE CITY OF HAMILTON, ONTARIO.

I have the honor to submit the following report, in compliance with the resolution of the Special Committee, appointed to consider the advisability of installing and operating a Civic Electric Light Plant, and adopted by the City Council on the 25th of July, 1898.

For the purpose of comparison the report is in two divisions.

1. Description and cost of installing and operating a plant for Electric Arc Lighting Purposes only, *i. e.* the lighting of the City streets.
2. Description and cost of installing and operating an Electric Incandescent Lighting and Power Plant for both commercial and civic purposes in connection with the Arc Lighting Plant.

I.—DESCRIPTION OF PROPOSED CIVIC ARC LIGHTING PLANT—500 ARC LIGHTS.

LOCATION.—Undoubtedly the best location for the plant is on the site adjoining the Sewage Interception Works at the foot of Ferguson avenue. The advantages being the utilization of all surplus power from that establishment, plenty of water for condensing purposes, and probably a saving in labor.

BUILDING.—The Power Station and Boiler House is estimated as containing 6000 square feet of floor space, thus providing room for Engines, Dynamos and all necessary apparatus, with office and storeroom. To be of brick, with stone foundation and slate roof, so planned and located as to allow of additions being made when necessary.

STEAM PLANT ENGINE.

One 500 Horse Power Tandem Compound Condensing Engine and Condenser, and all necessary equipment, capable of supplying power for 550 Arc Lamps of 2000 candle power each, or 650 Arc Lamps of 1200 candle power each.

BOILERS.—636 Boiler Horse Power in three units with fixtures, trimmings, grates, safety valves, gages, etc. Two boilers would be sufficient capacity for general running purposes, but it is deemed advisable to have one in reserve.

It is extremely desirable that this steam plant should be duplicated. The general plan of the station being such that disabling of one engine or boiler could not cause a shut down. The additional cost would not be great.

ELECTRIC PLANT.

DYNAMOS.—Five (5) one hundred and twenty-five light self-regulating series Arc Dynamos, capable of sustaining a steady current of 9.6 amperes or 2000 candle power per lamp.

Four Dynamos of capacity named would be sufficient for present requirements, but experience has proved the necessity of a spare generator.

With the increase of the number of lights to 700, another Dynamo will be required. It is advisable to postpone the purchase of such machine until absolutely necessary on account of constant improvements being made in the manufacture of electrical machinery.

ARC LAMPS.—Five hundred (500) Double Carbon Arc Lamps of the Clutch type, each of 2000 candle power, with globes, hangers, and automatic cut-outs, fitted for $\frac{3}{8}$ in. carbons. These lamps will burn two nights in succession, thus requiring to be trimmed but every other day.

LAMP CIRCUITS.—The line of No. 6, B. and S., weather proof copper wire, to be divided into 9 circuits of about 55 lamps each, thus allowing for additional lamps for each circuit.

Circuits to be so arranged as to prevent as far as possible the centre of the City being in total darkness in case of accident to any circuit or dynamo.

Also provision being made for certain lamps to be lit at all times, in case it is thought advisable to run on a moonlight schedule.

It is evident a much better distribution of lights can be made than at present. Many lamps are so placed that the radiating power is to a degree lost either by their being too high, or hung without proper allowance being made for the shadow cast by trees. These lamps can be so stationed as to give the full candle power of the light generated.

In considering the advisability of substituting a number of 1200 candle power for the present 2000 candle power lamps, the location of such it is impossible to determine without the opinion of your Committee to decide and sanction any changes. Therefore, while not naming the lamps to be changed, the report shows the comparative cost of installing and operating 1200 candle power and 2000 candle power lamps on one circuit.

MAINTENANCE OF PLANT.

In locating the Plant on the land adjoining the Ferguson Ave. Sewage Interception Works, a saving of labor would in all probability be effected by the utilization of the present engineer and his men, who, with the addition of an assistant engineer would be sufficient to operate both steam plants.

FUEL.—The estimated cost of coal required for operating is of considerable importance, fuel being the principal operating expense. With the latest type of Compound Condensing Engines, fitted with economizers, etc., a great saving of fuel can undoubtedly be effected. The amount of coal required is variously estimated from 5 lbs per horse power per hour for a simple Non-Condensing Engine to 1.765 lbs per horse power per hour for a Triple Compound Condensing Engine.

Taking 4 lbs. per horse power per hour as a fair estimate, assuming the efficiency of Engines and Generators to be 90%, and efficiency of line to average 93%, one pound of coal will produce 140.49 Watt hours. The estimate provides for four (4) generators running ten hours per day each 9.6 Amperes, 6250 volts, or a total output of 2,400,000 Watt hours per day.

Estimating 140.49 Watt hours per pound of coal, the amount consumed daily would be 17,083 lbs., or an annual consumption of about 3116 tons.

DESCRIPTION OF ADDITION TO ARC LIGHTING PLANT FOR CIVIC INCANDESCENT
LIGHTING—1000 LIGHTS.

INSTALLATION.—The installation of a Civic Incandescent Lighting Plant will add little to the cost of the Arc Lighting Plant.

It would be necessary to increase size of the engine from 500 to 600 horse power. This, with one alternating dynamo of 50 K. W. 1000 light capacity, with exciter and small switchboard would constitute all the necessary station equipment.

The principal outside item would be cost of wire, transformers and additional poles required.

A number of the civic buildings being already wired the cost in this connection would not be high.

OPERATION.—The cost of operation in connection with the Arc Lighting Plant will not be great.

The number of lights at present wired together with those to be installed is estimated at 1000.

Two-thirds of this number burning for five hours is a fair average of consumption, i. e. 125,000 Watt hours per night.

Assuming as before that one pound of coal will produce 110,49 Watt hours, this would mean an additional consumption of 888 lbs. per day or 162 tons per annum.

II.—DESCRIPTION OF ELECTRIC INCANDESCENT AND ARC LIGHTING AND POWER PLANT
TO OPERATE IN CONNECTION WITH THE CIVIC ELECTRIC ARC LIGHTING PLANT.
3000 INCANDESCENT, 125 ARC LIGHTS.

While the original cost of the installation of an Incandescent and Arc lighting and Power plant for Commercial purposes would be high the City would be more than compensated for the same by the receipts from the sale of Light and Power.

But a small portion of the residential part of the City being covered, there should be no difficulty in installing the full number of lights (3000). This with the introductions of small motors for power should give an adequate return for the money expended, as well as partially if not altogether wipe out the cost of operating the City Arc Lights.

The principal addition to the Power Station would be the duplicating of the Steam Plant and the introduction of one (1) Alternator, one (1) Power Generator and one (1) Arc Dynamo, together with the necessary Switchboards and Connections.

This can be done without addition to building, the principal outside item would be the cost of Wire, Transformers and additional Poles required.

OPERATION.—The addition to the cost of operation would be coal, extra carbons, the employment of two men for indoor wiring, depreciation and interest on bonds.

APPROXIMATE COST OF INSTALLING A CIVIC ELECTRIC ARC PLANT TO LIGHT THE
CITY STREETS, 500 ARC LIGHTS.

STEAM PLANT—

One (1) 500 Horse Power Tandem Compound Condensing Engine and Condensor, erected and connected ready for operation	5,000 00	
Three 212 Horse Power Boilers erected and connected ready for operation	11,550 00	
One Boiler Feed Pump	300 00	
Contingencies	2,000 00	
		\$18,850 00

ELECTRIC PLANT—

Five (5) Self Regulating Series Arc Lighting Dynamos, 125, 2000 C. P. lights capacity, at \$2,750 00	13,750 00	
One (1) Ten Circuit Switchboard, complete	300 00	
500 Double Carbon Arc Lamps, with globes, at \$25.00	12,500 00	
500 Lamp Hangers, at \$5.00	2,500 00	
50 miles of line No. 6 B. & S. Weatherproof Wire, at 16 cts. per lb	4,000 00	
1,750 Cedar Poles, with one cross arm, at \$3.60	5,250 00	
Setting same at \$1.00	1,750 00	
Insulators and Pins	150 00	
Erecting Wire, \$10.00 per mile	500 00	
		40,700 00

BUILDING, ETC.—

Building and chimney	30,000 00	
Belting	830 00	
Pulleys	250 00	
Shafting, etc.	500 00	
Publishing By-law and incidental expenses	1,000 00	
Contingencies	5,000 00	
		37,580 00
Total		\$97,130 00

ANNUAL COST OF OPERATING CIVIC ELECTRIC ARC LIGHTING PLANT OF 500 LIGHTS
CAPACITY.

Coal, 17,083 lbs. per night or 3,117 tons per annum at \$2.00 per ton	6,234 00	
Carbons, 500 pair per night at 1½¢ per pair	2,737 00	
Oil and Waste	300 00	
LABOR.—1 Supt. and Electrician	7,800 00	
1 Chief Engineer	900 00	
1 Assist. "	700 00	
1 Fireman	600 00	
1 Dynamo Tender	600 00	
1 Lamp repairer and tester	600 00	
3 Trimmers at \$500	1,500 00	
2 Linemen at \$500	1,000 00	
1 Patrolman	500 00	
1 Laborer	450 00	
Keep of 4 horses	500 00	
Office expenses stationery, etc	600 00	
Depreciation 5% on \$97,130.00	4,856 50	
Interest on \$97,130.00 at 3½%	3,399 55	
		\$27,277 05

II

Cost of Arc light per annum	54 55
" " " " night	1493

COMPARATIVE COST OF INSTALLING AND OPERATING 1200 AND 2000 C. P. LAMPS FOR ONE CIRCUIT—60, 2000 C. P. 75, 1200 C. P. LAMPS.

60 Double Carbon Arc Lamps, 2000 C. P., at \$25.00 ...	1,500 00
75 " " " " 1200 C. P., at \$25.00 ...	1,875 00

MAINTENANCE—

Carbons, 2000 C. P.	328 50	
Repairs, 2000 C. P.	65 00	393 50
Carbons, 1200 C. P.	410 62	
Repairs, 1200 C. P.	93 75	503 37

ADDITIONAL COST OF INSTALLING AND OPERATING AN ELECTRIC INCANDESCENT LIGHT- ING PLANT FOR CIVIC PURPOSES ONLY—1000 INCANDESCENT LIGHTS.

STEAM PLANT—Size of Engine increased from 500 H. P. to 600 H. P.	\$1,000 00	
Boiler H. P. increased proportionately	1,750 00	\$ 2,750 00

ELECTRIC PLANT—One 50 K. W.—1000 Light Alternator....	2,500 00	
40 Transformers, 25 Lights at \$32 50	1,300 00	
10 Miles of Feed Wire No. 00B. & S. at \$300 per mile..	3,000 00	
Erecting Wire	100 00	
Belting and Pulley	100 00	
Cross Arms, Pins, Insulators, Etc	125 00	
Extra Poles	150 00	
Setting same	50 00	\$ 7,325 00

Total..... \$10,075 00

ADDITIONAL OPERATING EXPENSES.

Coal, 888 lbs. per night or 162 tons per annum at \$2.00	324 00	
Interest on \$10,075 at 3½%	352 00	
Lamp Renewals, Sundry Expenses, Depreciation, Etc.	324 00	\$ 1,000 00

APPROXIMATE COST OF INSTALLING AN ELECTRIC INCANDESCENT AND ARC LIGHTING AND POWER PLANT IN CONNECTION WITH THE CIVIC ELECTRIC ARC LIGHT- ING PLANT FOR COMMERCIAL PURPOSES. 3000 INCANDESCENT LIGHTS—125 ARC LIGHTS.

STEAM PLANT —

One (1) 500 Horse Power Tandem Compound Condens- ing Engine and Condensor erected and connected, ready for operation	\$5,000 00	
Two (2) 212 Horse Power Boilers erected and connected ready for operation	7,700 00	
One Boiler Feed Pump	300 00	
Contingencies	1,000 00	\$14,000 00

ELECTRIC PLANT, INCANDESCENT—

One (1) 150 Kilo Watt 3000 lights, Alternator complete, with Exciter and Switchboard.....	\$4,000 00	
Transformers of sufficient capacity for above	3,000 00	
Approximate cost of Line Wire, about 25 miles.....	9,000 00	
Extra Poles.....	800 00	
Setting same.....	150 00	
Erecting Wire, \$10.00 per mile	250 00	
Belting and Pulley	200 00	
Cross Arms, Pins, Insulators, etc.....	291 00	
		\$17,691 00

ELECTRIC PLANT, ARC—

One (1) Self Regulating Series, Arc Lighting Dynamo		
125 2000 C. P. lights capacity	\$2,750 00	
125 Single Carbon Arc Lamps with globes at \$15.00..	1,875 00	
10, miles line No. 6 B&S Weatherproof wire at 16c. lb.	800 00	
Insulators and Pins	20 00	
Erecting Wire, \$10.00 per mile.....	100 00	
Pulley and Belting.....	80 00	
		5,625 00

ELECTRIC PLANT POWER—

One (1) 100 K. W. Multipolar Generator complete with		
Switchboard	\$3,000 00	
Belting and Pulley.....	200 00	
		3,200 00
Total		
		\$40,516 00

ANNUAL COST OF OPERATING ELECTRIC, INCANDESCENT AND ARC LIGHTING AND POWER PLANTS FOR COMMERCIAL PURPOSES—3000 INCANDESCENT LIGHTS—
125 ARC LIGHTS.

Coal, Incandescent Plant 3555 lbs. per night or 648 tons		
per year.....	\$1,296 00	
Coal, Arc Plant, 2135 lbs., per night or 389 tons per		
year.....	778 00	
Coal, Power Plant, 7110 lbs. per night or 1066 tons per		
year.....	2,132 00	
Carbons, 63 pair per night, 300 nights at 1½c. pair...	283 50	
2 men for indoor wiring at \$600.....	1,200 00	
Interest on \$40,516 at 3½%	1,418 00	
Depreciation 5% on \$40,516	2,025 00	
Lamp Renewals and Sundries.....	200 00	
		\$ 9,332 50

Respectfully submitted,

PERCY DOMVILLE.

HAMILTON, Oct. 19th, 1898.

CITY TREASURER'S OFFICE, 3rd Nov., 1898.

Ald. McAndrew :

DEAR SIR,—

The approximate cost of installing a Civic electric arc plant to light the City streets, 500 arc lights, as per Mr. Domville's report is.. \$ 97,130 00
 The additional cost of installing an electric incandescent lighting plant for Civic purposes only, 1,000 lights..... 10,075 00

Total..... \$107,205 00

The amount expended in year 1897 for lighting the streets..... \$34,563 90
 For lighting City buildings, as per statement attached.. 3,283 79
 \$ 37,847 69

The cost of operating street lighting plant, as per Mr. Domville's report..... \$27,277 05
 The cost of operating plant for Civic purposes..... 1,000 00
 Loss of taxes on machinery and plant of the H. E. L. & P. Co., assessment \$70,000 1,400 00
 29,677 05

Balance in favor of proposed Civic plant \$8,170 64

Should the amount required for installing the plants, viz., \$107,205.00, be raised by debentures, 20 years at 4 per cent., the annual payment for principal and interest would be \$ 7,917 08
 Deduct amount of interest included in Mr. Domville's report, \$3,399.55 and \$352.00..... 3,751 55
 \$ 4,165 53

Balance in favor of proposed Civic plants..... \$4,605 11

That is the cost of proposed plants and operating them would be \$4,005.11 per annum less than is now paid for lighting, and at the end of 20 years the buildings and plant would be paid for.

Mr. Domville's estimate for street lighting is for 500 lights and for Civic purposes 1,000 lights. At present only 380 and 887 respectively are used. This would make a further difference in favor of the proposed Civic plants—how much it would be Mr. Domville may be able to determine.

A. STUART, City Treasurer.

COST OF LIGHTING PUBLIC BUILDINGS FOR 1897.

	Electric.	Gas.	Oil.	Gas Control.
City Hall.....	\$ 497 11	\$ 30 00	\$	\$
Fire Department		242 60		9 60
Hospital		880 85		8 55
House of Refuge.....	237 24			
Jail		187 95		8 25
Markets	18 93	85 80		
Parks	182 50			
Police Department	361 50	76 15		
Public Library	350 04	21 20		
Weigh Scales.....		2 80		
Public Schools		23 50	18 42	
Collegiate Institute	13 70	27 10		
	<u>\$1,661 02</u>	<u>\$1,577 95</u>	<u>\$18 42</u>	<u>\$26 40</u>

LIGHTING AND POWER
LIGHTS—

96 00

8 00

32 00

83 50

00 00

18 00

25 00

00 00

\$ 9,332 50

Y DOMVILLE.

Electric Lighting as above	\$ 1,661 02	
Gas " "	1,577 95	
Oil " "	18 42	
Gas Control " "	26 40	
		\$ 3,283 79
Street lighting		34,563 90
		<u>\$37,847 69</u>

This sum would pay interest at $3\frac{1}{2}$ per cent. on \$1,081,400.00.

CITY TREASURER'S OFFICE,
Hamilton, 2nd Nov., 1898.

A. STUART, *City Treasurer.*

HAMILTON, November 3rd, 1898.

ALD. McANDREW,

Chairman Special Committee re Electric Light Plant :

DEAR SIR,—

There are 516 incandescent and 371 gas lights in the several City buildings, total 887 lights.

Yours faithfully,

JOHN ANDERSON, *Building Inspector.*

HAMILTON, Nov. 26th, 1898.

WM. McANDREW, Esq.,

Chairman Special Committee on Municipal Electric Plant, City Hall.

DEAR SIR,—

Regarding a tender from this Company for supplying the lighting of the City streets. Owing to the short time allowed between November 18th, the date on which this subject was first mentioned to us, and the latest day stipulated that the offer could be received, namely, November 26th, and in view of the entire absence of any specifications of the requirements, we are unable to submit a proper tender at the date specified. We wish to investigate certain improvements in the methods of street lighting before making this offer, and, taking into consideration the fact that the present City Contract will not expire for nearly two years yet, we respectfully request that more time be allowed us to carefully investigate the matter in order that we may be able to submit a properly considered tender.

You will appreciate the fact that in order to make an accurate figure it will be necessary to get the cost of installing the apparatus required, and also to have accurate information as to any changes that may be desirable in the present arrangement of lights. The time allowed was too short for this purpose, but should you still desire our figure, we will continue our investigations and be prepared to submit a tender sufficiently early so as not to interfere with the plan of erecting a Municipal plant should it be decided upon.

While unable at this short notice to name a figure at which we will do the lighting of the City streets, we can say, however, that when the time arrives for definitely settling this matter, we will offer to perform this service at a lower price than the City is paying at present and at a less figure than the average cost of cities which have been operating their own plants, under circumstances similar to those pertaining to this City.

Yours truly,

THE CATARACT POWER CO. OF HAMILTON, LIMITED.

H. R. LEYDEN, *General Manager.*

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