

DEPARTMENT OF THE INTERIOR, CANADA

HON. ARTHUR MEIGHEN, Minister : W. W. CORY, Deputy Minister.

DOMINION WATER POWER BRANCH

L. B. CHALLIES, C.E., Director

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CENTRAL ELECTRIC STATIONS
IN CANADA

PART II---DIRECTORY (Jan. 1, 1919)

BY

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Prepared in collaboration with the Dominion Bureau of Statistics of the
Department of Trade and Commerce

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CENTRAL ELECTRIC STATIONS
IN CANADA

LETTER OF TRANSMITTAL

OTTAWA, January 31, 1919.

W. W. CORY, Esq., C.M.G.,
Deputy Minister of the Interior,
Ottawa, Canada.

SIR,—The Directory of central electric stations herewith submitted, comprises the second section of a report on the central station industry of Canada. The report has been compiled under a co-operative arrangement between the Dominion Water Power Branch, Department of the Interior, and the Dominion Bureau of Statistics, Department of Trade and Commerce, with the assistance of the Ontario Hydro-Electric Commission and the Quebec Streams Commission.

The report deals with central electric stations only, that is to say, with stations developing electrical energy for sale or purchasing a block of power for resale. It is in two sections, the first comprising a comprehensive statistical survey of the industry and the second a Directory of the commercial and publicly-owned power stations reported as in operation throughout Canada.

The two sections of the report are being issued in uniform volumes, the first section comprising the statistics of the industry being distributed by the Dominion Bureau of Statistics, to whom application should be made for copies, and the second section, or the Directory, submitted herewith, being distributed by the Dominion Water Power Branch.

The basic data for the Directory were secured through census schedules distributed to the central stations through the Census Office. Summaries were prepared in this office covering each central station and were submitted for revision to the proper central station officials before being included in final form in the Directory. Particular care was taken to secure information respecting locations where blocks of electrical energy are for sale, the prices at which this power is obtainable and the transportation and other facilities which are available in the vicinity. This information has been incorporated in the Directory.

While the outstanding importance of water-power in the industrial activities of Canada and its relation to the central station industry was recognized at the inauguration of the census inquiry, the results indicate an even greater development than it was supposed had been realized. The census returns disclose the remarkable fact that 90 per cent of the central station primary power is derived from water and they emphasize both the extent of Canadian water-power resources and their ready availability to the great industrial centres from coast to coast.

The conception of the census, the direction of the work, the analysis of the census returns and the preparation of the Directory has been the responsibility of Mr. J. T. Johnston, Assistant Director of Water Power. Mr. J. R. Bissett, Mr. N. Marr, and Mr. G. G. McEwen of the engineering staff have rendered valued assistance in the analysis of the statistics. Mr. N. E. D. Sheppard has been particularly charged with the detailed preparation of the Directory.

Acknowledgment is made here of the hearty co-operation which the central station interests throughout the Dominion have shown in filling in the census schedules and particularly in releasing for publication the material contained in the Directory.

I have the honour to be, sir,

Your obedient servant,

J. B. CHALLIES,
Director of Water Power.

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CENTRAL ELECTRIC STATIONS
IN CANADA.

CENSUS STATISTICS.

JANUARY 1, 1918.

CENTRAL ELECTRIC STATIONS
IN CANADA

By H. J. W. HARRIS

1914

INTRODUCTORY

CENTRAL ELECTRIC STATIONS IN CANADA.

The increasing use and application of electrical energy is one of the outstanding phases of modern industry. In this connection the great water-power resources of the Dominion, the ready adaptability of hydro-power to the production of electrical energy, and the increasing extent and scope of economic electrical transmission, form an industrial asset which probably more than any other will ensure a full measure of future prosperity. A thorough investigation of the present status of the central electrical station industry forms therefore one of the essential preliminaries to systematic and intelligently directed development of our water resources.

Hitherto no attempt has been made to study and systematically analyse the central station industry in Canada, although its importance to industrial and commercial activities can scarcely be overstated. Electrical energy provides the ideal source of power for practically all classes of manufacturing, for the operation of street railways, for the operation of mines, for municipal and domestic lighting and for innumerable other activities. In brief, modern industrial, commercial and domestic life is very largely dependent upon an ample supply of electrical energy.

A census of the central electrical station industry of Canada has just been completed under a co-operative arrangement between the Department of the Interior, represented by the Dominion Water Power Branch, and the Department of Trade and Commerce, represented by the Dominion Bureau of Statistics.

The report has been prepared in two sections: the first comprising the statistics of the central station industry of the Dominion, and the second forming a Directory of the central electric stations. A detailed analysis of the census statistics is being published by the Dominion Bureau of Statistics, from whom copies may be received upon application. The publication herewith comprises the Directory with a very brief introductory statement of the outstanding features of the statistics. The statistics are complete to January 1, 1918, while the Directory covers the conditions maintaining on or about January 1, 1919.

The purpose of the present report is four-fold: first, a stock-taking of the present central station facilities with the provision for expansion; second, an analysis of the statistical data collected for the purpose of noting the characteristics and trend of the industry; third, the preparation of a complete Directory of the central station industry covering concisely and systematically the principal features of the commercial and publicly-owned stations and systems in operation throughout the Dominion; and, fourth, the making available to those interested the locations where blocks of electrical energy are for sale, the prices at which this power is obtainable, and the transportation facilities available in the vicinity.

In view of the enormous demands on power in all parts of the country, a special effort has been made to secure information respecting blocks of power available for sale. The results secured in this direction were most satisfactory and are incorporated in the Directory. This information will be kept as up to date as possible in the offices of the Dominion Water Power Branch.

The central station data contained in this introductory statement cover only those electrical stations which are engaged in the sale of electrical energy for light, power, heat; for industrial use in manufacturing, mining and other enterprises; for all public or private uses, or in bulk to other distributing companies or to municipalities. The census definition of the term "central electric station" is *a station which is engaged in the sale of electrical power. Central stations can be classed under two*

characteristic heads: those which generate their own power, and those which purchase a block of power from distributing companies for the purpose of reselling the same. Each power generating plant has been designated a central station throughout the statistics even although several plants may be operated by one organization.

The reference numbers which have been allocated to the central stations in the Directory are tied in to the general index-inventory system developed by the Dominion Water Power Branch for the recording of water resources and pertinent power data. (See Key plan of Index Divisions.)

CENTRAL STATION STATISTICS.

The total central electric stations reporting number 666, of which 470 generate their own power, and 196 purchase power from distributing stations. The Directory is complete to a later date than the census and contains a greater number of central stations than indicated by the foregoing. (See note, p. 9.)

Power Equipment Installed.

The total primary power installed on January 1, 1918, was 1,844,571 horse-power, of which 78.3 per cent or 1,444,314 horse-power is installed in commercial stations and 21.7 per cent or 400,257 horse-power in municipal stations. Of the total primary installation for all of Canada, it is interesting to note that 251 units or 180,200 horse-power are steam, 113 units of 11,710 horse-power are gas and oil engines, while 619 units totalling 1,652,661 horse-power are turbines or water-wheels. The total primary power installed averages 221 horse-power per thousand population; the k.v.a. dynamo capacity averages 166.

The average capacity of the central electric stations of the Dominion is 3,925 horse-power and the average of each machine 1,876 horse-power. The average commercial station has more than double the capacity of the average municipal station, 4,879 horse-power for the former, as against 2,300 horse-power for the latter, while the average machine unit is 2,253 horse-power, compared with 1,170 horse-power for the average municipal unit.

The steam turbines in central stations average 11,535 horse-power per station, and 2,884 horse-power per unit, as compared with 420 horse-power per station and 258 horse-power per unit in reciprocating steam stations; indicative of the development and adaptability of the steam turbine in modern electric stations.

The total capacity of the dynamos in central electric stations throughout the Dominion is 1,387,521 k.v.a., averaging 2,952 k.v.a. per station, and 1,471 k.v.a. per dynamo.

Employees, Salaries, and Wages.

The salaried employees and wage-earners total 8,847 for the Dominion, with salaries and wages aggregating \$7,777,715. Of this total, 5,135 are employed in commercial stations with salaries aggregating \$4,290,505, and 3,712 in municipal stations with salaries totalling \$3,487,210. The salaried employees include officers, superintendents, managers, clerks, stenographers, and other office employees, and expert hydraulic and electrical operators. These employees total 3,346 with salaries aggregating \$3,443,302. The wage-earners reported total 5,501 with wages totalling \$4,334,413. The total number of employees throughout the Dominion averages 3.8 per thousand installed primary horse-power, and 6.4 per thousand k.v.a. installed generator capacity. The total salaries and wages paid average \$4.22 per annum per installed primary horse-power, or \$5.61 per installed k.v.a. generator capacity.

Capital Invested in Central Stations.

The investment in the central electric station industry totals \$356,004,168, of which \$282,818,495 is reported by commercial stations and \$73,185,673 by municipal or publicly-owned stations. The actual cash investment in real estate, construction of dams, flumes, penstocks, hydraulic works, power station and power equipment,

transmission and distribution equipment is \$297,296,494, of which \$231,480,483 is reported for commercial plants and \$65,816,011 for municipal plants. The balance of the capital reported covers cash on hand, current assets, supplies and all other items. The average capital invested for the Dominion per primary horse-power is \$193. For commercial stations this figure is \$196, and for municipal stations, \$183.

The gross revenue received from power sales totals \$44,536,848, of which \$29,135,399 is secured by commercial stations and \$15,401,449 by publicly-owned stations. Of the total revenue secured, \$18,403,639 is derived from the sale of power for lighting purposes and \$26,133,209 from sales for all other purposes.

HYDRO POWER IN CENTRAL STATION INDUSTRY.

A review of the proportion of water-produced energy in the central electric station industry in Canada is exceptionally interesting. It is remarkable to note that out of a total installed capacity of 1,844,571 horse-power in central electric stations, 1,652,661 horse-power or 89.6 per cent is derived from water. Yukon develops 97.4 per cent of its primary central electric station energy from water. Ontario develops 95.7 per cent from water, indicating markedly the commercial adaptability of water-power for central station work even where in competition with convenient and reasonably cheap coal supplies. Manitoba develops 95.2 per cent from water, practically entirely from the Winnipeg River power reach. Quebec develops 94.9 per cent of its central station energy from water. British Columbia develops 89.8 per cent from water, although first-class coal supplies are available in the province. Alberta develops 43.2 per cent from water, although an abundant coal supply is available. The water-power developed in this province is practically wholly derived from the Bow River system. New Brunswick develops 38.8 per cent from water-power, Nova Scotia 19.2 per cent. The percentage of water-power used in central electric stations in Nova Scotia is low, although the province is exceptionally endowed with available water-power resources. An abundant coal supply indicates the reason for this condition. The city of Halifax is served from a steam-driven plant, the largest central electric station in the province. The present tendency in the province is, however, towards the increased use of hydro-power. In Prince Edward Island only 13.9 per cent of the central station power is derived from water. The topography and area of the Island province explains the lack of water-power resources. In Saskatchewan no water-power is developed. Here the topography of the province is solely responsible; the entire settled portion is located in prairie country which is not naturally endowed with attractive water-power sites.

In spite, however, of the low figures in certain provinces, the percentage of primary power in central stations produced from water is extraordinarily high—practically 90 per cent—and is indicative of two outstanding features, viz., the extent and availability of the water-power resources of the Dominion and the remarkable degree to which their adaptability for central electric station work has been appreciated in principle and realized in practice.

In water-driven plants the central station capacity for the Dominion averages 6,381 horse-power with 2,670 horse-power average units. Commercial water-driven plants average 7,112 horse-power, compared with 4,518 horse-power in municipal plants, the units averaging 2,901 horse-power and 2,024 horse-power, respectively.

The capital invested in hydro-electric central stations and systems totals \$310,104,658, averaging \$188 per installed horse-power for the Dominion. Commercial stations average \$189 per horse-power and municipal stations \$180 per horse-power. This cost includes all capital invested in construction and equipment of hydraulic works, power station, transmission and distribution systems; real estate, cash on hand, current assets, supplies, and all other items.

Construction Cost at Power Site of Hydro-Power Stations.

Of special interest to engineers is the actual cost of construction of hydro-electric power stations per installed turbine horse-power. The census questions were designed to secure this figure. In a large number of instances it was found to be impossible to obtain the subdivision desired as the construction cost records had not been preserved, so that the census returns as a whole could not be analysed on this basis. Sufficient accurate returns were, however, secured to permit of a statement on average costs.

The figures of seventy representative hydro-electric stations throughout the Dominion, with an aggregate turbine installation of 745,797 horse-power, show a total construction cost of \$50,740,468, or an average of \$69.11 per installed horse-power. The cost includes the capital invested in construction of dams, flumes, penstocks, and all hydraulic works, and of power stations and equipment. It excludes real estate and transmission and distribution equipment. The figure in brief represents the capital cost of construction at the power site.

TOTAL WATER-POWER DEVELOPMENT IN CANADA.

Apart from the foregoing statistics which have to do with the central electric station industry in Canada, a census of the total developed water-power in the Dominion has just been completed by the Dominion Water Power Branch in co-operation with the Dominion Bureau of Statistics. This compilation is complete to date, i.e., January, 1919, and takes into consideration the growth in turbine installation during the year 1918. The totals disclosed are exceptionally interesting. The water-power resources of Canada, with their strategic locations adjacent to practically every industrial centre, constitute one of our greatest assets, and it is satisfactory to note that the economic advantages accruing from utilization of these powers for industrial purposes is being fully realized in practice.

Table 1 analyses the installed turbine or water-wheel capacity of the Dominion by provinces, and by use of power. The returns indicate a total developed water-power capacity of 2,305,310 horse-power.

TABLE 1.—Distribution of developed water-power in Canada by provinces and by use of power, January 1, 1919. Figures represent installed turbine horse-power.

	*Central Elec- tric Stations. H. P.	†Pulp and Paper. H. P.	Other Industries. H. P.	Total. H. P.	H. P. per 1,000 population.
	1	2	3	4	5
Yukon	10,000	.....	3,392	13,392	1,574
British Columbia.....	221,025	46,450	41,348	312,423	506
Alberta.....	32,580	.....	300	32,880	63
Saskatchewan.....	.....	.....	.....	.....	.....
Manitoba.....	64,100	.....	12,072	76,172	133
Ontario.....	791,163	133,952	59,945	985,060	359
Quebec.....	597,601	155,512	89,648	842,761	376
New Brunswick.....	6,878	2,800	5,191	14,869	41
Nova Scotia.....	3,354	13,500	9,170	26,024	51
Prince Edward Island.....	170	.....	1,559	1,729	19
	1,727,471	352,214	225,625	2,305,310	215

* Column one includes only hydro-electric stations which develop electrical power for sale.

† Column two includes only the water-power owned by pulp and paper companies. In addition to this total, upwards of 100,000 hydro-electric horse-power is purchased by pulp and paper companies, mainly from the central electric stations included in column one. The hydraulic power utilized in the pulp and paper industry of Canada therefore totals 450,000 horse-power.

Of the total water-power developed, 1,727,471 horse-power is installed in central electrical stations, that is to say, in stations developing electrical energy for distribution and sale; 352,214 horse-power is installed in plants owned and operated by pulp and paper companies, and 225,625 horse-power is installed in other miscellaneous manufacturing and general industrial establishments. The foregoing figure for pulp and paper companies does not, however, represent the total amount of water-power used in that industry; upwards of 100,000 hydro-electric horse-power in addition is purchased by pulp and paper companies from central electrical stations, making the total hydro power utilized in pulp and paper industry some 450,000 horse-power. If this 100,000 horse-power is added to column 2, it should be subtracted from column 1 to maintain the correct tabular totals.

Column 5 of the table discloses interesting figures respecting the hydro power development in the various provinces on a per capita basis. In the Yukon the hydro power developed per thousand population totals 1,574 horse-power, in British Columbia 506 horse-power, in Quebec 376 horse-power, in Ontario 359 horse-power, and in Manitoba 133 horse-power. The other provinces average smaller figures. The ratio for the entire Dominion averages 276 horse-power developed per thousand population. The availability of hydro-power, the distribution, the density and occupation of the population have a very direct bearing upon the amount of power developed.

The per capita figures of hydro power developed for the Dominion, when compared with similar figures for other countries, are indicative of the advanced position which this country takes, both in the extent and in the utilization of the water-power resources. Norway and possibly Sweden are the only countries where the per capita utilization of water-power exceeds that of Canada. The fundamental reason underlying the extensive use of water-power in Canada lies in the fact that practically every commercial centre from coast to coast, excepting only a few in the middle Prairie Provinces, have abundance of water-power available, not only for present needs, but for all anticipated requirements.

THE DIRECTORY.

In compiling the material for the Directory, digests were prepared covering the installations of the central stations and incorporating the available general data pertinent to the scope of their activities. These digests were submitted to the officials in responsible charge of the respective stations, companies or municipalities with a request that the data be checked, deleted or added to as each individual case might warrant, and that the revised digest be returned to Ottawa for publication. The material as published therefore represents the revisions of responsible officials in each instance. The date of the final return is included in the write-up.

For further information regarding water-powers
in Canada, application should be made direct
to the following administrative officers
of the Dominion and the various
Provincial Governments:

Province of British Columbia: The Comptroller
of Water Rights, Victoria, B.C.

Provinces of Manitoba, Saskatchewan and Alberta:
Director of Water Power, Ottawa, Ont.

Province of Ontario: The Deputy Minister of
Lands, Forests and Mines, Toronto, Ont.; also,
to the Secretary of the Hydro-Electric Power
Commission of Ontario, Toronto, Ont.

Province of Quebec: The Chief Engineer, Hydraulic
Service, Department of Lands and Forests,
Quebec, Que.

Province of New Brunswick: Chairman of the
New Brunswick Water Power Commission, St.
John, N.B.

Province of Nova Scotia: The Secretary of the
Nova Scotia Water Power Commission,
Halifax, N.S.

CENTRAL ELECTRIC STATIONS IN CANADA.

DIRECTORY (Jan. 1, 1919.)

COLLATION OF DATA BY N. E. D. SHEPPARD, B.A.Sc.

NOTE.—The Directory includes a total of 765 "Central Electric Stations" (see definition p. 3) of which 534 generate their own power and 231 purchase power. This total does not include 60 auxilliary electric plants, some of which from the manner in which they are utilized might properly be designated central stations. A total of 987 municipalities are served with electrical energy.

CENTRAL ELECTRIC STATIONS IN CANADA

THEY ARE THE KEY TO THE FUTURE

OF THE COUNTRY'S DEVELOPMENT

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ALBERTA.

ACME.

Acme Lighting Company. (Fuel Power Plant No. 5CE₄). Oct., 1918.

Address,—Acme, Alta.

Officials,—J. A. Lafrance, Acme (Mgr.); R. J. Fowler, Acme (Sec.-Treas.).

History,—Plant installed in December, 1917.

Capital invested in Plant and Equipment,—\$1,300.

Plant. *Official*,—J. H. Owens (Engr. Pwr. Sta.).

Location,—Plant located in Acme, Alta.

Installation,—Gas Engine—1 at 15 h.p.; Generator—1 Fairbanks-Morse, D.C., 10 k.w., 165 r.p.m.

Power. *Local distribution lines* serve the municipality of Acme.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

BANKHEAD.

Canadian Pacific Railway Company (Natural Resources Dept.). (Fuel Power Plant No. 5BD₁). Sept., 1918.

Address,—Head Office, Montreal, Que. Local Office, Bankhead, Alta.

Official,—Lewis Stockett, Calgary, Alta. (Gen. Supt. Coal Mines Br.).

History,—Plant installed in 1905 and forms only a part of the general power plant used in the operation of the company's coal mines at Bankhead.

Capital invested in Transmission Lines and Distribution Equipment only,—\$32,658.

Plant. *Official*,—D. G. Wilson (Supt.).

Location,—Plant located at Bankhead, Alta., adjacent to Canadian Pacific Ry.

Installation,—Steam Engines—2 reciprocating, 200 h.p. each, total 400 h.p.; Generators—2 Can. Gen. Elec., A.C. 3-phase, 60-cycle, 150 k.w. each, 150 r.p.m., total 300 k.w.; Exciters—2 generators belted to main units; Transformers—3, primary 2,200v., secondary 13,200v.

Power. *Transmission Lines*,—5 miles of wooden pole line transmits power to Banff.

Local distribution lines serve the municipalities of Banff and Bankhead.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

BANFF.

Served by Canadian Pacific Railway Company, Natural Resources Dept.; see Bankhead, Alta.

BASSANO.

Feb., 1918.

United Electric and Engineering Company, Ltd. (Fuel Power Plant No. 5CG₂).

Address,—Head Office, Calgary, Alta. Local Office, Bassano, Alta.

Officials,—R. A. Brown, Calgary, Alta. (Pres.); A. G. Graves, Calgary, Alta. (Sec.-Treas.).

History,—Former steam plant replaced by gas engine in December, 1917.

Capital invested in Plant and Equipment,—\$20,000.

Plant. *Location*,—Plant located in Bassano, Alta.

Installation,—Gas Engine—1 at 90 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 62½ k.v.a., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Bassano.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

BELLEVUE.

West Canadian Collieries, Ltd. (Fuel Power Plant No. 5AA₅). Nov., 1918.

History,—Plant installed in 1908.

Capital invested in Plant and Equipment,—\$94,500.

Plant. *Location*,—Plant located in Bellevue, Alta.

Installation,—Boilers—8 return tubular at 150 h.p. each; Steam Engines—1 reciprocating, 360 h.p., 1 reciprocating, 290 h.p., total 650 h.p.; Generators—2 A.C., 3-phase, 60-cycle, 250 k.w. each, total 500 k.w.

Power. *Local distribution lines* serve municipality of Bellevue.

Use of Power,—A small amount is used for lighting and the balance for mining operations.

BLAIRMORE.

West Canadian Collieries, Ltd. (Fuel Cent. Sta. No. 5AA₁). Feb., 1918.

Address,—Blairmore, Alta.

Official,—R. Green, Blairmore, Alta. (Gen. Supt.).

History,—First unit installed in 1910, additional unit in 1917.

Capital invested in Plant and Equipment,—\$20,000.

Plant. *Location*,—Plant located at Blairmore, Alta.

Installation,—Boilers—2 at 150 h.p. each, total 300 h.p.; Steam Engines—2 reciprocating, 100 h.p. and 50 h.p., total 150 h.p.; Generators—2 Elect. Machine, A.C., 3-phase, 100 k.w. each, 900 r.p.m., total 200 k.w.

Power. *Local distribution lines* serve the municipality of Blairmore.

Use of Power,—Power is used for lighting and to operate coal mines. Power is sold in bulk to the municipality of Blairmore for distribution.

Power is delivered adjacent to Canadian Pacific Ry.

BOWNESS.

Bowness Improvement Company. (Fuel Power Plant No. 5BH₂). Nov., 1918.

History,—Plant installed in 1914.

Plant. *Location*,—Plant located in Bowness, Alta.

Installation,—Gas Engines—2 at 175 h.p., total 350 h.p.; Generators—2 A.C., 3-phase, 60-cycle, 117 k.v.a. each, total 234 k.v.a.

Power. *Local distribution lines* serve the municipality of Bowness.

Use of Power,—Power is used for lighting, general power purposes and operation of electric railway.

CALGARY.

Municipality of Calgary. (Fuel Power Plant No. 5BH₁). Dec., 1918.

Officials,—Dr. M. C. Castello (Mayor); J. M. Miller (Clerk).

History,—Plant installed in 1909 with additional units in 1912 and 1913.

Capital invested in Plant and Equipment,—\$2,563,807.

Plant. *Officials*,—Robert A. Brown (Electn.); J. F. McCall (Supt.).

Location,—Plant located on Victoria Park St., Calgary, Alta., and adjacent to railway spur line.

Installation,—Steam engines—5 Robb, reciprocating, total 2,000 h.p.; Steam turbines—3 Allis-Chalmers, 2,000 h.p., 3,000 h.p. and 7,500 h.p., total prime power 14,500 h.p.; Generators—1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 5,250 k.w., 1,800 r.p.m., 1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 2,000 k.w., 1,800 r.p.m., 1 Vickers, A.C., 3-phase, 2,500 k.w., 1,800 r.p.m., total 9,750 k.w.

Power. *Local distribution lines* serve the municipality of Calgary. Power is purchased in bulk from Calgary Power Company, Ltd.

Use of Power,—Power is used for lighting, operation of street railway, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Grand Trunk Ry.

ALBERTA.

Municipality of Calgary.—Con.**Power.—Con.**

The plant is designed for an ultimate capacity of 25,000 k.w.,

The municipality has at present available for sale 10,000 h.p.; power rates range from 2 cents to $\frac{3}{4}$ cent per k.w. hr.

Calgary Power Company, Ltd. Nov., 1918.

Address,—Head Office, 164 St. James St., Montreal, Que.; Local Office, Seebe, Alta.

Directors,—R. B. Bennett, K.C., Calgary, Alta.; Sir W. M. Aitken, London, Eng.; A. E. Cross, Calgary, Alta.; H. A. Lovett, K.C., Montreal, Que.; E. R. Wood, Toronto, Ont.; C. C. Giles, Montreal, Que.; V. M. Drury, Montreal, Que.; Thomas Hood, Montreal, Que.; Geo. Robinson, Calgary, Alta.

Officials,—R. B. Bennett, K.C., Calgary, Alta. (Pres. and Mng. Dir.); V. M. Drury, Montreal, Que. (Sec.).

History,—This company operates two plants, one at Horseshoe falls, and one at Kananaskis falls on Bow river. Horseshoe Falls plant was installed in 1911, with additional units in 1913. Kananaskis Falls plant was installed in 1913.

Capital,—Authorized, \$3,000,000. Issued, \$1,850,000.

Bonds,—Authorized, £616,400. Issued, £616,400.

Capital invested in Plant and Equipment,—\$4,903,380.

Plants. Official,—F. J. Robertson, Seebe, Alta. (Supt.).

Kananaskis Falls Plant. (Hydro Power Plant No. 5BE₁).

Location,—Plant located at Kananaskis Falls, on Bow river, near Seebe, Alta., about 52 miles west of Calgary, and adjacent to Canadian Pacific Ry.

Installation,—Plant operates under an average head of 68 feet. Water is conveyed from dam to power-house through tunnels. Turbines—2 Allis-Chalmers, vert., single runner, 5,800 h.p. each, 163.5 r.p.m., total 11,600 h.p.; Generators—2 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 4,250 k.v.a. each, 163.5 r.p.m., total 8,500 k.v.a.; Exciters—1 turbine, vert., 100 h.p., 600 r.p.m., 1 generator, 74.75 k.w., 600 r.p.m., 1 motor generator set, motor 3-phase, 2,200 v., 860 r.p.m., generator, 74.95 k.w.

Horseshoe Falls Plant. (Hydro Power Plant No. 5BE₂).

Location,—Plant located at Horseshoe Falls, on Bow river, near Seebe, Alta., about 50 miles west of Calgary, and adjacent to Canadian Pacific Ry.

Installation,—Plant operates under an average head of 70 feet. Water is conveyed from dam to power-house through four penstocks, two 9 $\frac{1}{2}$ feet in diameter and two 12 feet in diameter, each 250 feet in length. Turbines—2 Wellman-Seaver-Morgan, hor., double runners, 6,000 h.p. each, 225 r.p.m., 2 Jens Orten-Boving, hor., double runner, 4,000 h.p. each, 300 r.p.m., total 20,000 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 2,500 k.v.a. each, 300 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 4,000 k.v.a. each, 225 r.p.m., total 13,000 k.v.a.; Exciters—2 turbines, hor., 235 h.p. each, 700 r.p.m., 2 generators, 175 k.w. each, 700 r.p.m.; Transformers—2 banks of 2 Can. West., 3-phase, water-cooled, oil insulated, primary 12,000 v., secondary 55,000 v., 3,000 k.v.a. each.

Power. Transmission Lines—111 miles of pole line (both plants combined) serve municipalities of Calgary and Cochrane and the Canada Cement Company at Exshaw.

Use of Power,—Power is used for lighting, operation of street railway, general manufacturing and general power purposes. Power is sold in bulk to the municipalities of Calgary and Cochrane for distribution.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Grand Trunk Pacific Ry.

The company has at present available for sale 14,000 h.p.

58553—2 $\frac{1}{2}$

ALBERTA.

Calgary Water Power Company, Ltd. (Hydro Power Plant No. 5BH₁). Oct., 1918.

Address,—Calgary, Alta.

Officials,—J. K. Kerr, Calgary (Pres.); P. A. Prince, Calgary (Vice-Pres. and Treas.); F. H. Brown, Calgary (Sec.); Chas. E. Carr, Calgary (Mgr.).

History,—Original plant installed in 1893. New units installed; two turbines and two generators in 1908 and one turbine in 1913.

Capital,—Authorized, \$100,000. Issued, \$100,000.

Capital invested in Plant and Equipment,—\$164,625.

Plant. *Official*,—Theo. Strom (Eng. and Plant Supt.).

Location,—Plant located cor. 1st Ave. and 3rd St., W. Calgary, Alta.

Installation,—Plant operates under an average head of 10 feet. *Turbines*—4 Leffel, 50-inch, vert., single runner, 70 h.p. each, 75 r.p.m., 2 Wm. Hamilton 50-inch, vert., Samson, single runner, 150 h.p. each, 95 r.p.m., 1 Wm. Hamilton, 56-inch, vert., single runner, 200 h.p., total 780 h.p.; *Generators*—3 West., A.C., 3-phase, 60-cycle, 200 k.w. each, 600 r.p.m., total 600 k.w.; *Exciters*—One for each unit; *Auxiliary Plant*—1 Robb, reciprocating steam engine, 700 h.p., 1 Robb, reciprocating steam engine, 500 h.p.; 1 Can. Gen. Elec. steam turbine, 1,000 h.p.; 1 generator, 500 k.v.a.; 1 generator, 400 k.v.a.; 1 generator, 750 k.v.a.

Power. *Local distribution lines* serve the municipality of Calgary.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Pacific Ry., and Canadian Northern Ry.

CAMROSE.

Municipality of Camrose. (Fuel Power Plant No. 5FA₂). Jan., 1918.

Officials,—O. B. Olson (Mayor); J. D. Saunders (Sec.-Treas.).

Capital invested in Plant and Equipment,—\$18,000.

Plant. *Location*,—Plant located in Camrose, Alta.

Installation,—*Steam Engines*—1 Belliss & Morcom, reciprocating, 75 h.p., 1 Leonard reciprocating, 200 h.p., total 275 h.p.; *Generators*—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 60 k.v.a., 600 r.p.m.; 1 Bullock, A.C., 3-phase, 60-cycle, 125 k.w., 277 r.p.m., total 185 k.w.

Power. *Local distribution lines* serve the municipality of Camrose.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Grand Trunk Pacific Ry.

CANMORE.

Canmore Coal Company. (Fuel Power Plant No. 5BE₁). Nov., 1918.

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$88,500.

Plant. *Location*,—Plant located in Canmore, Alta.

Installation,—*Boilers*—6 return tubular at 150 h.p. each; *Steam Engines*—2 reciprocating, compound condensing at 350 h.p. each, total 700 h.p.; *Generators*—2 A.C., 3-phase, 60-cycle, 260 k.w. each, total 520 k.w.

Power. *Local distribution lines* serve the municipality of Canmore.

Use of Power,—Power is used principally in the operation of the company's mines and a small amount sold for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

CARBON.

Carbon Electric Light Plant. (Fuel Power Plant No. 5CE₁). June, 1918.

Address,—Carbon, Alta.

Owners,—Messrs. Nash and Burnett, Carbon, Alta.

ALBERTA.

Carbon Electric Light Plant.—Con.

History.—Original plant installation in 1911; present unit installed in December, 1914. Plant owned and operated by Alex. Reid until October 15, 1917.

Capital invested in Plant and Equipment.—\$2,500.

Plant. *Location.*—Plant located in Carbon, Alta.

Installation.—Steam Engine—1 reciprocating, 17 h.p.; Generator—1 West., D.C. 10 k.w., 1,325 r.p.m.

Power. *Local distribution lines* serve the municipality of Carbon.

Use of Power.—Power is used for lighting.

CARDSTON.

Municipality of Cardston. (Fuel Power Plant No. 5AE₁). Jan., 1918.

Officials.—W. E. Pitcher (Mayor); A. J. Higgs (Sec.-Treas.).

History.—Plant installed in 1907.

Capital invested in Plant and Equipment.—\$73,000.

Plant. *Official.*—S. Boxter (Supt.).

Location.—Plant located in Cardston, Alta.

Installation.—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 Allis-Chalmers, A.C., 2-phase, 60-cycle, 75 k.w.

Power. *Local distribution lines* serve the municipality of Cardston.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

CARMANGAY.

Municipality of Carmangay. (Fuel Power Plant No. 5AC₂). Aug., 1918.

Officials.—W. E. Bryans, M.D. (Mayor); Miss B. E. Harding (Sec.-Treas.).

History.—Plant installed in 1912.

Capital invested in Plant and Equipment.—\$12,000.

Plant. *Official.*—Louis C. Collin (Engr. Pwr. Sta.).

Location.—Plant located in Carmangay on south bank of Little Bow river.

Installation.—Steam Engine—1 Leonard, reciprocating, 75 h.p.; Generator—1 Can. Gen. Elect. D.C., 50 k.w., 290 r.p.m.

Power. *Local distribution lines* serve the municipality of Carmangay.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

CLARESHOLM.

Municipality of Claresholm. (Fuel Power Plant No. 5AB₂). Jan., 1918.

Officials.—N. G. Holmes (Mayor); J. E. Reynolds (Sec.-Treas.).

Capital invested in Plant and Equipment.—\$32,240.

Plant. *Official.*—N. MacKenzie (Engr. Pwr. Sta.).

Location.—Plant located in Claresholm, Alta.

Installation.—Boiler—1 Robb, 200 h.p.; Steam Engine—1 Robb, reciprocating, 200 h.p.; Generator—1 Allis-Chalmers, A.C., 3-phase, 125 k.w., 2,300 r.p.m.

Power. *Local distribution lines* serve the municipality of Claresholm.

Use of Power.—Power is used for lighting and operation of municipal pumping plant.

Power is delivered adjacent to Canadian Pacific Ry.

COCHRANE.

Served by Calgary Power Company, Ltd.; see Calgary, Alta.

COLEMAN.

Dec., 1918.

International Coal and Coke Company, Ltd. (Fuel Power Plant No. 5AA₁).

Address.—Head Office, 1230 Old National Bldg., Spokane, Wash. Local Office, Coleman, Alta.

International Coal and Coke Company, Ltd.—Con.

Directors,—A. C. Flumerfelt, Victoria; H. Davidson, Vancouver; A. L. White, Spokane, Wash.; C. S. Houghton, Boston, Mass.; W. A. Graves, Spokane, Wash.

Officials,—A. C. Flumerfelt, Victoria, B.C. (Pres.); H. Davidson, Vancouver, B.C. (1st Vice-Pres.); A. L. White, Spokane, Wash. (2nd Vice-Pres.); R. W. Riddle, Coleman, Alta (Mng. Dir.); O. E. S. Whiteside, Coleman, Alta. (Gen. Mgr.); W. G. Graves, Spokane, Wash. (Sec.); J. Emerson, Coleman, Alta. (Treas.).

History,—Plant installed in 1904, with additional unit in 1914. The lighting plant forms part of the general power plant, used in the operation of the company's coal mines.

Capital invested in Plant and Equipment,—\$173,986.

Plant. *Location*,—Plant located at Coleman, adjacent to Canadian Pacific Ry.

Installation,—Boilers—10 return tubular, 150 h.p. each, total 1,500 h.p.; Steam Engines—2 reciprocating, 450 h.p. each; Steam Turbine—1 turbine, 1,000 h.p.; total prime power 1,900 h.p.; Generators—2 West., D.C., 250 k.w. each, 200 r.p.m.; 1 British Gen. Elect., A.C., 3-phase, 60-cycle, 940 k.v.a.

Power. *Local distribution lines* serve the municipality of Coleman.

Use of Power,—Power is used for lighting and operation of company's coal mines.

Power is delivered adjacent to Canadian Pacific Ry.

The company develops power for use in its own mines; the only power sold is for lighting.

CORONATION.

Municipality of Coronation. (Fuel Power Plant No. 5FD₁). Nov., 1918.

Officials,—A. O. Thomas (Mayor); Roy T. Cunliffe (Sec.-Treas.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$15,000.

Plant. *Location*,—Plant located in Coronation, Alta.

Installation,—Boilers—2 return tubular at 120 h.p. each; Steam Engine—1 reciprocating at 120 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 75 k.v.a.

Power. *Local distribution lines* serve the municipality of Coronation.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

DIDSBURY.

Municipality of Didsbury. (Fuel Power Plant No. 5CE₃). May, 1918.

Officials,—G. B. Sexsmith (Mayor); A. Brusso (Sec.-Treas.).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$28,300.

Plant. *Official*,—John Myolsness (Supt.).

Location,—Plant located in Didsbury, Alta.

Installation,—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 West, A.C., 3-phase, 50 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Didsbury.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

Power rate,—8 cents per k.w. hr. with 10 per cent discount.

DRUMHELLER.

Northwestern Engineering and Supply Company, Ltd. (Fuel Power Plant No. 5CE₂). Jan, 1918.

Address,—Drumheller, Alta.

Official,—Geo. B. Griffith, Calgary, Alta. (Pres., Sec. and Mgr.).

History,—Original plant installed 1916; present steam engine installed 1917.

Capital invested in Plant and Equipment,—\$25,488.

ALBERTA.

Plant. *Location*,—Plant located at Drumheller, Alta.

Installation,—Steam Engine—1 Robb-Armstrong, reciprocating, 200 h.p.; Generator—1 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 100 k.v.a., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Drumheller.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

EDMONTON.

The Alliance Power Company, Ltd. (Fuel Power Plant No. 5DF₁). Sept., 1918.

Address,—Edmonton, Alta.

Officials,—R. B. Bennett, K.C., Calgary, Alta. (Pres.); Chas. E. Taylor, Edmonton, Alta. (Mng. Dir.); D. L. Redman, M.P., Edmonton, Alta. (Sec.).

History,—Original plant placed in operation in 1891. Present units were installed in 1910, 1911, 1913 and 1914. The plant is owned by the municipality of Edmonton and was leased to the Alliance Power Company, Ltd., for a term of five years from July 1, 1916.

Capital invested in Plant and Equipment,—\$2,839,406.

Plant. *Location*,—Plant located on 104th St., Edmonton, Alta., and adjacent to spur line connected to Canadian Northern Ry., Canadian Pacific Ry., and Grand Trunk Pacific Ry.

Installation,—Boilers—Babcock and Wilcox, total 7,200 h.p.; Steam Engines—4 reciprocating, total 3,620 h.p.; Steam Turbines—3, total 10,900 h.p.; total prime power, 14,520 h.p.; Generators—2 Crocker-Wheeler, D.C., 400 k.w. each, 350 r.p.m., 1 Siemens, D.C., 750 k.w., 285 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,000 k.w., 120 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 2,500 k.v.a., 3,600 r.p.m., 1 Siemens, A.C., 3-phase, 60-cycle, 2,500 k.v.a., 3,600 r.p.m., 1 Siemens, A.C., 3-phase, 60-cycle, 5,000 k.v.a., 1,800 r.p.m., total 2,550 k.w. and 10,000 k.v.a.; Motor Generators—1 Siemens, A.C., 3-phase induction motor, 425 h.p., 440 r.p.m., West. D.C. generator, 300 k.w., 435 r.p.m.; 1 Can. Gen. Elect., A.C., 3-phase induction motor, 375 h.p., 720 r.p.m., Can. Gen. Elect. D.C. generator, 720 r.p.m.

Power. *Local distribution lines* serve the municipality of Edmonton.

Use of Power,—Power is used for lighting, operation of street railway, general manufacturing, operation of municipal pumping plant, and general power purposes. Power is sold in bulk to the municipality of Edmonton.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., Edmonton, Dunvegan and British Columbia Ry., and Alberta and Great Waterway Ry.

Municipal power rates vary from 3 cents to 1 cent per k.w. hr., with 10 per cent discount.

EXSHAW.

Served by Calgary Power Company, Ltd. (See Calgary, Alta.)

FORT SASKATCHEWAN.

Municipality of Fort Saskatchewan. (Fuel Power Plant No. 5EB₁). Jan., 1918.

Officials,—J. W. Kidney (Mayor); H. F. Greenwood (Sec.-Treas.).

History,—Plant installed in December, 1912.

Capital invested in Plant and Equipment,—\$7,300.

Plant. *Official*,—E. Barnott (Supt.).

Location,—Plant located in Fort Saskatchewan, Alta.

Installation,—Boiler—1 Goldie-McCullough, 140 h.p.; Steam Engine—1 Goldie-McCullough, reciprocating, 90 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 72 k.w., 1,000 r.p.m.

Power. *Local distribution lines* serve the municipality of Fort Saskatchewan.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

FRANK.

Franco-Canadian Collieries, Ltd. (Fuel Power Plant No. 5AA₂). Jan., 1918.

Address.—Local Office, Frank, Alta.

Officials.—P. de Chezelles, France (Pres. and Vice-Pres.); G. Cahen, Paris, France (Mgr. Dir.); J. Brown, Frank, Alta. (Gen. Mgr.); S. J. Tompkins, Frank, Alta. (Sec.).

Capital invested in Plant and Equipment.—\$75,000.

Plant. *Location*.—Plant located at Frank, Alta.

Installation.—Steam Engines—2 reciprocating, 375 h.p. and 200 h.p., total 575 h.p.; Generators—1 Elect. Machine Co., A.C., 3-phase, 60-cycle, 400 k.v.a., 150 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.v.a., 900 r.p.m., total 475 k.v.a.

Power. *Local distribution lines* serve the municipality of Frank.

Use of Power.—Power is used for lighting. The lighting plant forms only a small part of the general power plant used to operate the company's coal mines.

Power is delivered adjacent to the Canadian Pacific Ry.

GLEICHEN.

Municipality of Gleichen. (Fuel Power Plant No. 5BM₁). May, 1918.

Officials.—A. R. Tndhope (Mayor); P. Maclean (Sec.-Treas.).

History.—Plant installed in 1917.

Capital invested in Plant and Equipment.—\$6,000.

Plant. *Officials*.—P. Reishang, J. McCarthy.

Location.—Plant located in Gleichen adjacent to Canadian Pacific Ry.

Installation.—Boilers—2 at 125 h.p. each, total 250 h.p.; Steam Engine,—1 McEwen, reciprocating, 75 h.p.; Generators—1 Can. Gen. Elect., D.C., 11 k.w., 1 Can. Gen. Elect., D.C., 14 k.w., total 25 k.w.

Power. *Local distribution lines* serve the municipality of Gleichen.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

HANNA.

Hanna Electric Light Plant. (Fuel Power Plant No. 5CG₁). May, 1918.

Address.—Hanna, Alta.

Owner.—Albert Lindstrom, Hanna, Alta.

History.—Plant installed in September, 1916.

Capital invested in Plant and Equipment.—\$13,000.

Plant. *Location*.—Plant located in Hanna, Alta.

Installation.—Steam Engine—1 reciprocating, 130 h.p.; Generator—1 West, A.C., 3-phase, 70 k.w., 277 r.p.m.

Power. *Local distribution lines* serve the municipality of Hanna.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

HARDISTY.

Hardisty Electric Light Plant. (Fuel Power Plant No. 5FB₁). May, 1918.

Address.—Hardisty, Alta.

Owner.—T. A. Weeks, Hardisty, Alta.

History.—Plant installed in 1917.

Capital invested in Plant and Equipment.—\$9,450.

Plant. *Location*.—Plant located in Hardisty, Alta., adjacent to Canadian Pacific Ry.

Installation.—Gas Engine—1 at 50 h.p.; Generators—1 West, D.C., 35 k.w., 1,025 r.p.m., 1 West, D.C., 8 k.w., 1,450 r.p.m., total 43 k.w.

ALBERTA.

Hardisty Electric Light Plant.—Con.

Power. *Local distribution lines* serve the municipality of Hardisty.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

The owner is installing a 12 h.p. oil engine.

HIGH RIVER.

Municipality of High River. (Fuel Power Plant No. 5BL₁). Jan., 1918.

Officials.—L. Williams (Mayor); Chas. A. Gigot (Sec.-Treas.); F. D. Blake (Chmn. of Lt. Com.).

History.—Plant installed in 1907.

Capital invested in Plant and Equipment.—\$30,942.

Plant. *Location.*—Plant located in High River, Alta.

Installation.—Steam Engine—1 reciprocating, 160 h.p.; Generator—1 Bullock, A.C., 3-phase, 125 k.w., 277 r.p.m.

Power. *Local distribution lines* serve the municipality of High River.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

HILLCREST MINES.

Hillcrest Collieries, Ltd. (Fuel Power Plant No. 5AA₆). Nov., 1918.

History.—Plant installed in 1911.

Capital invested in Plant and Equipment.—\$38,000.

Plant. *Location.*—Plant located in Hillcrest Mines, Alta.

Installation.—Boilers—6 return tubular, 150 h.p. each; Steam Engines—1 reciprocating, 430 h.p., 1 reciprocating, 150 h.p., total 580 h.p.; Generators—1 A.C., 3-phase, 60-cycle, 312 k.w., 1 A.C., 3-phase, 60-cycle, 100 k.w., total 412 k.w.

Power. *Local distribution lines* serve the municipality of Hillcrest Mines.

Use of Power.—Power is used principally in the operation of the company's mines and a small amount sold for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

INNISFAIL.

Municipality of Innisfail. (Fuel Power Plant No. 5CC₁). May, 1918.

Officials.—Geo. E. Bryan (Mayor); Wm. Jensen (Sec.-Treas.).

History.—Plant installed in September, 1912.

Capital invested in Plant and Equipment.—\$21,000.

Plant. *Official.*—C. E. Benton (Ch. Engr.).

Location.—Plant located in Innisfail, Alta.

Installation.—Boiler—1 Robb-Armstrong, 100 h.p.; Steam Engine—1 Robb-Armstrong, reciprocating, 100 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 55½ k.v.a., 1,200 r.p.m.; Exciter—1 generator, 2 k.w.

Power. *Local distribution lines* serve the municipality of Innisfail.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

LACOMBE.

Municipality of Lacombe. (Hydro Power Plant No. 5CC₁). Feb., 1918.

Officials.—W. N. Morrison (Mayor); N. E. Carruthers (Sec.-Treas.).

History.—Plant was installed by the Blindman River Electric Power Company, Ltd., in 1905, and was acquired by the municipality in 1910. Present turbine installed in 1911. Auxiliary steam plant installed in 1909.

Capital invested in Plant and Equipment.—\$23,046.

Plant. *Official.*—C. Danner (Supt. and Engr. Pwr. Sta.).

Location.—Plant located at the mouth of Blindman river about 3 miles from Blackfalds station on Canadian Pacific Ry.

Municipality of Lacombe.—Con.**Plant.—Con.**

Installation,—Plant operates under an average head of 24 feet: Turbine—1 Madison Williams 30-inch, hor., single runner, 200 h.p., 225 r.p.m.; Generator—1 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 60 k.w., 1,200 r.p.m.; Exciter—1 generator, 1½ k.w., 1,400 r.p.m., direct connected to main generator shaft; Auxiliary Plant—1 Waterous, 300 h.p. boiler, 1 Waterous, 150 h.p. reciprocating steam engine.

Power. *Transmission Lines*,—8 miles of wooden pole line serves the municipality of Lacombe.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

LETHBRIDGE.

Municipality of Lethbridge. (Fuel Power Plant No. 5AD₁). May, 1918.

Officials,—W. D. L. Hardie (Mayor); D. A. Duff (City Clerk); M. Freeman (Commr. Utilities); A. M. Grace (Commr. Works).

History,—Plant was originally owned by Lethbridge Water Works and Electric Light Company, Ltd., and was acquired and rebuilt by the municipality.

Capital invested in Plant and Equipment,—\$602,692.

Plant. *Official*,—J. T. Watson (Ch. Engr.).

Location,—Plant located in Lethbridge adjacent to Canadian Pacific Ry.

Installation,—Boilers—8 Babcock & Wilcox, total 2,520 h.p.; Steam Engines—2 Belliss & Morecom, reciprocating, 440 h.p. and 750 h.p.; Steam Turbine—1 Willans & Robinson, 2,300 h.p.; total prime power, 3,490 h.p.; Generators—1 West., A.C., 2-phase, 350 k.v.a., 360 r.p.m., 1 West., A.C., 2-phase, 580 k.v.a., 360 r.p.m., 1 Siemens, A.C., 2-phase, 1,500 k.v.a., 3,600 r.p.m., 1 Siemens, D.C., 50 k.w., 600 r.p.m., total 2,430 k.v.a. and 50 k.w.

Power. *Local distribution lines* serve the municipality of Lethbridge.

Use of Power,—Power is used for lighting, operation of street railway, operation of pumping plant, and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The ultimate designed capacity of plant is 4,720 h.p. and the municipality contemplates installing one Curtis turbo-generator of 1,250 k.w. capacity.

When the new unit is installed, the municipality will have 1,000 h.p. available for sale; rates range from 6 to 2 cents per k.w. hr.

LLOYDMINSTER.

Served by Lloydminster Electric Light Plant; see Lloydminster, Sask.

MACLEOD.

Municipality of Macleod. (Fuel Power Plant No. 5AB₁). May, 1918.

Officials,—D. J. Grier (Mayor); E. F. Brown (Sec.-Treas.).

History,—First unit installed in 1907; an additional unit in 1909.

Capital invested in Plant and Equipment,—\$61,000.

Plant. *Official*,—G. H. Altham (Supt. and Ch. Engr.).

Location,—Plant located in Macleod, Alta.

Installation,—Plant uses natural gas for fuel. Boilers—4 Robb-Munford, 125 h.p. each, total 500 h.p.; Steam Engines—2 reciprocating, 180 h.p. and 450 h.p., total 630 h.p.; Generators—1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 110 k.w., 277 r.p.m., 1 Westn. Elect., A.C., 3-phase, 60-cycle, 260 k.w., 150 r.p.m., total 370 k.w.; Exciters—1 generator, 9 k.w., 120 v., belted to main unit, 1 generator, 20 k.w., 120 v., direct connected to main unit.

Power. *Local distribution lines* serve the municipality of Macleod.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

ALBERTA.

MAGRATH.

Crane-Cassidy Electric Company, Ltd. (Fuel Power Plant No. 5AE₂). June, 1918.

Address.—129 5th Ave. E., Calgary, Alta.

Officials.—M. J. Crane, Calgary, Alta. (Pres. and Mgr.); J. J. Cassidy, Calgary, Alta. (Vice-Pres.); I. McNally, Calgary, Alta. (Sec.).

History.—Plant installed August, 1917.

Capital invested in Plant and Equipment.—\$20,000.

Plant. Official.—Ed. Miller (Supt.).

Location.—Plant located in Magrath, Alta.

Installation.—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 Elect. Machine, A.C., 3-phase, 60-cycle, 50 k.v.a., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Magrath.

Use of Power.—Power used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

MEDICINE HAT.

Municipality of Medicine Hat. (Fuel Power Plant No. 5AJ₁). May, 1918.

Officials.—M. A. Brown (Mayor); F. Blackburn (City Clerk).

History.—First two units installed in 1910; additional units installed in 1913 and 1915.

Capital invested in Plant and Equipment.—\$387,042.

Plant. Official.—G. R. Taylor (Supt. Utilities).

Location.—Plant located at Medicine Hat.

Installation.—Plant uses natural gas for fuel. Boilers—Babcock & Wilcox, water tube, gas fired, 1,600 h.p.; Steam Turbines—2 at 1,000 h.p. and 1 at 2,000 h.p.; Gas Engines—2 at 200 h.p. each; total prime power, 4,400 h.p.; Generators—2 Siemens, A.C., 3-phase, 60-cycle, 750 k.v.a., 3,600 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 1,500 k.v.a., 3,600 r.p.m., 2 Bergman, 170 k.v.a. each, total 3,340 k.v.a.; Exciters—3 generators: 1 turbine driven, 1 motor driven, and 1 belted to main unit; Transformers—high tension equipment, primary 2,300 v., secondary 13,200 v., 1,500 k.v.a.

Power. *Local distribution lines* serve the municipality of Medicine Hat.

Use of Power.—Power used for lighting, and general power purposes, including the operation of brickyards, linseed-oil mills, foundry and machine shops, grain elevators, munition factories, pottery plants, sewerage plant, and cold storage plant.

Power is delivered adjacent to Canadian Pacific Ry.

The municipality contemplates installing an additional unit of 1,500 k.w. capacity.

Power rates range from 6 cents to 1 cent per k.w. hr., with graduated discounts.

NANTON.

Municipality of Nanton. (Fuel Power Plant No. 5AC₁). May, 1918.

Officials.—A. Z. Jessup (Mayor); Wm. Robertson (Sec.-Treas.).

History.—Plant installed in 1910 with steam engine. In 1916 a gas engine was installed to replace the steam engine.

Capital invested in Plant and Equipment.—\$10,500.

Plant. Official.—A. Langstroth.

Location.—Plant located in Nanton, Alta., adjacent to Canadian Pacific Ry.

Installation.—Plant uses natural gas. Boilers—2 at 120 h.p. each (not in use); Steam Engine—1 Robb-Armstrong reciprocating, 125 h.p. (not in use); Gas Engine—1 Canadian Producer gas engine, 75 h.p., total 200 h.p.; Generator—1 Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 275 r.p.m.; Exciter—1 Gen. Elect., generator, 7 k.w., belted to main unit.

Power. *Local distribution lines* serve the municipality of Nanton.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

NORDEGG.

Brazeau Collieries, Ltd. (Fuel Power Plant No. 5DC₁). Nov., 1918.

History.—Plant installed in 1914.

Capital invested in Plant and Equipment.—\$82,500.

Plant. *Location.*—Plant located in Nordegg, Alta.

Installation.—Boilers—4 return tubular at 150 h.p. each; Steam Engines—2 reciprocating at 230 h.p. each, total 460 h.p.; Generators—2 A.C., 60-cycle at 185 k.v.a. each, total 370 k.v.a.

Power. *Local distribution lines* serve the municipality of Nordegg.

Use of Power.—Power is used principally in the operation of the company's mines and a small amount sold for lighting.

Power is delivered adjacent to Canadian Northern Ry.

OKOTOKS.

Okotoks Electric Company, Ltd. (Fuel Power Plant No. 5BL₂). Aug., 1918.

Address.—Okotoks, Alta.

Officials.—R. A. Brown (Pres.); T. Allan, Calgary, Alta. (Sec.).

History.—Plant installed in September, 1917, by Northwestern Engineering and Supply Company, Ltd., and taken over by present company in December, 1917.

Capital invested in Plant and Equipment.—\$16,000.

Plant. *Location.*—Plant located at Okotoks, Alta.

Installation.—Gas Engine—1 at 65 h.p.; Generator—1 Elect. Machine Co., A.C., 3-phase, 60-cycle, 37½ k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Okotoks.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

OLDS.

Olds Electric Company, Ltd. (Fuel Power Plant No. 5CE₅). Aug., 1918.

Address.—Olds, Alta.

Officials.—R. A. Brown, Calgary, Alta. (Pres.); T. Allan, Calgary, Alta. (Sec.).

History.—Plant installed in October, 1917.

Capital invested in Plant and Equipment.—\$24,000.

Plant. *Location.*—Plant located in Olds, Alta.

Installation.—Gas Engine,—1 at 50 h.p.; Generator,—1 Can. West., A.C., 3-phase, 60-cycle, 30 k.v.a., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Olds.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

OYEN.

Oyen Electric Light Plant. (Fuel Power Plant No. 5GA₁). Feb., 1918.

Address.—Box 153, Oyen, Alta.

Owner.—Walter Marshall.

History.—Plant installed in January, 1916.

Capital invested in Plant and Equipment.—\$4,000.

Plant. *Location.*—Plant located at Oyen, Alta.

Installation.—Oil engine—1 at 28 h.p.; Generator—1 West. D.C. 20 k.w. 1,025 r.p.m.

Power. *Local distribution lines* serve the municipality of Oyen.

Use of Power.—Power is used for lighting only.

ALBERTA.

PINCHER CREEK.

Municipality of Pincher Creek. (Fuel Power Plant No. 5AA₃). May, 1918.

Officials.—R. O. Allison (Mayor); G. D. Plunkett (Sec.-Treas.); Dr. Mills (Chmn. Lt. Com.).

History.—Plant installed in 1907.

Capital invested in Plant and Equipment.—\$26,647.

Plant. Official.—A. Broodwell (Engr. Pwr. Sta.).

Location.—Plant located in Pincher Creek.

Installation.—Boilers—Goldie & McCullough, Waterous, 200 h.p.; Steam Engines—1 McEwen reciprocating, 210 h.p., 1 Goldie & McCullough, 65 h.p., total 275 h.p.; Generator—1 West., A.C., 3-phase 60-cycle, 120 k.w., 900 r.p.m.

Power. Local distribution lines serve the municipality of Pincher Creek.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

POCAHONTAS.

Jasper Park Collieries, Ltd. (Fuel Power Plant No. 7AA₁). Nov., 1918.

History.—Plant installed in 1913.

Plant. Location.—Plant located in Pocahontas, Alta.

Installation.—Boilers,—4 return tubular at 150 h.p. each; Steam Engines,—1 reciprocating at 150 h.p.; 1 reciprocating at 60 h.p., total 210 h.p.; Generators—1 A.C., 3-phase, 60-cycle at 185 k.w., 1 A.C., 3-phase, 60-cycle at 75 k.w., total 260 k.w.

Power. Local distribution lines serve the municipality of Pocahontas.

Use of Power.—Power is used principally in the operation of the company's coal mines and a small amount sold for lighting.

Power is delivered adjacent to Grand Trunk Pacific Ry.

PONOKA.

Provincial Government. (Fuel Power Plant No. 5FA₃). March, 1918.

Official.—Wm. Todd, Edmonton (Ch. Engr.).

History.—Plant installed 1910.

Capital invested in Plant and Equipment.—\$106,000.

Plant. Location.—Plant located in Ponoka at Provincial Asylum.

Installation.—Steam Engines—2 reciprocating, 250 h.p. each, total 500 h.p.; Generators,—2 West., D.C., 125 k.w., 450 r.p.m. each, total 250 k.w.

Power. Local distribution lines serve the municipality of Ponoka. The installation forms part of a combined heating and power plant.

Use of Power.—Power is used for lighting only. Power is sold in bulk to the municipality of Ponoka for distribution.

Power is delivered adjacent to Canadian Pacific Ry.

RAYMOND.

Knight Sugar Company, Ltd. (Fuel Power Plant No. 5AF₁). Jan., 1918.

Address.—Raymond, Alta.

Officials.—Jesse Knight, Raymond (Pres.); E. P. Ellison, Raymond (Vice-Pres.); Raymond Knight, Raymond (Sec.); D. H. Kinsey, Raymond (Mgr.); J. H. Walker, Raymond (Acct.).

History.—Plant installed in July, 1917.

Capital invested in Plant and Equipment.—\$21,000.

Plant. Location.—Plant located at Raymond, Alta.

Installation.—Steam Engine—1 reciprocating 100 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 80 k.w., 277 r.p.m.

Power. Local distribution lines serve the municipality of Raymond.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

RED DEER.

May, 1918.

The Western General Electric Company, Ltd. (Fuel Power Plant No. 5CC₂).*Address*,—Red Deer, Alta.*Officials*,—G. W. Smith, Red Deer (Pres.); Wm. A. Moore, Red Deer (Mng. Dir.); E. A. Bonnick, Red Deer (Sec.-Treas.).*History*,—Plant installed in 1904, with an additional unit in 1907.*Capital invested in Plant and Equipment*,—\$150,000.**Plant.** *Official*,—J. T. Watson (Engr. Pwr. Sta.).*Location*,—Plant located at Red Deer, Alta.*Installation*,—Steam Engines—1 Robb, reciprocating, 100 h.p., 1 Robb, reciprocating, 400 h.p., total 500 h.p.; Generators—1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 60 k.w., 1,200 r.p.m., 1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 260 k.w., 150 r.p.m., total 320 k.w.**Power.** *Local distribution lines* serve the municipality of Red Deer.*Use of Power*,—Power is used for lighting and general power purposes.*Power is delivered* adjacent to Canadian Pacific Ry.**STETTTLER.****Municipality of Stettler.** (Fuel Power Plant No. 5FC₁). Jan., 1918.*Officials*,—W. Sharpe (Mayor); S. P. Williams (Sec.-Treas.).*Capital invested in Plant and Equipment*,—\$27,090.**Plant.** *Location*,—Plant located in Stettler, Alta.*Installation*,—Steam Engine—1 reciprocating, 200 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 125 k.v.a., 277 r.p.m.**Power.** *Local distribution lines* serve the municipality of Stettler.*Use of Power*,—Power is used for lighting and general power purposes.*Power is delivered* adjacent to Canadian Pacific Ry., and Canadian Northern Ry.**TABER.****The Canada West Coal Company.** (Fuel Power Plant No. 5AG₁). May, 1918.*Address*,—Head Office, Winnipeg, Man.; Local Office, Taber, Alta.*Directors*,—O. A. Robertson, F. E. Kenaston, J. S. Hough, H. R. Howard, D. E. Adams.*Officials*,—J. S. Hough, Taber (Pres. and Sec.); J. R. Howard, Taber (Gen. Mgr.).*History*,—The lighting plant installed in 1913 and forms only part of the general power plant used in the operation of the company's coal mine.*Capital invested in Plant and Equipment*,—\$30,100 (exclusive of building and boilers).**Plant.** *Officials*,—J. R. Howard (Gen. Mgr.); Wm. McMahon (Engr. Pwr. Sta.).*Location*,—Plant located at Taber, Alta.*Installation*,—Steam Engine—1 reciprocating, 190 h.p.; Generators—1 Elect. Machine Co., A.C., 3-phase, 125 k.v.a., 900 r.p.m., 1 Elect. Machine Co., A.C., 3-phase, 87½ k.v.a., 900 r.p.m., total 212½ k.v.a.**Power.** *Local distribution lines* serve the municipality of Taber.*Use of Power*,—Power is used for lighting and general power purposes.*Power is delivered* adjacent to Canadian Pacific Ry.

In addition to the installation listed above the company has two Goodman D.C. generators at 150 k.w. each, connected to two reciprocating steam engines of 225 h.p. capacity; used only to operate the coal mine.

The company propose installing a new 350 k.w., A.C. generating unit. Power rate, \$30 per h.p. per annum.

ALBERTA.

VEGREVILLE.

Municipality of Vegreville. (Fuel Power Plant No. 5EE₂). April, 1918.

Officials,—J. B. Holden (Mayor); F. Wilson (Sec.-Treas.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$25,000.

Plant. *Location*,—Plant located in Vegreville.

Installation,—Steam Engines—2 reciprocating, about 200 h.p.; Generators—1

Can. West., A.C., 3-phase, 60-cycle, 62.5 k.v.a., 550 r.p.m., 1 Can. West., A.C., 3-phase, 60-cycle, 94 k.v.a., 550 r.p.m., total 156.5 k.v.a.

Power. *Local distribution lines* serve the municipality of Vegreville.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

VERMILION.

Municipality of Vermilion. (Fuel Power Plant No. 5EE₁). May, 1918.

Officials,—Wm. J. Seed (Mayor); H. P. Long (Sec.-Treas.).

History,—Plant installed in February, 1912.

Capital invested in Plant and Equipment,—\$20,000.

Plant. *Official*,—John Welsh (Supt.).

Location,—Plant located in Vermilion.

Installation,—Steam Engine—1 reciprocating, 75 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 50 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Vermilion.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

The municipality contemplates installing an additional unit of the same capacity as the existing unit.

The municipality has at present available for sale about 200 k.w.

VULCAN.

Vulcan Electric Light Plant. (Fuel Power Plant No. 5AC₃). Nov., 1918.

History,—Plant installed in 1917.

Capital invested in Plant and Equipment,—\$15,000.

Plant. *Location*,—Plant located in Vulcan, Alta.

Installation,—Boilers—2 return tubular, total 150 h.p.; Steam Engine—1 reciprocating, 75 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 62 k.v.a.

Power. *Local distribution lines* serve the municipality of Vulcan.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

WAINWRIGHT.

Feb., 1918.

Wainwright Light and Power Company, Ltd. (Fuel Power Plant No. 5FE₂).

Address,—Wainwright, Alta.

Officials,—B. L. Berry, Wainwright, Alta. (Pres.); W. E. Washburn, Wainwright, Alta. (Vice-Pres.); R. A. Snyder, Wainwright, Alta. (Sec.-Treas.).

History,—Plant installed in 1917; not yet completed.

Capital invested in Plant and Equipment,—\$14,000.

Plant. *Location*,—Plant located at Wainwright, Alta.

Installation,—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Wainwright.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Pacific Ry.

ALBERTA.

WETASKIWIN.

Municipality of Wetaskiwin. (Fuel Power Plant No. 5FA₁). Jan., 1918.

Officials.—W. J. Loggie (Mayor); E. Roberts (Sec.-Treas.).

History.—Plant installed in 1905; additional units installed in 1908, 1913 and 1915.

Capital invested in Plant and Equipment.—\$113,816.

Plant. *Officials.*—Jas. S. Watson (Supt.); J. Ryan (Ch. Engr.); W. Chapman (Engr. Pwr. Sta.).

Location.—Plant located in Wetaskiwin, Alta.

Installation.—Steam Engines—2 reciprocating, 120 h.p. and 430 h.p.; Gas Engine 1 West., gas engine, 190 h.p., total prime power 740 h.p.; Generators—1 Bullock, A.C., 2-phase, 60-cycle, 75 k.w., 800 r.p.m., 1 West., A.C., 2-phase, 60-cycle, 127 k.w., 257 r.p.m., 1 Swedish Gen. Elec., A.C., 2-phase, 60-cycle, 200 k.w., 360 r.p.m., total 502 k.w.

Power. *Local distribution lines* serve the municipality of Wetaskiwin.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

BRITISH COLUMBIA.**ALBERNI.**

Served by municipality of Port Alberni; see Port Alberni, B.C.

ANYOX.

The Granby Consolidated Mining, Smelting and Power Company, Ltd. (Hydro Power Plant No. 8DC₁). Nov., 1918.

Address.—Head Office, Vancouver, B.C. Mines, Anyox, B.C. Smelter, Grand Forks, B.C.

Officials.—William H. Nichols, New York (Pres.); E. P. Earle, New York (Vice-Pres.); W. H. Robinson (Vice-Pres.); Edward Everett, New York (Sec'y); F. M. Sylvester (Mng. Dir.); G. W. Winter (Treas.).

History.—Hydro plant installed in 1913, with additional equipment in 1917. Steam plant installed in 1916.

Capital invested in Plant and Equipment (including steam plant),—\$1,300,000.

Plant. *Location.*—Plant located on Falls creek at Anyox, B.C.

Installation.—Plant operates under an average head of 380 feet. Water Wheels—2 Pelton, impulse, 56-inch, double runner, 1,400 h.p. each, 400 r.p.m., total 2,800 h.p.; Generators—2 West., A.C., 3-phase, 60-cycle, 938 k.v.a. each, total 1,876 k.v.a.; Exciters—1 turbine, 75 h.p., 870 r.p.m.; 1 motor, 3-phase, 2,200 v., 870 r.p.m., 2 generators, 50 k.w., 870 r.p.m.; Auxiliary Plant—2 West. steam turbines, 5,000 h.p. and 3,350 h.p., total 8,350 h.p.; 2 generators, 3,750 k.v.a. and 2,500 k.v.a., total 6,250 k.v.a.

Power. Power is used almost entirely in the operation of the company's mines and smelter and a small amount is supplied for domestic and street lighting.

The company has a second hydraulic plant at Grand Forks, B.C., consisting of three Dayton Globe turbines of 800 h.p. total capacity, and three West. generators of 540 k.w. total capacity. This plant is used in the operation of the company's works only.

ARMSTRONG.

Municipality of Armstrong. (Hydro Power Plant No. 8LC₁). Jan., 1918.

Officials.—J. M. Wright (Mayor); Ernest Groves (Treas.).

History.—Plant installed in 1913.

Capital invested in Plant and Equipment.—\$76,286.

BRITISH COLUMBIA.

Municipality of Armstrong.—Con.

Plant. *Officials.*—Geo. McNaughton (Supt.); Thos. Lawson (Engr. Pwr. Sta.).

Location.—Plant located on Fortune (or Davis) creek.

Installation.—Plant operates under an average head of 500 feet. Water is conveyed from dam to power-house, $\frac{3}{4}$ mile, by a wood stave pipe, joined to a short length of 10-inch steel pipe. Turbine—1 Pelton, 24-inch, hor., single runner, impulse, 125 h.p., 900 r.p.m.; Generator—1 Can. Gen. Elect. A.C., 3-phase, 60-cycle, 90 k.w., 900 r.p.m.; Auxiliary Plant—1 Diesel oil engine, 500 h.p.

Power. *Transmission Lines.*—10 miles of wooden pole line serves the municipality of Armstrong.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

ASHCROFT.

May, 1918.

Ashcroft Water, Electric and Improvement Company. (Fuel Power Plant No. 8LF₁).

Address.—Ashcroft, B.C.

Officials.—J. C. Shields, Ashcroft, B.C. (Pres.); E. A. Punter, Ashcroft, B.C. (Mgr. and Ch. Engr.).

History.—Original plant commenced operation in 1899. Present plant installed in 1912.

Capital invested in Plant and Equipment.—\$25,000.

Plant. *Location.*—Plant located adjacent to Thompson river at Ashcroft, B.C.

Installation.—Oil Engines—2 Fairbanks-Morse, 20 h.p. each, 1 Fairbanks-Morse, 50 h.p., total 90 h.p.; Generators—1 Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 18½ k.w., 1,200 r.p.m., total 93½ k.w.

Power. *Local distribution lines* serve the municipality of Ashcroft.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry.

BOUNDARY FALLS.

Served by West Kootenay Power and Light Co., Ltd.; see Rossland, B.C.

BRITANNIA BEACH.

Nov., 1918.

Britannia Mining and Smelting Company, Ltd. (Hydro Power Plant No. 8GA₃).

Address.—Local Office, Britannia Beach, B.C.

Officials.—J. W. D. Moodie (Vice-Pres. and Gen. Mgr.); E. J. Donahue (Sec.-Treas.).

Plants. The company operates two plants, the Tunnel Power House and the Beach Power House, on Britannia creek on east shore of Howe sound, 28 miles from Vancouver. The Tunnel Power House is situated about three miles from the Beach Power House, 2,084 feet above sea-level. The water is conveyed from a diversion dam on Britannia creek through a pipe line 7,100 feet long to the Tunnel plant, and is augmented by a supply from Jane and Maripot creeks, the water being conveyed to the main pipe through wood stave pipes. The Beach Power House is situated 165 feet above sea-level and is served by two pipe lines, the intake of one being at 1,920 feet and the other at 745 feet above sea-level; the lengths being 13,900 feet and 4,570 feet, respectively.

Installation.—The plants operate under heads varying from 600 to 2,080 feet. Total turbine capacity of plants 13,700 h.p., and total generator capacity 7,650 k.v.a. Some units are installed for the operation of air compressors.

Power. Practically all the power is used in the operation of the company's mines and reduction mill. A small amount of power is sold for lighting in Britannia Beach.

BURNABY.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

Served by Western Power Company of Canada, Ltd.; see Vancouver, B.C.

CHASE.

Adams River Lumber Company, Ltd. (Fuel Power Plant No. 8LE₂). Feb., 1918.

Address.—Chase, B.C.

Officials.—J. P. McGoldrich, Chase, B.C. (Pres.); W. F. Lommers, Chase, B.C. (Mgr. Dir. and Sec.).

History.—Plant installed in 1910.

Capital invested in Plant and Equipment.—\$6,300.

Plant. *Location*.—Plant located in Chase, B.C.

Installation.—Steam Engines—2 reciprocating, 80 h.p. each, total 160 h.p.; Generators—1 Can. Gen. Elect., A.C., single-phase, 125-cycle, 120 k.w., 1,070 r.p.m.; 1 Can. Gen. Elect., A.C., single-phase, 125-cycle, 60 k.w., 680 r.p.m., total 180 k.w.

Power. *Local distribution lines* serve the municipality of Chase.

Use of Power.—Power is used for lighting and operating saw-mill.

Power is delivered adjacent to Canadian Pacific Ry.

CHILLIWACK.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

COAL CREEK.

Crow's Nest Pass Electric Light and Power Company. (Fuel Power Plant No. 8NK₂). Aug., 1918.

Controlled by the Crow's Nest Pass Coal Company, Ltd.

Address.—Head Office, Toronto, Ont.; Mines Office, Fernie, B.C.; Local Office, Coal Creek, B.C.

Directors.—Elias Rogers, Toronto; E. C. Whitney, Ottawa; H. B. McGivern, Ottawa; R. Budd, St. Paul, Minn.; A. E. Stovel, Toronto.

Officials.—Elias Rogers, Toronto, Ont. (Pres. and Treas.); E. C. Whitney, Ottawa, Ont. (Vice-Pres.); R. M. Young, Fernie, B.C. (Sec.); W. R. Wilson, Fernie, B.C. (Gen. Mgr.).

History.—Plant installed in 1905.

Capital invested in Plant and Equipment.—\$4,897.

Plant. *Location*.—Plant located at Coal Creek, B.C., adjacent to Morrissey, Fernie and Michel Ry.

Installation.—Steam Engines—2 reciprocating, 250 h.p. each, total 500 h.p.; Generators—4 Eddy Elect., D.C., 100 k.w. each, 650 r.p.m., 1 Gen. Elect., D.C., 97 k.w., 500 r.p.m., total 497 k.w.

Power. *Local distribution lines* serve the municipality of Coal Creek.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Morrissey, Fernie, and Michel Ry.

This lighting plant is only a part of the general power plant used in the operation of the company's coal mines.

COQUITLAM.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

Served by Western Power Company of Canada, Ltd.; see Vancouver, B.C.

COURTENAY.

Served by Courtenay Electric Light, Heat and Power Co., Ltd., with power purchased from Canadian Collieries (Dunsmuir), Ltd.; see Union Bay, B.C.

BRITISH COLUMBIA.

CRANBROOK.

Cranbrook Electric Light Company, Ltd. (Fuel Power Plant No. 8NJ₂). June, 1918.

Address.—Cranbrook, B.C.

Officials.—R. E. Beattie, Cranbrook, B.C. (Pres.); Geo. A. Leitch, Cranbrook, B.C. (Vice-Pres.); E. H. McPhee, Cranbrook, B.C. (Sec.)

History.—Plant installed in 1909.

Capital.—Authorized, \$150,000. Issued, \$58,490.

Capital invested in Plant and Equipment.—\$68,825.

Plant. *Official*.—R. C. Eakin (Gen. Supt. and Engr. Pwr. Sta.).

Location.—Plant located in Cranbrook, B.C.

Installation.—Steam Engines—3 Armstrong reciprocating, 150 h.p. each, total 450 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 2-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Allis-Chalmers-Bullock, A.C., 2-phase, 60-cycle, 250 k.w., 150 r.p.m., total 325 k.w.

Power. *Local distribution lines* serve the municipality of Cranbrook.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

CUMBERLAND.

Served by Cumberland Electric Lighting Co., Ltd., with power purchased from Canadian Collieries (Dunsmuir), Ltd.; see Union Bay, B.C.

DELTA.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

DUNCAN.

Municipality of Duncan. (Fuel Power Plant No. 8HA₂). Feb., 1918.

Officials.—E. F. Miller (Mayor); J. Greig (Clerk).

History.—Plant installed in March, 1915.

Capital invested in Plant and Equipment.—\$65,000.

Plant. *Location*.—Plant located in Duncan, B.C.

Installation.—Oil Engines—2, at 100 h.p. each, total 200 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle, 60 k.v.a. each, 212 r.p.m., total 120 k.v.a.

Power. *Local distribution lines* serve the municipality of Duncan.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Esquimalt and Nanaimo Ry. (C. P. Ry.).

ENDERBY.

Okanagan Saw Mills, Ltd. (Fuel Power Plant No. 8LC₁). Jan., 1918.

Address.—Enderby, B.C.

Officials.—A. R. Rogers, Enderby (Pres.); T. M. Lewis, Enderby (Gen. Mgr.); D. J. Craig, Enderby (Sec.).

History.—Plant installed in 1908.

Capital invested in Plant and Equipment.—\$14,306.

Plant. *Location*.—Plant located at Enderby, B.C.

Installation.—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 Gen. Elect., A.C., single-phase, 60-cycle, 75 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Enderby.

Use of Power.—Power is used for lighting and operating saw-mills.

Power is delivered adjacent to Canadian Pacific Ry.

ESQUIMALT.

Served by British Columbia Electric Railway Co., Ltd.; see Victoria, B.C.

BRITISH COLUMBIA.

FERNIE.

Municipality of Fernie. (Fuel Power Plant No. 8NK₁). Jan., 1918.

Officials,—G. B. Thompson (Mayor); Arthur J. Moffatt (Clerk).

History,—Plant previously owned by Crow's Nest Pass Electric Light and Power Company, Ltd.; acquired by municipality in 1909, when present units were installed.

Capital invested in Plant and Equipment,—\$63,812.

Plant. *Officials*,—J. W. Quail (Electn.); Harry Clift (Engr. Pwr. Sta.).

Location,—Plant located in Fernie, B.C., adjacent to Canadian Pacific Ry.

Installation,—Steam Engine—1 reciprocating, 250 h.p.; Generators—2 S.K.C., A.C., 2-phase, 60-cycle, 150 k.w., 1,000 r.p.m., total 300 k.w.

Power. *Local distribution lines* serve the municipality of Fernie.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Great Northern Ry., and Morrissey, Fernie and Michel Ry.

Power rates vary from 12 to 4 cents per k.w. hr., with 10 per cent discount.

FORT GEORGE.

Served by municipality of Prince George; see Prince George, B.C.

GOLDEN.

Jan., 1918.

The Columbia River Lumber Company, Ltd. (Fuel Power Plant No. 8NA₁).

Controlled by the Canadian Western Lumber Company, Ltd., of Fraser Mills, B.C., and controls the Golden Light, Power and Water Company, Ltd.

Address,—Local Office, Golden, B.C.

Officials,—D. B. Hanna, Toronto, Ont. (Pres.); J. D. McCormack, Vancouver, B.C. (Vice-Pres.); R. P. Ormsby, Toronto, Ont. (Sec.); H. B. Cornell, Golden, B.C. (Gen. Mgr.).

History,—Plant installed in 1907.

Capital invested in Plant and Equipment,—\$16,801.

Plant. *Location*,—Plant located at Golden, B.C.

Installation,—Steam Engines—2 reciprocating, 90 h.p. and 60 h.p., total 150 h.p.; Generators—1 Bullock, A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., total 150 k.w.

Power. *Local distribution lines* serve the municipality of Golden.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

In 1911 an additional unit was installed in this plant, consisting of one steam turbine at 1,300 h.p. and one Allis-Chalmers, A.C., 3-phase generator at 1,000 k.w., 3,600 r.p.m., which is used to generate electricity to operate the saw-mill and is not connected to the lighting system.

GRAND FORKS.

Served by South Kootenay Water Power Co., with power purchased from West Kootenay Power and Light Co., Ltd.; see Rossland, B.C.

GREENWOOD.

Greenwood City Waterworks Company. (Hydro Power Plant No. 8NN₃). July, 1918.

Address,—Greenwood, B.C.

Officials,—D. B. Fotheringham, Spokane, Wash. (Pres.); A. M. Whitside, Vancouver, B.C. (Vice-Pres.); Geo. Swynn, Greenwood, B.C. (Mgr.); H. McCutcheon, Greenwood, B.C. (Sec.).

History,—Plant installed in 1906.

Capital invested in Plant and Equipment,—\$21,500.

BRITISH COLUMBIA.

Greenwood City Water Works Company.—Con.

Plant. Location.—Plant located at Boundary falls on Boundary creek, near Boundary Falls station, on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 80 feet. Turbine—1 Allis-Chalmers, 125 h.p.; Generators—4 Allis-Chalmers, A.C., 3-phase, 80 k.w. each, 225 r.p.m., total 320 k.w.

Power. Transmission Lines.—3 miles of wooden pole line serve the municipality of Greenwood.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

Served also by—

West Kootenay Power and Light Company, Ltd.: See Rossland, B.C.

HEDLEY.

The Hedley Gold Mining Company, Ltd. (Hydro Power Plant No. 8NL₁). Formerly the Daly Reduction Company. Jan., 1918.

Address.—Hedley, B.C.

Officials.—W. D. Thornton, Hedley, B.C. (Pres.); G. P. Jones, Hedley, B.C. (Supt.); Jas. D. Clark, Hedley, B.C. (Sec.).

History.—Plant installed in December, 1914, to supersede former plant on Twenty-mile Creek.

Capital invested in Plant and Equipment.—\$203,421.

Plant. Location.—Plant located on Similkameen river.

Installation.—Plant operates under an average head of 62 feet. Water is conveyed from diversion dam through 16,000 feet of flume, 9 feet wide and 7 feet deep, to a forebay, thence through a steel pipe line 8 feet in diameter to the power-house. Turbine—1 S. Morgan Smith, Francis, 28-inch, hor., double runner, 1,600 h.p., 400 r.p.m.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 1,250 k.v.a., 400 r.p.m.; Exciter—1 generator, 20 k.w., 400 r.p.m., direct connected to main unit; Auxiliary Plant—1 Can. Ingersoll-Rand steam engine, 200 h.p., 1 Goldie & McCullough steam turbine, 400 h.p., total 600 h.p.

Power. Transmission Lines.—7 miles of wooden pole line serves the municipality of Hedley.

Use of Power.—Power is used for lighting and operation of gold mines.

Power is delivered adjacent to Great Northern Ry.

The company operates a second plant, about 3 miles from Hedley, under a head of 412 feet, which is used for the mines only.

KAMLOOPS.

Municipality of Kamloops. (Hydro Power Plant No. 8LB₁). July, 1918.

Officials.—A. M. Tyrrell (Mayor); J. J. Carment (City Clerk).

History.—The city commenced supplying power in 1896 from a steam plant. Present hydraulic plant installed in 1914 and steam stand-by plant installed in 1913.

Capital invested in Plant and Equipment.—\$311,674.

Plant. Official.—C. L. Wain (Supt. and Engr.).

Location.—Plant located on Barriere river about 40 miles north of city of Kamloops and 3 miles east of Barriere station on Canadian Northern Ry.

Installation.—Plant operates under an average head of 180 feet. From the dam at the outlet of Barriere lake the water is conveyed by a timber flume, 17,800 feet in length, to the forebay, and then by penstocks to the power-house. Turbines—2 Platt, 26-inch, hor., single runner, Francis, 1,000 h.p. each, 600 r.p.m., total 2,000 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle, 750 k.v.a. each, 600 r.p.m., total 1,500 k.v.a.; Exciters—2 generators, 40 k.w. each, 600 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., single-phase,

BRITISH COLUMBIA.

Municipality of Kamloops.—Con.**Plant.—Con.**

water-cooled, oil insulated, primary 2,200 v., secondary 44,000 v.; Auxiliary Plant—2 Gen. Elect., steam turbines, 1,000 h.p. each, 2 generators, 3-phase, 900 k.w. each, 1 Gen. Elect., steam turbine, 30 h.p. (used as exciter).

Power. *Transmission Lines*,—45 miles of wooden pole line serves the municipality of Kamloops.

Use of Power,—Power is used for lighting, operation of electric railway, general manufacturing, operation of copper and gold mines, general power purposes and pumping water for municipal supply and irrigation purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Northern Ry. The municipality has at present available for sale 1,000 h.p. at rates ranging from 1 to 2 cents per k.w. hr.

Present power plant is designed for an additional capacity of 3,000 h.p.

KASLO.

Municipality of Kaslo. (Hydro Power Plant No. 8NH₁). Jan., 1918.

Officials,—Jas. Anderson (Mayor); Wm. E. Hodder (Clerk).

History,—Plant installed by the Kootenay Electric Company, Ltd., in 1897, with new generator in 1907, and purchased by municipality of Kaslo in 1915.

Capital invested in Plant and Equipment,—\$27,059.

Plant. *Official*,—Fred. D. Emory, Kaslo (Supt. and Electn.).

Location,—Plant located near mouth of Kaslo creek, 1½ mile from Kaslo.

Installation,—Plant operates under an average head of 40 feet; Turbine—1 Wm. Kennedy, 19-inch, hor., double runner, 250 h.p., 428 r.p.m.; Generator—1 West., A.C., 2-phase, 60-cycle, 120 k.w., 720 r.p.m.; Exciter—1 generator, 2.75 k.w., 2,100 r.p.m., belted to main generator shaft.

Power. *Transmission Lines*,—2 miles of wooden pole line serve the municipality of Kaslo.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

KELOWNA.

Municipality of Kelowna. (Fuel Power Plant No. 8NM₃). May, 1918.

Officials,—D. W. Sutherland (Mayor); G. H. Dunn (Clerk and Treas.).

History,—Plant installed in 1908 with additional units in 1911 and 1914.

Capital invested in Plant and Equipment,—\$57,377.

Plant. *Official*,—John McMillan (Ch. Engr.).

Location,—Plant located in Kelowna on shore of Okanagan lake and adjacent to lake navigation.

Installation,—Steam Engines—1 Robb, reciprocating, 95 h.p., 1 Goldie & McCullough, reciprocating, 200 h.p., 1 Goldie & McCullough, reciprocating, 325 h.p., total 620 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 50 k.v.a., 277 r.p.m., 1 Fairbanks-Morse, A.C., 3-phase, 60-cycle, 100 k.v.a., 257 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 250 k.v.a. 450 r.p.m., total 400 k.v.a.; Exciters—1 generator, 10 k.w., 2 generators, 7.5 k.w. each.

Power. *Local distribution lines* serve the municipality of Kelowna.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Okanagan lake navigation.

The municipality has 250 kilowatts available for sale at rates ranging from 2 to 4 cents per k.w.hr., with a discount of 33½ per cent.

BRITISH COLUMBIA.

LADYSMITH.

Municipality of Ladysmith. (Fuel Power Plant No. 8HA₃). May, 1918.

Officials,—E. G. Pannell (Mayor); N. A. Morrison (Clerk).

History,—Plant installed in 1909.

Capital invested in Plant and Equipment,—\$25,000.

Plant. *Officials*,—Wm. M. Allester (Ch. Engr.); J. Michie (Engr. Pwr. Sta.); W. McLaren (Engr. Pwr. Sta.).

Location,—Plant located in Ladysmith, Vancouver Island, B.C.

Installation,—Steam Engine—1 reciprocating, 153 h.p.; Generator,—1 Can. West., A.C., 3-phase, 115 k.w., 240 r.p.m.

Power. *Local distribution lines* serve the municipality of Ladysmith and suburbs.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

LANGLEY.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

MAPLE RIDGE.

Served by Western Power Company of Canada, Ltd.; see Vancouver, B.C.

MATSQUI.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

Served by Western Power Company of Canada, Ltd.; see Vancouver, B.C.

MERRITT.

Municipality of Merritt. (Fuel Power Plant No. 8LG₁). May, 1918.

Officials,—M. L. Grimmett (Mayor); H. Priest (Clerk).

History,—Plant installed in February, 1913.

Capital invested in Plant and Equipment,—\$70,000.

Plant. *Location*,—Plant located in Merritt.

Installation,—Steam Engine—1 reciprocating, 200 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 125 k.w., 450 r.p.m.

Power. *Local distribution lines* serve the municipality of Merritt.

Use of Power,—Power is used for lighting and pumping water.

Power is delivered adjacent to Kettle Valley Ry.

MICHEL.

Aug., 1918

Crow's Nest Pass Electric Light and Power Company. (Fuel Power Plant No. 8NK₂).

Controlled by the Crow's Nest Pass Coal Company, Ltd.

Address,—Local Office, Michel, B.C.

For details of Directors and Officers see Coal Creek, B.C.

History,—Plant installed in 1908.

Capital invested in Plant and Equipment,—\$9,944.

Plant. *Location*,—Plant located in Michel, B.C., adjacent to Canadian Pacific Ry.

Installation,—Steam Engines—2 reciprocating, 400 h.p. each, total 800 h.p.; Generators—1 Ridgeway dynamo, D.C., 250 k.w., 175 r.p.m., 1 Can. Gen. Elect., D.C., 250 k.w., 175 r.p.m., total 500 k.w.

Power. *Local distribution lines* serve the municipality of Michel.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Great Northern Ry.

This lighting plant is only a part of the general power plant used in the operation of the company's coal mines.

MILL CREEK.

Whalen Pulp and Paper Mills, Ltd. (Hydro Power Plant No. 8GA₄). Nov., 1918.

Address,—Head Office, Vancouver, B.C. Local Office, Mill Creek, B.C.

Officials,—Geo. F. Whalen (Gen. Mgr.); Allan Paterson (Secy.).

History,—Plant installed in 1911 with an additional unit in 1913.

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BRITISH COLUMBIA.

Whalen Pulp and Paper Mills, Ltd.—Con.

Plant. The plant is operated in connection with the company's mill. Water is obtained from Mill creek and Cedar creek. The total turbine capacity is 1,530 h.p. and the generator capacity 150 k.w.

Power. Practically all the power is used in the operation of the company's mill. A small amount of power is distributed in Mill Creek for lighting. The company also operates plants at Swanson Bay and Quatsino, B.C.

MISSION CITY.

April, 1918.

Mission Water, Light and Power Company, Ltd. (Hydro Power Plant No. SMH₁).

Address,—Mission City, B.C.

Owner,—H. Windebank, Mission City, B.C.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$10,000.

Plant. *Location*,—Plant located on Silver Creek.

Installation,—Plant operates under an average head of 200 feet; Turbine—1 Jas. Gordon, 50-inch, hor., 70 h.p., 1,200 r.p.m.; Generator.—1 Chapman & Walker, A.C., 3-phase, 55 k.v.a., 1,200 r.p.m.; Exciter—1 generator, 14 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Mission City.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

Served also by—

Western Power Company of Canada; see Vancouver, B.C.

MOUNT OLIE.

Mount Olie Electric Light Plant. (Hydro Power Plant No. 8LB₂). Jan., 1918.

Address,—Mount Olie, B.C.

Owner,—J. H. Latremouille.

Plant. *Location*,—Plant located on Nikalliston creek.

Installation,—Plant operates under an average head of 48 feet; water is conveyed from dam to power-house by 600 feet of 16-inch wood-stave pipe; Turbine—1 Chas. Barber, 16-inch, hor., 60 h.p., 580 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase.

Power. This plant has not operated since 1916.

Use of Power,—Power formerly used for lighting only.

Power was delivered adjacent to Canadian Northern Ry.

NANAIMO.

The Nanaimo Electric Light, Power and Heating Company, Ltd. (Hydro Power Plant No. 8HB₂). April, 1918.

Address,—Nanaimo, B.C.

Officials,—Jos. Hunter, Victoria (Pres.); Wm. Lewis, Nanaimo (Sec. and Gen. Mgr.).

History,—Pelton wheel installed in 1905, one generator installed in 1906, one in 1911. A steam engine and generator installed in 1913.

Capital invested in Plant and Equipment,—\$167,683.

Plant. *Officials*,—H. Alexander, Nanaimo (Supt.); F. W. Byers, Nanaimo (Ch. Engr.); J. W. Parken, Nanaimo (Eng. Pwr. Sta.).

Location,—Plant located on Millstone river; auxiliary steam plant located in same building as hydraulic plant.

Installation,—Turbine—1 Pelton, impulse, 3 wheels, 2 nozzles each, 450 h.p., 165 r.p.m.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 250 k.w., 600 r.p.m.

BRITISH COLUMBIA.

The Nanaimo Electric Light, Power and Heating Company, Ltd.—Con.**Plant.—Con.**

total 400 k.w.; Auxiliary Plant—1 boiler 189 h.p., 1 J. Hawden reciprocating steam engine, 450 h.p., 1 Peebles, A.C., 3-phase, 60-cycle, 300 k.w. generator.

Power. *Local distribution lines* serve the municipality of Nanaimo.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Esquimalt and Nanaimo Ry. (C.P.Ry.), and coastal navigation.

NARAMATA.

Feb., 1918.

The Okanagan Securities Company, Ltd. (Hydro Power Plant No. SNM₁).

Address.—Naramata, B.C.

Capital invested in Plant and Equipment.—\$5,221.

Plant. *Location.*—Plant located on Mill creek.

Installation.—Turbine—1 Pelton, 60 h.p.; Generator—1 A.C., 30 k.w.; Exciter—1 generator, D.C., 3.25 k.w., direct connected to main generators.

Power. *Local distribution lines* serve the municipality of Naramata.

The plant has not operated recently due to shortage of water supply.

NELSON.**Municipality of Nelson. (Hydro Power Plant No. 8NJ₂). July, 1918.**

Officials.—M. R. McQuarrie (Mayor); W. E. Wasson (City Clerk); Dr. W. O. Rose (Chmn. Comm.).

History.—Original hydro-electric plant acquired by the municipality about 1898, and replaced by new hydraulic plant in 1907. An additional unit was installed in 1909.

Capital invested in Plant and Equipment.—\$346,380.

Plant. *Officials.*—Herbert P. Thomas (Supt. and City Electn.); T. Needham (Engr. Pwr. Sta.).

Location.—Plant located at Upper Bonnington falls, on Kootenay river, at Bonnington Falls station on Canadian Pacific Ry., about 10 miles west of Nelson.

Installation.—Plant operates under an average head of 60 feet. Intake located above falls, and plant built at foot of falls with short steel penstock from forebay to plant; Turbines—1 Allis-Chalmers-Bullock, 55-inch, vert., single runner, 1,800 h.p., 180 r.p.m., 1 Allis-Chalmers-Bullock, 53-inch, vert., single runner, 1,600 h.p., 180 r.p.m., total 3,400 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 750 k.w., 180 r.p.m., 1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 1,000 k.w., 180 r.p.m., total 1,750 k.w.; Exciters—2 generators, 50 k.w. each, belted to main generator shafts.

Power. *Transmission Lines.*—11½ miles of wooden pole line serves the municipality of Nelson.

Use of Power.—Power is used for lighting, general manufacturing, operation of mines, and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The municipality has at present available for sale 1,000 k.w.

The plant is designed for an ultimate turbine capacity of about 8,000 h.p. and the municipality contemplates installing additional units at some future date.

NEW DENVER.

Feb., 1918.

The Denver Light and Power Company, Ltd. (Hydro Power Plant No. 8NJ₃).

Address.—New Denver, B.C.

Official.—Colin J. Campbell, New Denver (Mgr.).

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BRITISH COLUMBIA.

The Denver Light and Power Company, Ltd.—Con.

History,—Original plant installed in 1903 and destroyed by fire in 1914. Plant rebuilt in 1914 with the original turbine and a new generator.

Capital invested in Plant and Equipment,—\$9,000.

Plant. *Location*,—Plant located on Carpenter creek.

Installation,—Plant operates under an average head of 82 feet. Turbine—1 Pelton, 72-inch, hor., single runner, 52 h.p., 92 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 93 k.v.a., 1,200 r.p.m.; Exciter—1 generator, 3 k.w., 1,600 r.p.m., belted to main generator shaft.

Power. *Transmission Lines*,—9.6 miles of wooden pole lines serve the municipalities of New Denver and Silverton.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry., and Slocan Lake navigation.

NEW WESTMINSTER.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

Served by Western Power Company of Canada, Ltd.; see Vancouver, B.C.

NORTH VANCOUVER.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

OAK BAY.

Served by British Columbia Electric Railway Co., Ltd.; see Victoria, B.C.

PEACHLAND.

Municipality of Peachland. (Hydro Power Plant No. 8NM₂). July, 1918.

Officials,—Wm. Douglas (Reeve); Wm. M. Dryden (Clerk).

History,—Plant installed in 1909.

Capital invested in Plant and Equipment,—\$13,706.

Plant. *Official*,—John McLaughlan (Electn.).

Location,—Plant located on Trepanier creek.

Installation,—Plant operates under an average head of 120 feet. Turbine—1 Pelton, 50-inch, vert., 50 h.p., 223 r.p.m.; Generator—1 West., A.C., 3-phase, 50 k.w., 1,200 r.p.m.

Power. *Transmission Lines*,—5 miles of wooden pole line serves the municipality of Peachland.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Okanagan Lake navigation.

PENTICTON, DISTRICT OF.

Municipality of District of Penticton. (Fuel Power Plant No. 8NM₁). May, 1918.

Officials,—W. A. McKenzie (Reeve); B. C. Bracewell (Clerk).

History,—Plant installed in March, 1913.

Capital invested in Plant and Equipment,—\$87,000.

Plant. *Official*,—F. L. McKeever, M.I.E.E. (Supt).

Location,—Plant located in Penticton, B.C.

Installation,—Oil Engine—1 Diesel, 200 h.p.; Generator—1 Lancashire, A.C., 3-phase, 60-cycle, 125 k.v.a., 900 r.p.m.

Power. *Local distribution lines* serve the district of Penticton.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Kettle Valley Ry., and Okanagan Lake navigation.

PHOENIX.

Served by South Kootenay Water Power Co., with power purchased from West Kootenay Power and Light Co., Ltd.; see Rossland, B.C.

POINT GREY.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

BRITISH COLUMBIA.

PORT ALBERNI.

Municipality of Port Alberni. (Fuel Power Plant No. 8HB₁). May, 1918.

Officials,—A. D. MacIntyre (Mayor); R. F. Blandy (Treas.).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$42,500.

Plant. *Official*,—Geo. Swanson (Electn.).

Location,—Plant located in Port Alberni, adjacent to Canadian Pacific Ry.

Installation,—Oil Engine—1 Aktiebolaget Diesel, 150 h.p.; Generator—1 Can.

Gen. Elect., A.C., 3-phase, 60-cycle, 2,300 v., 125 k.v.a., 277 r.p.m.; Exciter—

Direct connected to main generator.

Power. *Local distribution lines* serve the municipalities of Port Alberni and Alberni.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and coastal navigation.

Power rate—6.3 cents per k.w. hr. net.

PORT MOODY.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

POWELL RIVER.

Powell River Company, Ltd. (Hydro Power Plant No. 8GB₁). July, 1918.

Address,—Head Office, 804 Standard Bank Bldg., Vancouver, B.C. Local Office, Powell River, B.C.

Directors,—D. F. Brooks, Minneapolis; M. J. Seanton, Minneapolis; A. S. Brooks, Minneapolis; N. R. Lang, Vancouver, B.C.; F. T. Griffith, Portland.

Officials,—D. F. Brooks, Minneapolis, Minn. (Pres.); N. R. Land, Vancouver, B.C. (Mng. Dir.); H. K. Brooks, Bend, Oregon (Sec.).

History,—Plant installed in April, 1912; additional units installed in May, 1913.

Capital,—Authorized, \$5,000,000. Issued, \$3,500,400.

Capital invested in Plant and Equipment,—\$1,237,690.

Plant. *Officials*,—Wm. McBain, Powell River, B.C. (Mill Mgr.); C. A. Schram, Powell River, B.C. (Asst. to Mill Mgr.); W. B. Qumwalt, Powell River, B.C. (Supt.).

Location,—Plant located on Powell river at Powell River, B.C., on Malaspina straits.

Installation,—Plant operates under an average head of 147 feet. Water is conveyed from forebay intake to power-house by three pipe lines, one wood stave pipe and two riveted steel pipes. Turbines—2 Allis-Chalmers, 42-inch, hor., Francis, single runner, 3,000 h.p. each, 375 r.p.m., direct connected to generators, 1 Platt, 48-inch, hor., single runner, 3,600 h.p., 375 r.p.m., direct connected to generators, 2 Allis-Chalmers, 36-inch, hor., Francis, double runner, 3,600 h.p. each, 225 r.p.m., connected to grinders, 2 Platt, 54-inch, hor., single runner, 3,600 h.p. each, 225 r.p.m., connected to grinders, total 24,000 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 50-cycle, 1,500 k.w. each, 375 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 50-cycle, 2,000 k.w., 375 r.p.m., total 5,000 k.w.; Exciters—1 motor, 3-phase, 600 v., 1,000 r.p.m., 1 generator, 150 k.w., 1,000 r.p.m., 1 generator, 36 k.w., 375 r.p.m., 2 generators, 30 k.w. each, 375 r.p.m.

Power. *Transmission Lines*,—2.1 miles of wooden pole line serves the municipality of Powell River, B.C.

Use of Power,—Power is used for operation of pulp and paper mills and a small amount for lighting.

Power is delivered adjacent to ocean navigation.

The company contemplates an additional installation of 9,000 h.p., completing the designed capacity of the plant.

BRITISH COLUMBIA.

PRINCE GEORGE.

Municipality of Prince George. (Fuel Power Plant No. 8JC₁). Feb., 1918.

Officials,—H. G. Perry (Mayor); H. A. Cameron (Clerk).

History,—Plant installed January, 1917.

Capital invested in Plant and Equipment,—\$71,960.

Plant. *Location*,—Plant located in Prince George, B.C.

Installation,—Oil Engines—2 Type Y, Fairbanks-Morse, semi-diesel, 150 h.p. each, total 300 h.p.; Generators—1 Minneapolis Elect., A.C., 3-phase, 60-cycle, 160 k.w., 900 r.p.m., 1 Fairbanks-Morse, A.C., 3-phase, 60-cycle, 100 k.w., 900 r.p.m., total 260 k.w.

Power. *Local distribution lines* serve the municipalities of Fort George, South Fort George and Prince George.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to the Grand Trunk Pacific Ry., and Fraser River navigation.

PRINCE RUPERT.

Municipality of Prince Rupert. (Hydro Power Plant No. 8EG₁). July, 1918.

Officials,—Thos. McClymont (Mayor); F. Peters, K.C. (City Clerk).

History,—Plant installed in November, 1914.

Capital invested in Plant and Equipment,—\$156,500.

Plant. *Official*,—T. C. Duncan (Supt.).

Location,—Hydro-electric plant located 5½ miles east of Prince Rupert at outlet of Woodworth lake; auxiliary steam plant located in Prince Rupert, B.C.

Installation,—The plant operates under an average head of 253 feet. The water is conveyed from the dam, at the outlet of Woodworth lake, to the powerhouse through a 45-inch pipe, 7,800 feet long; Turbine—1 Can. Allis-Chalmers, 75-inch, hor., single runner, 1,650 h.p., 514 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,125 k.v.a., 514 r.p.m.; Exciter—1 Can. Gen. Elect. generator, 15 k.w., 514 r.p.m.; Auxiliary Plant—2 Ridgway, reciprocating steam engines, 165 h.p. each, 1 reciprocating steam engine 150 h.p., total 480 h.p.; 3 A.C., 3-phase, 60-cycle, generators, 100 k.w. each, total 300 k.w.

Power. *Transmission Lines*,—5½ miles of wooden pole line serves the municipality of Prince Rupert.

Use of Power,—Power is used for lighting and for general industrial purposes, including operation of saw-mills, ore conveyors, Grand Trunk dry dock and wharves, fish-handling plants, Provincial Government wharf, hoists, etc., coal-handling machinery and also for numerous small power purposes.

Rates for power based on a connected load of 21 h.p. to 100 h.p. inclusive of 746 watts per horse-power per month, vary from 4 cents per connected kilowatt up to and including 100 kilowatt hours per month, to 1 cent per connected kilowatt for 720 kilowatt hours per month and over.

Power is delivered adjacent to Grand Trunk Pacific Ry., and Pacific Ocean navigation.

PRINCETON.

Princeton Coal and Land Company. (Fuel Power Plant No. 8NL₁). Jan., 1918.

Address,—Princeton, B.C.

Official,—J. Smellie, Princeton, B.C. (Acet.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$8,000.

Plant. *Location*,—Plant located at Princeton, B.C.

Installation,—Steam Engine—1 reciprocating, 75 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 50 k.w.

BRITISH COLUMBIA.

Power. *Local distribution lines* serve the municipality of Princeton.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Kettle Valley Ry., and Great Northern Ry.

QUATSINO.

Whalen Pulp and Paper Mills, Ltd. (Fuel Power Plant No. 8HF₁). Nov., 1918.

Address.—Head Office, Vancouver, B.C.; Local Office, Quatsino, B.C.

Officials.—(See under Mill Creek, B.C.).

History.—Plant installed in 1917.

Plant. The plant is operated in connection with the company's mill.

Installation.—Consists of seven water-tube boilers, total capacity 2,000 h.p.; two compound reciprocating steam engines 2,400 h.p., and two 3-phase, 60-cycle generators of total capacity 1,750 k.w.

Power. Practically all the power is used in the operation of the company's mill. A small quantity is distributed in Quatsino for lighting. The company also operates plants at Mill Creek and Swanson Bay.

REVELSTOKE.

Municipality of Revelstoke. (Hydro Power Plant No. SND₁). July, 1918.

Officials.—H. F. McKinnon (Mayor); W. A. Gordon (City Clerk).

History.—Plant installed in 1910. Additional units installed in 1915.

Capital invested in Plant and Equipment.—\$227,505.

Plant. *Official.*—C. North, (Mgr. and Supt.).

Location.—Plant located on Illecillewaet river, 1½ mile from Revelstoke station on the Canadian Pacific Ry.

Installation.—Plant operates under an average head of 72 feet. Water is conveyed from dam to power-house through a 6-foot wood-stave pipe, about 600 feet long; Turbines—1 Jenckes, 38-inch, hor., single runner, Francis, 900 h.p., 450 r.p.m.; 1 Escher-Wyss, 34-inch, hor., double runner, Francis, 1,400 h.p., 360 r.p.m., total 2,300 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 450 k.v.a., 450 r.p.m., 1 Can. West., A.C., 3-phase, 60-cycle, 750 k.v.a., 360 r.p.m., total 1,200 k.v.a.; Exciters—1 generator 12 k.w., 450 r.p.m., 1 generator 20 k.w., 360 r.p.m., direct connected to main generator shafts; Auxiliary Plant—1 Premier gas engine 300 h.p., 1 A.C., 3-phase, 60-cycle, 250 k.w. generator.

Power. *Transmission Line.*—1½ mile of wooden pole line serves the municipality of Revelstoke and district.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The municipality has at present available for sale 350 kilowatts; rates range from ½ to ¾ cents per k.w. hr.

RICHMOND.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

ROSSLAND.

West Kootenay Power and Light Company, Ltd. Controls South Kootenay Water Power Company; Cascade Water, Power and Light Company; Okanagan Water Power Company; and Rossland Water and Light Company.

Address.—Rossland, B.C.

Directors.—C. R. Hosmer, Montreal, Que.; L. A. Campbell, Rossland, B.C.; Walter R. Baker, C.V.O., Montreal, Que.; George F. Benson, Montreal, Que.; Edwin Hanson, Montreal, Que.; F. E. McNally, Montreal, Que.; James J. Warren, Trail, B.C.

West Kootenay Power and Light Company, Ltd.—Con.

Officials.—C. R. Hosmer, Montreal, Que. (Pres.); L. A. Campbell, Rossland, B.C. (Vice-Pres. and Gen. Mgr.); James J. Warren, Trail, B.C. (Mng. Dir.); F. E. McNally, Montreal, Que. (Sec.); Thos. S. Gilmour, Rossland, B.C. (Audr.); J. D. McDonald, Rossland, B.C. (Gen. Supt.).

History.—Lower Bonnington Falls plant installed in 1897, with an additional unit in 1899. Upper Bonnington Falls plant installed in 1906, with additional units in 1914 and 1916. Cascade plant installed in 1902 by the Cascade Water, Power and Light Company, Ltd., and taken over by the present company in 1907.

Capital.—Authorized, \$2,500,000. Issued, \$2,500,000.

Debtenture Stock.—Authorized, \$1,500,000. Issued, \$1,500,000.

Capital invested in Plant and Equipment.—Lower Bonnington Falls and Upper Bonnington Falls plants combined, \$3,640,146. Cascade plant, \$278,308.

Plants.**Lower Bonnington Falls Plant.** (Hydro Power Plant No. 8NJ₅). Sept., 1918.

Location.—Plant located at Lower Bonnington falls, on Kootenay river, 18 miles from Nelson.

Installation.—Plant operates under an average head of 37 feet. Turbines—2 Victor, 39-inch, hor., double runner, 1,000 h.p. each, 180 r.p.m., 1 Victor, 45-inch, hor., double runner, 1,648 h.p., 180 r.p.m., total 3,648 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 750 k.w. each, 180 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,500 k.w., 180 r.p.m., total 3,000 k.w.; Exciters—3 12-inch turbines, 40 h.p. each, 3 generators, 30 k.w. each, 600 r.p.m.; Transformers—4 banks, Can. Gen. Elect., single-phase, air-cooled, primary 1,100 v., secondary 22,000 v., 1,000 k.v.a. per bank.

Upper Bonnington Falls Plant. (Hydro Power Plant No. 8NJ₄). Sept., 1918.

Location.—Plant located at Upper Bonnington falls, on Kootenay river, about one mile above Lower Bonnington Falls plant.

Installation.—Plant operates under an average head of 67.5 feet. Turbines—2 I. P. Morris, 60-inch, vert., Francis, 9,000 h.p. each, 180 r.p.m., 2 Allis-Chalmers, 65-inch, vert., Francis, 10,000 h.p. each, 180 r.p.m., total 38,000 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 5,625 k.v.a. each, 180 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 7,500 k.v.a. each, 180 r.p.m., total 26,250 k.v.a.; Exciters—2 25.5-inch turbines, 500 h.p. each, 400 r.p.m., 2 generators, 150 k.w. each, 400 r.p.m.; Transformers—2 banks of 3, Can. West., single-phase, water-cooled, oil insulated, primary 25,000 v., secondary 60,000 v., 2,000 k.v.a. each, 2 banks of 3, Can. West., single-phase, water-cooled, oil insulated, primary 25,000 v., secondary 60,000 v., 1,875 k.v.a. each, 1 bank of 3, Can. West., single-phase, water-cooled, oil insulated, primary 25,000 v., secondary 60,000 v., 1,250 k.v.a. each.

Cascade Plant. (Hydro Power Plant No. 8NN₁). Sept., 1918.

Location.—Plant located on Kettle river, 12 miles below Grand Forks, on the Canadian Pacific Ry.

Installation.—Plant operates under an average head of 156 feet. Turbines—3 S. Morgan Smith, 39-inch, hor., double runner, 1,300 h.p. each, 400 r.p.m., total 3,900 h.p.; Generators—3 West., A.C., 3-phase, 60-cycle, 750 k.w. each, 400 r.p.m., total 2,250 k.w.; Exciters—2 12-inch turbines, 60 h.p. each, 1,100 r.p.m., 2 generators, 45 k.w. each, 1,100 r.p.m.; Transformers—3 West., single-phase, natural cooled, oil insulated, primary 2,200 v., secondary 22,000 v., 390 k.v.a. each.

Power. *Transmission Lines*.—89 miles of wooden pole lines from Lower Bonnington Falls and Upper Bonnington Falls plants, and 32 miles of wooden pole lines from Cascade plant, serve the municipalities of Rossland, Trail, Grand Forks, Phoenix, Greenwood and Boundary Falls.

BRITISH COLUMBIA

Cascade Plant.—Con.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing, operation of mines and smelters and general power purposes. Power is sold in bulk to South Kootenay Water Power Company, Cascade Water, Power and Light Company, and Rossland Water and Light Company, for distribution.

Power is delivered adjacent to Canadian Pacific Ry., and Great Northern Ry.

The company has contracted to supply power to the Northport Smelting and Refining Company and the Canada Copper Corporation, and transmission lines are under construction to the works of these companies.

SAANICH.

Served by British Columbia Electric Railway Co., Ltd.; see Victoria, B.C.

SALMON ARM.

Municipality of Salmon Arm. (Fuel Power Plant No. 8LE₁). June, 1918.

Officials.—J. E. Lacey (Mayor); F. E. Wilcox (Clerk).

History.—Plant installed in November, 1913.

Capital invested in Plant and Equipment.—\$36,036.

Plant. *Official.*—G. L. Boutwell (Engr. Pwr. Sta.).

Location.—Plant located in Salmon Arm and adjacent to Canadian Pacific Ry., and Shuswap Lake navigation.

Installation.—Oil Engine—1 Diesel, 150 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 100 k.w., 277 r.p.m.; Exciter—1 generator, 110 v., direct connected to main unit.

Power. *Local distribution lines* serve the municipality of Salmon Arm.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

The municipality has at present 70 k.w. for sale; rates, 8 to 16 cents per k.w. hr.

SANDON.

July, 1918.

The Sandon Waterworks and Light Company, Ltd. (Hydro Power Plant No. 8NJ₁).

Address.—Sandon, B.C.

Officials.—J. M. Harris, Sandon (Pres., Mgr. and Supt.); F. T. Kelly, Sandon (Sec.).

History.—Plant installed in 1896.

Capital.—Authorized, \$50,000. Issued, \$50,000.

Capital invested in Plant and Equipment.—\$21,000 (not including waterworks installation).

Plant. *Official.*—A. H. Sanderson, Sandon (Engr. Pwr. Sta.).

Location.—Plant located on Sandon creek, adjacent to Sandon station, on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 410 feet; Turbine—1 Pelton, 36-inch, hor., single runner, 2-nozzle, 175 h.p., 475 r.p.m.; Generators—2 Can. Gen. Elect., D.C., 35 k.w. each, 975 r.p.m.

Power. *Local distribution lines* serve the municipality of Sandon.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

SICAMOUS.

Canadian Pacific Railway. (Fuel Power Plant No. 8LE₃). Nov., 1918.

Plant. Located in Sicamous, B.C., and consists of two boilers, total capacity 100 h.p.; two reciprocating steam engines, total capacity 80 h.p.; and two D.C. generators, total capacity 60 k.w.

Power. The plant is operated in connection with the company's hotel and also serves the railway station and a few customers.

SILVERTON.

Served by the Denver Light and Power Co., Ltd.; see New Denver, B.C.

SOUTH FORT GEORGE.

Served by municipality of Prince George; see Prince George, B.C.

SOUTH VANCOUVER.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

SPENCES BRIDGE.

Spences Bridge Electric Light and Power Company. (Hydro Power Plant No. SLF₁). July, 1918.

Address,—Local Office, Spences Bridge, B.C.

Officials,—A. Clemes (Pres. and Mgr.); F. Inskip (Sec.).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$13,920.

Plant. *Official*,—Chas. J. Baillie (Electn.).

Location,—Plant located near mouth of Murray creek about $\frac{3}{4}$ mile from Spences Bridge station on Canadian Pacific Ry., Merritt Branch of Kettle Valley Ry., and Canadian Northern Ry.

Installation,—Plant operates under an average head of 265 feet. Water is conveyed from dam to power-house through a 16-inch riveted steel pipe about 250 feet long; upper 175 feet in rock tunnel; Turbine—1 Pelton 48-inch, hor., single runner, 175 h.p., 200 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 1,200 r.p.m.; Exciter—1 Can. Gen. Elect., D.C., generator, 4 k.w., 1,350 r.p.m., belted to main generator shaft.

Power. *Transmission Line*,—1 mile of wooden pole line serves the municipality of Spences Bridge.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry., Merritt Branch of Kettle Valley Ry., and Canadian Northern Ry.

Additional power can be developed at this site.

The company has at present 150 h.p. available for sale.

SUMAS.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

SUMMERLAND.

Municipality of Summerland. (Hydro Power Plant No. 8NM₃). April, 1918.

Officials,—Isaac Blair (Reeve); J. L. Logie (Clerk).

Capital invested in Plant and Equipment,—\$22,736.

Plant. *Location*,—Plant located on Prairie creek.

Installation,—Plant operates under an average head of 400 feet. Turbine—1 Pelton, 45 h.p.; Generator—1 generator, 30 k.w.

Power. *Local distribution lines* serve the municipality of Summerland.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Okanagan Lake navigation.

SURF INLET.

The Surf Inlet Power Company, Ltd. (Hydro Power Plant No. SFD₃), controlled by Belmont Surf Inlet Mines, Ltd. July, 1918.

Address,—Surf Inlet, B.C.

Officials,—Clyde A. Hellen, Surf Inlet (Pres.); Frederick Bradshaw, Surf Inlet (Gen. Mgr.); J. K. Kitto, Surf Inlet (Sec.).

History,—Plant installed in February, 1917.

Capital invested in Plant and Equipment,—\$236,490.

BRITISH COLUMBIA.

Plant. *Official*.—F. W. Holler, Surf Inlet (Supt.).

Location.—Plant located on Congar lake and adjacent to coastal navigation.

Installation.—Plant operates under an average head of 75.5 feet. Turbines—2 Pelton, 26-inch, hor., Francis, single runner, 700 h.p. each, 600 r.p.m., total 1,400 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle, 468 k.v.a. each, 300 r.p.m., total 936 k.v.a.; Exciters—2 generators, 12 k.w. each, 600 r.p.m., direct connected to main generator shaft; Transformers—1 bank of 3 Can. West., 3-phase, oil insulated, primary 440 v., secondary 13,200 v., 300 k.v.a. each.

Power. *Transmission Line*.—6 miles of wooden pole line serves mines at Surf Inlet.

Use of Power.—Power is used for lighting and operation of mines.

Total output of plant is sold in bulk to Belmont Surf Inlet Mines, Ltd.

Power is delivered adjacent to ocean navigation.

SURREY.

Served by British Columbia Electric Railway Co., Ltd.; see Vancouver, B.C.

SWANSON BAY.

Whalen Pulp and Paper Mills, Ltd. (Hydro Power Plant No. 8FD₅). Nov., 1918.

Address.—Head Office, Vancouver, B.C. Local Office, Swanson Bay, B.C.

Officials.—(See under Mill Creek, B.C.)

History.—Plant installed in January, 1909.

Plant. The plant is operated in connection with the company's mill. Water is taken from Swanson or Yule creek and conveyed to the plant through a wooden conduit 1,000 feet in length.

Installation.—Consists of four S. Morgan Smith hor., single runner turbines of 1,750 h.p. total capacity, and two Can. Gen. Elect., A.C., 3-phase, and two Can. Gen. Elect., D.C. generators, total capacity of 370 k.w.

Power. Practically all the power is used in the operation of the company's mill. A small amount of power is distributed in Swanson Bay for lighting. The company also operates plants at Mill Creek and Quatsino, B.C.

TRAIL.

Served by West Kootenay Power and Light Co., Ltd.; see Rossland, B.C.

UNION BAY.

Canadian Collieries (Dunsmuir), Ltd. (Hydro Power Plant No. SHB₁). July, 1918.

Address.—Head Office, Victoria, B.C. Local Office, Union Bay, B.C.

Officials.—H. S. Fleming (Chmn.); J. H. Savage, Union Bay, B.C. (Gen. Mgr.); H. Browning, Union Bay, B.C. (Asst. Sec.); Thos. Graham, Union Bay, B.C. (Gen. Supt.).

History.—Company formerly operated steam power plants at the various mines but installed present plant in 1913, to replace the steam plants.

Capital invested in Plant and Equipment.—\$939,741.

Plant. *Official*.—Walter White, Cumberland, B.C. (Ch. Engr.).

Location.—Plant located on Puntledge river, about 6 miles above city of Courtenay, Vancouver island.

Installation.—Plant operates under an average head of 275 feet. Water is conveyed from diversion dam to forebay by concrete-lined canal and open wood stave pipe; total length, 3,400 feet. From forebay to power-house water is conveyed through closed pipe consisting of four sections: one 8-foot wood stave pipe 2,380 feet long, one 6-foot wood stave pipe 4,477 feet long, two 50-inch wood stave pipes 3,056 feet long, and two steel pipes 660 feet long. Turbines—2 Escher-Wyss, 36-inch, hor., Francis, single runner, 6,000 h.p. each, 500 r.p.m., total 12,000 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 25-cycle, 3,500 k.w. each, 500 r.p.m., total 7,000 k.w.; Exciters—2 Can. Gen. Elect. generators, direct connected to main generators.

BRITISH COLUMBIA.

Canadian Collieries (Dunsmuir), Ltd.—Con.

Power. Transmission Lines.—23.35 miles of wooden pole lines serve the municipalities of Courtenay and Cumberland.

Use of Power.—Power is used for lighting, operation of electric railway, general manufacturing, and operation of mines.

Power is sold in bulk to the Cumberland Electric Lighting Company, Ltd., and the Courtenay Electric Light, Heat and Power Company, Ltd.

Power is delivered adjacent to the Canadian Pacific Ry., and ocean navigation.

The plant has an ultimate designed capacity of 24,000 h.p., and provision is made for the installation of two units similar to those at present installed.

VANCOUVER.

British Columbia Electric Railway Company, Ltd., controls Vancouver Power Company, Ltd., and Vancouver Island Power Company, Ltd. Aug., 1918.

Address.—Head Office, 425 Carrall St., Vancouver, B.C.

Directors and Officials.—See Victoria, B.C.

Power. Transmission Lines.—7.4 miles of steel tower line and 187.9 miles of wooden pole lines serve the municipalities of Vancouver, New Westminster, North Vancouver, Port Moody, Delta, Point Grey, South Vancouver, Richmond, Burnaby, Coquitlam, Surrey, Langley, Sumas, Matsqui, Chilliwack, Sumas, U.S.A., and Blaine, U.S.A.

The company purchases all the power of its subsidiary company, the Vancouver Power Company, and also buys power from Western Power Company of Canada.

Power is sold in bulk to the municipality of New Westminster.

The company operates an extensive electric railway system between a number of municipalities in the vicinity of Vancouver.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Great Northern Ry., Northern Pacific Ry., British Columbia Electric Ry., and ocean and coastal navigation.

For details of the system operated by the company on Vancouver Island, see Victoria, B.C.

Vancouver Power Company, Ltd.; controlled by British Columbia Electric Railway Company, Ltd. Aug., 1918.

Address.—425 Carrall St., Vancouver, B.C.

Directors and Officials.—See British Columbia Electric Railway Company, Ltd., Victoria.

History.—Company incorporated in 1897. Plant No. 1, initial development of four units installed in 1903-4; one unit added in 1907 and final development of two additional units completed in 1911. Plant No. 2, installed in 1912-13. Steam auxiliary plant, owned by British Columbia Electric Railway Company, Ltd., and leased to Vancouver Power Company, Ltd. Used as source of power prior to 1904; now used only as reserve. Original equipment abandoned and first two new units installed in 1910; two units added in 1911, and one in 1912.

Capital.—Authorized, \$8,500,000. Issued, \$8,500,000.

Debt Stock.—Authorized, \$7,290,000. Issued, \$7,290,000.

Plants.

Coquitlam-Buntzen Development, Plant No. 1. (Hydro Power Plant No. 8GA₁).

Location.—Plant located on North Arm, Burrard Inlet about 16 miles from Vancouver and accessible to coastal navigation.

BRITISH COLUMBIA.

Plant.—Con.**Coquitlam-Buntzen Development, Plant No. 1.—Con.**

Installation.—Plant operates under an average head of 395 feet. Original tunnel between Coquitlam lake and lake Buntzen, constructed in 1902-3, was 12,650 feet long and 9 feet square with rounded corners. Tunnel was enlarged in 1908-11, part made egg-shape and balance rectangular; mean cross-sectional area 192 square feet. The water is conveyed from intake dam at lake Buntzen to power-house through riveted steel pipe lines 2,000 feet long. One 48-inch pipe for each of first four units; two 60-inch pipes for fifth unit, and one 84-inch, tapering to 72 inches, for each of last two units. Turbines—4 Pelton, hor., double runner, 3,000 h.p. each, 200 r.p.m., 1 Pelton, hor., four runner, 10,500 h.p., 200 r.p.m., 2 Doble, hor., four runner, 10,500 h.p. each, 200 r.p.m., total 43,500 h.p. Generators—4 West, A.C., 3-phase 60-cycle, 1,500 k.v.a. each, 200 r.p.m., 1 Dick Kerr, A.C., 3-phase, 60-cycle, 5,000 k.v.a., 200 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 5,000 k.v.a. each, 200 r.p.m., total 21,000 k.v.a.; Transformers—3 banks of 3 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 2,200 v., secondary 34,600 v., 3,000 k.v.a. each.

Coquitlam-Buntzen Development, Plant No. 2. (Hydro Power Plant No. 8GA₂).

Location.—Plant located on North Arm, Burrard Inlet, about one-third mile south of Plant No. 1.

Installation.—Plant operates under an average head of 395 feet. The water is conveyed from intake dam at lake Buntzen through a concrete-lined pressure tunnel about 1,800 feet long, and 14 feet 8 inches in diameter, driven through solid rock, to a steel surge tank. From the surge tank 3 steel penstocks, 8 feet 6 inches in diameter, convey the water to the power-house; Turbines—3 Pelton-Doble, hor., four runner, 13,500 h.p. each, 200 r.p.m., total 40,500 h.p.; Generators—3 Dick Kerr, A.C., 3-phase, 60-cycle, 8,900 k.v.a. each, 200 r.p.m., total 26,700 k.v.a.; Exciters—3 Pelton-Doble turbines, 300 h.p. each, 600 r.p.m. driving 3 motor generator sets; motors 3-phase, 2,200 v., 600 r.p.m., generators 300 k.w. each, 600 r.p.m.; Transformers—4 banks of 3 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 2,200 v., secondary 34,600 v., 3,000 k.v.a. each.

Steam Auxiliary Plant.

Location.—Plant located on Union Street and False Creek water front in Vancouver.

Installation.—Steam Turbines—4 Allis-Chalmers, 2,700 h.p. each, 1 Allis-Chalmers, 6,700 h.p., total 17,500 h.p.; Generators—4 Allis-Chalmers, A.C., 3-phase, 60-cycle, 2,000 k.w., 1,800 r.p.m., 1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 4,500 k.w., 1,800 r.p.m., total 12,500 k.w.

Power. All power is sold to the controlling company, the British Columbia Electric Railway Company, Ltd.

Sept., 1918

Western Power Company of Canada, Ltd. (Hydro Power Plant No. 8MH₂).

Address.—New York Office, 30 Broad St., New York, N.Y.; Vancouver Office, Carter-Cotton Bldg., Vancouver, B.C.

Directors.—J. D. Mortimer, New York; M. H. Coggeshall, New York; Joseph R. DeLamar, New York; Bayard Dominick, New York; H. Starr Giddings, New York; H. H. Pierce, New York; J. W. Killam, Montreal.

Officials.—J. D. Mortimer, New York (Pres.); M. H. Coggeshall, New York (Vice-Pres.); R. F. Hayward, Vancouver (Gen. Mgr.); J. F. Fogarty, New York (Sec. and Treas.); W. McNeill, Vancouver (Asst. Gen. Mgr.).

BRITISH COLUMBIA.

Western Power Company of Canada, Ltd.—Con.

History,—Company formed in 1916 and took over the property and franchises of Western Canada Power Company, Ltd., on February 1, 1917. The construction of the plant was commenced by Stave Lake Power Company and the initial installation of two units was completed by Western Canada Power Company in 1912. The third unit was installed in 1913.

Capital,—Authorized, \$10,000,000. Issued, \$5,850,000.

Debtenture Stock,—Authorized, \$500,000. Issued, \$500,000.

Bonds,—Authorized, \$6,000,000. Issued, \$5,000,000.

Capital invested in Plant and Equipment,—\$5,720,000.

Plant. Official,—L. B. Philpot (Supt.).

Location,—Plant located at Stave falls on Stave river, 6 miles north from the junction of the Stave and Fraser rivers at Ruskin, B.C., and 36 miles east of city of Vancouver. A standard gauge railway (6 miles), owned by the company connects with main line Canadian Pacific Ry. at Ruskin.

Installation,—Plant operates under an average head of 115 feet. Provision is made for raising the dam 30 feet. Water is conveyed from intake dam to power-house by four steel penstocks, each 14 feet 6 inches in diameter. Turbines—3 Escher-Wyss, hor., double runner, 13,200 h.p. each, 225 r.p.m., total 39,600 h.p.; Generators—3 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 8,825 k.v.a. each, 225 r.p.m., total 26,475 k.v.a.; Exciters—2 turbines, hor., single runner, 500 h.p. each, 500 r.p.m., 2 generators, 250 k.v. each, 500 r.p.m.; Transformers—4 banks of 3 Can. Gen. Elect., single-phase, water-cooled, primary 4,400 v., secondary 60,000 v., 3,000 k.v.a. each, 2 Can. Gen. Elect., 3-phase, water-cooled, primary 4,400 v., secondary 12,000 v., 1,000 k.v.a. each.

Power. Transmission Lines,—30 miles of steel tower lines, double circuit, and 22 miles of wooden pole lines, single circuit. Power is served by the company in the municipalities of Vancouver, New Westminster, Barnaby, Coquitlam, Matsqui, Mission City, and Maple Ridge.

Use of Power,—Power is used for lighting, operation of electric steel furnaces, general manufacturing and general power purposes.

Power is sold in bulk to British Columbia Electric Railway Company, of Vancouver, B.C., and Puget Sound Traction, Light and Power Company, of Seattle and Bellingham, Wash., U.S.A.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Great Northern Ry., Northern Pacific Ry., and coastal and ocean navigation.

The company has a fourth unit of 13,200 h.p. ready to install, which will complete the designed capacity of the plant.

The company, upon the installation of the fourth unit, will have available for sale 7,500 k.w.; rates for primary power range from \$20 to \$12 per k.w.

The company owns a second power site at Ruskin, on Stave river at tide water, about 40 miles above the mouth of Fraser river, near Canadian Pacific Ry. main line. This site is said to be capable of developing about 40,000 h.p.

VERNON.**Municipality of Vernon.** (Fuel Power Plant No. 8NM.). May, 1918.

Officials,—S. A. Shatford (Mayor); F. S. Reynolds (Chmn. Lt. Com.); J. G. Edwards (Clerk).

History,—Plant formerly contained a steam engine but at present Diesel engines are used. An additional generator unit was installed in 1914.

Capital invested in Plant and Equipment,—\$199,000.

Plant. Officials,—H. A. Blakeborough (Supt. and Mgr.); T. Martin (Ch. Engr.); R. King (Engr. Pwr. Sta.); C. Johnston (Engr. Pwr. Sta.).

Location,—Plant located in Vernon, adjacent to Canadian Pacific Ry.

BRITISH COLUMBIA.

Municipality of Vernon—Con.

Installation.—Oil Engines—1 Mirrless Bickerton and Day, Diesel, 200 h.p., 1 Aktiebolaget Diesel, 525 h.p., total 725 h.p.; Generators—1 West., A.C., 3-phase, 120-cycle, 154 k.w., 257 r.p.m., 1 Gen. Elect., A.C., 3-phase, 120-cycle, 325 k.w., 173 r.p.m., total 479 k.w.; Exciters—1 generator, 10 k.w., 1 generator, 21 k.w.

Power. *Local distribution* lines serve the municipality of Vernon.

Use of Power.—Power is used for lighting, and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The power-house is designed to accommodate an additional 600 h.p. unit.

The municipality has at present available for sale 400 k.w.; rates for power vary from 5 to 1½ cents per k.w. hr., with 10 per cent discount.

VICTORIA.

British Columbia Electric Railway Company, Ltd. (Hydro Power Plant No. 8HA₁), controls Vancouver Power Company, Ltd., and Vancouver Island Power Company, Ltd. July, 1918.

Address.—London Office, 34 Nicholas Lane, London, E.C. Head Office, 425 Carrall Street, Vancouver, B.C. Local Office, Victoria, B.C.

Directors.—R. M. Horne-Payne; T. Blundell Brown; Harold G. Brown; J. Davidson; E. L. Evan-Thomas; E. M. Harvey; G. P. Norton; Sir Wm. MacKenzie.

Officials.—R. M. Horne-Payne, London, E.C. (Chmn.); M. Urwin, London, E.C. (Sec.); J. Davidson, London, E.C. (Act. Sec.); George Kidd, Vancouver (Gen. Mgr.); W. G. Murrin, Vancouver (Asst. Gen. Mgr.); F. R. Glover, Vancouver (Gen. Executive Asst.); J. V. Armstrong, Vancouver (Local Sec.); E. H. Adams, Vancouver (Compt.); A. T. Goward, Victoria (Local Mgr.); G. M. Tripp, Victoria (Engineering Supt.).

History.—Company registered April 3, 1897, under Acts of the Legislature of British Columbia, to acquire the Consolidated Railway Company of Vancouver, which had previously acquired the Victoria Electric Railway and Lighting Company, Ltd. Prior to 1898 the company operated a steam plant in Victoria. In September, 1897, an agreement was made with the Esquimalt Water Works Company for a supply of water, and in 1898 the Goldstream Power plant was installed with two units. In 1903 the plant was enlarged and a third unit installed, and in 1905 a fourth unit was added.

Capital.—Authorized, £5,000,000. Issued, £4,320,000.

Capital invested in Power Equipment.—\$138,556.

Plant. *Officials.*—S. G. Peele, Victoria, F. Hudson, Goldstream (Engrs. Pwr. Sta.).

Location.—Plant located at Goldstream, on Goldstream river, on Vancouver island, about 12 miles from Victoria, and adjacent to Esquimalt and Nanaimo Ry.

Installation.—Plant operates under an average head of 670 feet. Water is conveyed from the Esquimalt Water Works Company's storage reservoirs to power-house through a steel pipe 8,000 feet in length, made up of 4,000 feet of 33-inch pipe and 4,000 feet of 30-inch pipe. Turbines—1 Pelton, hor., single runner, impulse, 1,000 h.p., 450 r.p.m.; 1 Pelton, hor., double runner, impulse, 2,400 h.p., 400 r.p.m., total 3,400 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 500 k.w., 450 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 1,000 k.w., 400 r.p.m., total 1,500 k.w.; Exciters—1 turbine, hor., 25 h.p., 450 r.p.m., 1 turbine, hor., 60 h.p., 850 r.p.m., 1 motor, 3-phase, 700 v., 850 r.p.m., 1 generator, 45 k.w., 850 r.p.m., 1 generator, 17 k.w., 450 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., single-phase, air-cooled, primary 700 v., secondary 17,500 v., 175 k.v.a. each, 1 bank of 3 Can. West., single-phase, air-cooled, primary 700 v., secondary 17,500 v., 400 k.v.a. each.

BRITISH COLUMBIA.

British Columbia Electric Railway Co., Ltd.—Con.

Power. *Transmission Lines*,—33 miles of wooden pole lines serve the municipalities of Victoria, Esquimalt, Saanich, and Oak Bay.

The company purchases all the power of its subsidiary company, the Vancouver Island Power Company, for distribution on Vancouver Island. The company also operates an electric railway on Vancouver Island between Victoria and Deep Bay.

Use of Power,—Power is used for lighting, operation of electric railways, general manufacturing, and general power purposes.

† Power is sold in bulk to municipality of Victoria.

Power is delivered adjacent to Esquimalt and Nanaimo Ry., Canadian Northern Ry., Victoria and Sydney Ry., and Ocean navigation.

The company has at present available for sale 4,200,000 kilowatt hours from the Goldstream plant, and 50,000,000 kilowatt hours from the Jordan River plant of Vancouver Island Power Company. Rates for large commercial power, for 100 horse-power and over of active load, range from 2 cents per kilowatt hour for first 65 kilowatt hours, per month per horse-power, maximum demand, to $\frac{1}{2}$ cent per kilowatt hour for all over 130 kilowatt hours per month, per horse-power, maximum demand.

Provision is made at the Jordan River plant for an additional turbine capacity of 13,000 h.p., which will be installed at some future date.

Vancouver Island Power Company, Ltd. (Hydro Power Plant No. 8HA₂), controlled by British Columbia Electric Railway Company, Ltd. July, 1918.

Address,—Head Office, 425 Carrall St., Vancouver, B.C.; Local Office, Victoria, B.C.

Directors and Officials,—See British Columbia Electric Railway Company, Ltd.

History,—Initial installation of one unit in 1911, additional unit added in 1912.

Power-house enlarged in 1914 and third unit installed in October, 1914.

Capital,—Authorized, \$4,000,000. Issued, \$3,500,000.

Capital invested in Power Equipment,—\$3,931,052.

Plant. *Officials*,—D. I. Walker, Victoria (Engr. Hydro Pwr. Sta.); T. W. Walker, Victoria (Engr. Auxil. Pwr. Sta.).

Location,—Hydraulic plant located on Vancouver Island at mouth of Jordan river, which flows into the straits of San Juan de Fuca, about 36 miles west of Victoria, and is adjacent to coastal navigation. Steam auxiliary plant located at Brentwood Bay.

Installation,—Plant operates under an average head of 1,145 feet. Water is conveyed from diversion dam to forebay reservoir by about $5\frac{1}{2}$ miles of wooden flume, and from reservoir to power-house by two steel penstocks, each 9,290 feet in length. Penstock for first two units consists of 3,067 feet of 54-inch riveted steel pipe, connected to two 36-inch riveted steel pipes decreasing in diameter to 30 inches at power-house. Penstock for third unit consists of 1,960 feet of 54-inch pipe and 7,330 feet of 48-inch pipe. Upper 2,509 feet is riveted steel and remainder is lap-welded. Turbines—2 Pelton-Doble, 90-inch, hor., single runner, impulse, 600 h.p. each, 400 r.p.m., 1 Pelton-Doble, 93-inch, hor., single-runner, impulse, 13,000 h.p., 400 r.p.m., total 25,000 h.p.; Generators—2 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 4,000 k.v.a. each, 400 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 8,000 k.v.a., 400 r.p.m., total 16,000 k.v.a.; Exciters—2 turbines, 26-inch, hor., 150 h.p. each, 870 r.p.m., 1 turbine, 54-inch, hor., 200 h.p., 600 r.p.m., 2 motors, 3-phase, 2,300 v., 870 r.p.m., 1 motor, 3-phase, 2,300 v., 600 r.p.m., 2 generators, 100 k.w. each, 870 r.p.m., 1 generator, 200 k.w., 600 r.p.m.; Transformers—2 banks of 3, Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 2,300 v., secondary 34,600 v., 1,400 k.v.a. each, 1 bank of 3, Can. Gen. Elect. single-phase, water-cooled, oil-insulated, primary 2,300

Vancouver Island Power Company, Ltd.—Con.**Plant.—Con.**

v., secondary 34,600 v., 3,000 k.v.a. each; Auxiliary Plant—Brentwood Bay; Boilers—6 Babcock & Wilcox, water tube; Steam Turbines—2 Allis-Chalmers, 3,000 h.p. each, total 6,000; Generators—2 Parson's type, hor., 3-phase multiple expansion, condensing turbo-generators, 2,000 k.v.a. each, total 4,000 k.v.a.

Power. Transmission Lines.—83 miles of wooden pole lines.

All power is sold to the controlling company, the British Columbia Electric Railway Company, Ltd.

Provision is made at the Jordan River power-house for an additional unit of 13,000 h.p. turbine capacity, giving an ultimate designed capacity of 38,000 h.p.

WALHACHIN.

Anglesey Estate. (Fuel Power Plant No. SLF₂). Nov., 1918.

The plant consists of one 15 h.p. oil engine and one 10 k.w. D.C. generator, but has not been operated for some time.

MANITOBA.**BEAUSEJOUR.**

Served by municipality of Winnipeg; see Winnipeg, Man.

BIRDS HILL.

Served by municipality of Winnipeg; see Winnipeg, Man.

BOISSEVAIN.

Municipality of Boissevain. (Fuel Power Plant No. 50A₂). May, 1918.

Officials.—W. Willson (Mayor); G. C. Smith (Secy.-Treas.).

History.—Plant installed in 1909.

Capital invested in Plant and Equipment.—\$21,305.

Plant. Officials.—J. Richardson (Supt.); G. Hill (Engr. Pwr. Sta.).

Location.—Plant located in Boissevain, Man.

Installation.—Steam Engine—1 Goldie & McCullough, high-speed, reciprocating, 75 h.p.; Generator—1 Allis-Chalmers, A.C., 2-phase, 60-cycle, 75 k.w., 277 r.p.m.

Power. Local distribution lines serve the municipality of Boissevain.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Great Northern Ry.

BRANDON.

Canada Gas and Electric Corporation (Hydro Power Plant No. 5MF₁). Aug., 1918.

Controlled by Continental Gas and Electric Corporation, Cleveland, Ohio.

Address.—Brandon, Man.

Official.—G. A. Paterson, Brandon (Gen. Mgr. and Sec.).

Capital invested in Hydraulic Plant and Equipment.—\$400,000.

Capital invested in Steam Plant and Equipment.—\$1,189,478.

Plants. Officials.—C. W. Cope (Supt. Ovhd. Distbn.); C. R. Franz (Mgr. Stm. Htg.); J. Mowring (Engr. Pwr. Sta.).

Hydraulic Plant—

Location.—Plant located on Little Saskatchewan river, about one-half mile above its junction with the Assiniboine river.

Installation.—Plant operates under an average head of 33 feet. Turbines—2 Wm. Kennedy, 54-inch, 500 h.p. each, total 1,000 h.p.; Generators—2 at 300 k.w. each, total 600 k.w.

Steam Plant—

Location.—Plant located in Brandon, Man.

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MANITOBA.

Canada Gas and Electric Corporation.—Con.**Plant.—Con.**

Installation.—Steam Engines—1 Goldie & McCullough, reciprocating, 2,250 h.p., 2 Robb. Mumford, reciprocating, 478 h.p. each, total 3,206 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,200 k.v.a., 120 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.v.a. each, 120 r.p.m., total 1,800 k.v.a.

Power. *Transmission Line.*—10 miles of wooden pole line from the hydraulic plant serves the municipality of Brandon.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Great Northern Ry.

CARBERRY.

Municipality of Carberry. (Fuel Power Plant No. 5LL₂). June, 1918.

Officials.—H. R. Cooper (Mayor); A. E. Horton (Town Clerk).

History.—Plant installed in 1906.

Capital invested in Plant and Equipment.—\$21,231.

Plant. *Location.*—Plant located in Carberry, Man., adjacent to Canadian Pacific Ry.

Installation.—Steam Engine—1 Goldie & McCullough, reciprocating, 95 h.p.; Generator—1 West., A.C., 2-phase, 60-cycle, 75 k.w., 277 r.p.m.

Power. *Local distribution lines* serve the municipality of Carberry.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry.

CARMAN.

Municipality of Carman. (Fuel Power Plant No. 5OF₂). May, 1918.

Officials.—H. Armstrong (Mayor); A. Malcolmson (Sec.-Treas.).

History.—Plant installed in 1901.

Capital invested in Plant and Equipment.—\$24,166.

Plant. *Officials.*—F. W. Evans (Supt.); W. Dalgleish (Engr. Pwr. Sta.).

Location.—Plant located in Carman, Man.

Installation.—Boilers—Stratford and Waterous, total 180 h.p.; Steam Engines—1 McEwen, reciprocating, 100 h.p., 1 Robb-Armstrong, reciprocating, 75 h.p., total 175 h.p.; Generators—1 Can. Gen. Elect., D.C., 50 k.w., 280 r.p.m., 1 West., D.C., 38 k.w., 290 r.p.m., total 88 k.w.

Power. *Local distribution lines* serve the municipality of Carman.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Great Northern Ry.

DAUPHIN.

Municipality of Dauphin. (Fuel Power Plant No. 5LJ₁). Oct., 1918.

Officials.—J. L. Bowman (Mayor); J. W. Johnston (Sec.-Treas.).

History.—Plant installed in 1905, with additional units in 1909 and 1913.

Capital invested in Plant and Equipment.—\$57,144.

Plant. *Official.*—W. A. Brookman (Supt.).

Location.—Plant located in Dauphin, Man.

Installation.—Boilers—4 at 100 h.p. each; Steam Engines—3 reciprocating, 100 h.p., 150 h.p. and 287 h.p., total 537 h.p.; Generators—1 West., A.C., 2-phase, 60-cycle, 65 k.w., 240 r.p.m., 1 West., A.C., 2-phase, 60-cycle, 100 k.w., 277 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 225 k.w., 360 r.p.m., total 390 k.w.

Power. *Local distribution lines* serve the municipality of Dauphin.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

MANITOBA.

FORT GARRY.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

FORT WHYTE.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

GLADSTONE.

Served by Gladstone Electric Light and Power Co. with power purchased from Echo Flour Mills.

KENTON.

Kenton Electric Light Plant. (Fuel Power Plant No. 5MG₂). May, 1918.

Address,—Box 21, Kenton, Man.

Owners,—D. Patterson, S. Patterson.

History,—Plant installed in 1916.

Capital invested in Plant and Equipment,—\$1,500.

Plant. Official,—S. Patterson (Mgr.).

Location,—Plant located in Kenton, one-quarter mile from railway station.

Installation,—Oil Engine—1 at 8 h.p.; Generator—1 Can. Fairbanks-Morse, D.C., 5 k.w., 1,900 r.p.m.

Power. Local distribution lines serve the municipality of Kenton.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

KILDONAN.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

KILLARNEY.

Killarney Electric Light Company. (Fuel Power Plant No. 5OA₁). Jan., 1918.

Address,—Killarney, Man.

Owner,—S. H. Vipond (Mgr.).

History,—Plant installed in 1908.

Capital invested in Plant and Equipment,—\$14,500.

Plant. Location,—Plant located at Killarney, Man.

Installation,—Steam Engine—1 Brown, slow-speed, reciprocating, 100 h.p.; Generator—1 Allis-Chalmers, A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.

Power. Local distribution lines serve the municipality of Killarney.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

LENORE.

Citizens' Electric Plant. (Fuel Power Plant No. 5MG₁). Feb., 1918.

Address,—Lenore, Man.

Official,—Geo. Todd (Sec.-Treas.).

History,—Plant installed in 1916.

Capital invested in Plant and Equipment,—\$1,650.

Plant. Location,—Plant located in Lenore, Man.

Installation,—Oil Engine—1, at 15 h.p.; Generator—1 Fairbanks-Morse, D.C., 10 k.w., 1,600 r.p.m.

Power. Local distribution lines serve the municipality of Lenore.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

LOCKPORT.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

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MANITOBA.

MELITA.

The Melita Flour Mills Company, Ltd. (Fuel Power Plant No. 5NF₁). Jan., 1918.

Address,—Melita, Man.

Officials,—F. Oliver, Melita (Pres.); F. J. Davies, Melita (Sec.-Treas.).

History,—Plant installed in December, 1917. Distribution system owned by municipality.

Capital invested in plant and Equipment,—\$1,302.

Plant. *Location*,—Plant located in Melita, Man.

Installation,—Steam Engine—1 Goldie & McCullough, 48 h.p.; Generator—1 Gen.

Elect., D.C., 37½ k.w., 300 r.p.m.

Power. *Local distribution lines* serve the municipality of Melita.

Power is sold in bulk to municipality of Melita for distribution.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

MIDDLE CHURCH.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

MINNEDOSA.

Minnedosa Power Company. (Hydro Power Plant No. 5MF₂). July, 1918.

Address,—Minnedosa, Man.

Directors,—P. J. McDermott, Minnedosa; Andrew Boyd, Minnedosa; John Duke Minnedosa; John McDougall, Minnedosa; Geo. Frazer, Minnedosa; Jas. McKay, Minnedosa; H. F. Maulson, Minnedosa.

Officials,—P. J. McDermott, Minnedosa, Man. (Pres.); H. F. Maulson, Minnedosa (Mgr. and Sec.-Treas.).

History,—Plant installed in 1914 and replaces a steam power plant formerly used to supply the municipality.

Capital,—Issued, \$75,000.

Capital invested in Plant and Equipment,—\$163,541.

Plant. *Official*,—E. H. Parmelee, Minnedosa (Supt. and Ch. Engr.).

Location,—Plant located on Little Saskatchewan river (Minnedosa river), about one-half mile from Canadian Pacific Railway station at Minnedosa.

Installation,—Plant operates under an average head of 19 feet. Water is conveyed from intake to power-house by a 6-foot wood stave pipe 236 feet long. Turbine—1 Wm. Kennedy, 31-inch, hor., double runner, 450 h.p., 257 r.p.m.; Generator—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 312.5 k.v.a., 257 r.p.m.; Exciters—1 hor. turbine, 50 h.p., 600 r.p.m. (not used at present), 1 generator, 20 k.w., 600 r.p.m., belted to main generator shaft.

Power. *Transmission Lines*—One-half mile of wooden pole line serves the municipality of Minnedosa.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to the Canadian Pacific Ry.

Power rate for connected loads of over 5 h.p., maximum \$40 per horse-power per annum.

The plant is designed to provide for a second unit which would duplicate the present installation.

MORDEN.

Municipality of Morden. (Fuel Power Plant No. 5OB₁). Aug., 1918.

Officials,—R. T. Hewitt (Mayor); C. McCordale (Town Clerk).

History,—Plant installed in 1891 with additions in 1896 and 1907.

Capital invested in Plant and Equipment,—\$10,485.

MANITOBA.

Municipality of Morden.—Con.

Plant. *Official.*—Thos. Sanders (Mgr.).

Location.—Plant is located in Morden, Man.

Installation.—Steam Engines—1 Leonard, reciprocating, 100 h.p., 1 Leonard, reciprocating, 50 h.p., total 150 h.p.; Generators—1 Natural, A.C., single-phase, 133-cycles, 50 k.w., 1,500 r.p.m., 1 Thomas Houston, A.C., single-phase, 133-cycle, 25 k.w., 1,560 r.p.m., total 75 k.w.

Power. *Local distribution lines* serve the municipality of Morden.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry., and Great Northern Ry.

NEEPAWA.

Municipality of Neepawa. (Fuel Power Plant No. 5LL₁). May, 1918.

Officials.—J. L. McKay (Mayor); W. F. Barr (Secy.-Treas.).

History.—Plant installed in 1900, with additional units in 1903 and 1914.

Capital invested in Plant and Equipment.—\$35,867.

Plant. *Officials.*—E. G. Balkwell (Supt.); Wm. Sherritt (Engr. Pwr. Sta.).

Location.—Plant located in Neepawa, Man.

Installation.—Steam Engines—1 Goldie & McCullough, reciprocating, 105 h.p., 1 Goldie & McCullough, reciprocating, 188 h.p., total 293 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 125 k.v.a., 900 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.v.a., 450 r.p.m., total 275 k.v.a.

Power. *Local distribution lines* serve the municipality of Neepawa.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Northern Ry.

The municipality has at present available for sale about 50 k.w. at rates from 9 to 4 cents per k.w. hr.

The municipality has a 350-h.p. steam engine which will be placed in operation when required.

PIPESTONE (Rural Municipality), see Reston, Man.

PORTAGE LA PRAIRIE.

Municipality of Portage la Prairie. (Fuel Power Plant No. 5MJ₁). Jan., 1918.

Officials.—S. R. Marlott (Mayor); W. R. Grieve (City Treas.).

History.—Plant acquired by municipality from Central Electric Company. Present units installed in 1903 and 1911.

Capital invested in Plant and Equipment.—\$174,792.

Plant. *Officials.*—R. J. Hill (Supt.); A. Daum (Engr. Pwr. Sta.).

Location.—Plant located on Pacific Ave., and Tupper St., in Portage la Prairie, Man.

Installation.—Steam Engines—2 Goldie & McCullough, reciprocating, 450 h.p. each, total 900 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.v.a., 120 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 312 k.v.a., 120 r.p.m., total 612 k.v.a.

Power. *Local distribution lines* serve the municipality of Portage la Prairie.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Pacific Ry., and Great Northern Ry.

RAPID CITY.

Municipality of Rapid City. (Fuel Power Plant No. 5MF₁). May, 1918.

Officials.—V. E. Berkinshaw (Mayor); C. G. Murray (Secy.-Treas.).

History.—Plant installed in March, 1913.

Capital invested in Plant and Equipment.—\$18,000.

Municipality of Rapid City.—Con.

Plant. *Official.*—C. E. Wythe (Elect. Engr.).

Location.—Plant located in Rapid City, Man.

Installation.—Gas Engine—1 Ruston-Proctor producer gas, 50 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.; Exciter—1 generator, D.C., 2½ k.w., 2,300 r.p.m.

Power. *Local distribution lines* serve the municipality of Rapid City.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Northern Ry.

RESTON.

Reston Local Improvement District. (Rural Municipality of Pipestone.) (Fuel Power Plant No. 5NG₁). Aug., 1918.

Officials.—A. E. Smith (Reeve); A. W. Power (Secy.-Treas.).

History.—Plant installed in 1915 with additional unit in 1916.

Capital invested in Plant and Equipment.—\$14,500.

Plant. *Officials.*—A. E. Smith (Mgr.); J. K. Robertson (Engr. Pwr. Sta.).

Location.—Plant located in Reston, Man.

Installation.—Gas Engines—2 Cushman, 20 h.p. each, total 40 h.p.; Generators—2 E.C.K., D.C., 12 k.w. each, 600 r.p.m., total 24 k.w.

Power. *Local distribution lines* serve the district of Reston.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

ROCKWOOD.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

RUSSELL.

Municipality of Russell. (Fuel Power Plant No. 5ME₁). Aug., 1918.

Officials.—W. W. Wilson (Mayor); A. B. Callin (Secy.-Treas.).

History.—Plant installed in 1913.

Capital invested in Plant and Equipment.—\$23,126.

Plant. *Location.*—Plant located in Russell, Man.

Installation.—Gas Engine—1, at 75 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 50 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Russell.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry.

ST. ANDREWS.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

ST. BONIFACE.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

ST. NORBERT.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

ST. PAULS.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

ST. VITAL.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

SELKIRK.

Served by Winnipeg, Selkirk and Lake Winnipeg Railway Co., with power purchased from Winnipeg Electric Railway Co.; see Winnipeg, Man.

MANITOBA.

SHOAL LAKE.

Municipality of Shoal Lake. (Fuel Power Plant No. 5MF₁). May, 1918.

Officials,—F. W. Weeks (Mayor); F. Dobbs (Treas.).

History,—Plant installed in 1915.

Capital invested in Plant and Equipment,—\$28,000.

Plant. *Official*,—Thos. H. Stark (Engr.).

Location,—Plant located in Shoal Lake, Man., adjacent to Canadian Pacific Ry.

Installation,—Oil Engine—1 semi-Diesel, 55 h.p.; Generators—1 Gen. Elect., D.C., 30 k.w., 375 r.p.m.; Exciter—1 Gen. Elect., D.C., 4.8 k.w., 1,600 r.p.m.

Power. *Local distribution lines* serve the municipality of Shoal Lake.

Use of Power,—Power is used for lighting and general power purposes.

SOURIS.

Municipality of Souris. (Fuel Power Plant No. 5NG₂). June, 1918.

Officials,—T. A. Lockhart (Mayor); J. W. Breakey (Town Clerk).

History,—Gas engines installed for municipal water pumping in 1911, and generators installed in December, 1913.

Capital invested in Plant and Equipment,—\$49,530.

Plant. *Official*,—A. R. Ibbottson (Supt.).

Location,—Plant located in Souris, Man.

Installation,—Gas Engines—2 at 82 h.p. each, total 164 h.p.; Generators—1 Gen. Elect., D.C., 50 k.w., 1,150 r.p.m., 1 Gen. Elect., D.C., 30 k.w., 1,300 r.p.m., total 80 k.w.

Power. *Local distribution lines* serve the municipality of Souris.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

STEINBACH.

Steinbach Light Company. (Fuel Power Plant No. 5OH₁). Jan., 1918.

Address,—Steinbach, Man.

Officer,—Jos. F. Barkman, Steinbach (Sec.-Treas.).

History,—Plant installed in 1911.

Capital invested in Plant and Equipment,—\$1,575.

Plant. *Location*,—Plant located in Steinbach, Man.

Installation,—Oil Engine—1, at 15 h.p.; Generator—1 Three Rivers Elect., D.C., 17.5 k.w., 1,550 r.p.m.

Power. Supplied only to shareholders and used for lighting only.

STONEWALL.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man.

STONY MOUNTAIN.

Served by municipality of Winnipeg, and Winnipeg Electric Railway Co.; see Winnipeg, Man.

THE PAS.

Municipality of The Pas. (Fuel Power Plant No. 5KJ₁). May, 1918.

Officials,—Wm. Davies (Mayor); H. H. Elliott (Sec.); F. Bickle (Contr. Comm.); A. Taillon (Contr. Comm.); E. Carroll (Contr. Comm.).

History,—Plant installed in October, 1914.

Capital invested in Plant and Equipment,—\$55,325.

Plant. *Official*,—G. A. Williams (Supt.).

Location,—Plant located in The Pas, Man.

Installation,—Oil Engine—1 Mirrless, Bickerton & Day, Diesel, 240 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 200 k.w., 240 r.p.m.; Exciter—1 generator, 12 k.w., direct connected to main unit.

Municipality of The Pas.—Con.

Power. *Local distribution lines* serve the municipality of The Pas.

Use of Power.—Power is used for lighting and general power purposes, including operation of municipal pumping plant.

Power is purchased in bulk from the Finger Lumber Company, Ltd.

Power is delivered adjacent to Canadian Northern Ry., Hudson Bay Ry. (under construction), and lake and river navigation.

The municipality has at present available for sale about 100 k.w.; power rate, 9 cents per k.w. hr., minimum rate and meter rental, with 10 per cent to 15 per cent discount.

The plant is designed for an ultimate capacity of 500 h.p.

TINDALL.

Served by the municipality of Winnipeg; see Winnipeg, Man. ✓

TRANSCONA.

Served by municipality of Winnipeg; see Winnipeg, Man.

Served by Winnipeg Electric Railway Co.; see Winnipeg, Man. ✓

TREHERNE.

Treherne Electric Light Plant. (Fuel Power Plant No. 50F₁). May, 1918.

Address.—Treherne, Man.

Owner.—C. Wiechman

Capital invested in Plant and Equipment.—\$11,000.

Plant. *Location.*—Plant located in Treherne, Man.

Installation.—Steam Engine—1 reciprocating, 250 h.p.; Generator—1 Edison, D.C., 250 k.w., 154 r.p.m.

Power. *Local distribution lines* serve the municipality of Treherne.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

WINNIPEG.

Municipality of Winnipeg. (Hydro Power Plant No. 5PF). July, 1918.

Officials.—F. H. Davidson (Mayor); C. J. Brown (City Clerk); John G. Glasco (Mgr.); E. V. Caton (Ch. Engr.); R. A. Sara (Sales Mgr.).

History.—Plant was completed with an initial installation of 5 units and commenced operation in October, 1911. Two units were added in 1914; while at present another unit is being installed.

Capital invested in Plant and Equipment.—\$7,700,000.

Plant. *Official.*—J. W. Sanger (Eng. Pwr. Sta.).

Location.—Plant located on Winnipeg river at Point du Bois, 77 miles from Winnipeg and 22 miles from Lac du Bonnet station of the Canadian Pacific Ry.

Installation.—Plant operates under an average head of 45½ feet. Water is conveyed from intake to power-house by a forebay canal 1,600 feet long. Turbines—5 Boving, 87.5-inch, hor., double runner, 5,200 h.p. each, 164 r.p.m., 3 Escher-Wyss, hor., double runner, 6,800 h.p. each, 138 r.p.m., total 46,400 h.p.; Generators—5 Vickers, A.C., 3-phase, 60-cycle, 3,000 k.w. each, 164 r.p.m., 3 West., A.C., 3-phase, 60-cycle, 5,000 k.w. each, 138 r.p.m., total 30,000 k.w.; Exciters—2 turbines, 450 h.p. each, 400 r.p.m., 1 motor, 3-phase, 220 v., 900 r.p.m., 2 generators, 250 k.w. each, 400 r.p.m., 1 generator, 150 k.w., 900 r.p.m.; Transformers—1 bank of 6 West., single-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 60,000 v., 3,000 k.v.a. each, 1 West., 3-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 60,000 v., 9,000 k.v.a.

MANITOBA.

Municipality of Winnipeg.—Con.

Power. Transmission Lines.—78 miles of double circuit steel tower line, 60,000 volts, and 50 miles of wooden pole line, 12,000 volts, serve the municipalities of Winnipeg, Transcona, Beausejour, Tindall, Stoney Mountain and Birds Hill.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific, Ry., Canadian Northern Ry., Grand Trunk Pacific Ry., and Canadian Government Ry., Great Northern Ry., Greater Winnipeg Water District Ry., and Northern Pacific Ry.

Power is sold in bulk to the municipality of Beausejour.

The plant is designed for an ultimate capacity of 100,000 horse-power.

Winnipeg Electric Railway Company (Hydro Power Plant No. 5PF₁), controls Winnipeg, Selkirk and Lake Winnipeg Railway Company, and Suburban Rapid Transit Company. July, 1918.

Address.—Winnipeg, Man.

Directors.—Sir Wm. Mackenzie, Toronto; Sir A. M. Nanton, Winnipeg; Sir Donald Mann, Toronto; G. V. Hastings, Winnipeg; D. B. Hanna, Toronto; Hugh Sutherland, Winnipeg; R. F. Mackenzie, Winnipeg; F. Morton Morse, Winnipeg; J. D. McArthur, Winnipeg.

Officials.—Sir Wm. Mackenzie, Toronto (Pres.); Sir A. M. Nanton, Winnipeg (Vice-Pres.); F. Morton Morse, Winnipeg (Sec.-Treas.); A. W. McLimont, Winnipeg (Gen. Mgr.); F. L. Butler, Winnipeg (Gen. Supt.).

History.—This company was incorporated in 1904, and amalgamated the interests of the Winnipeg General Power Company with those of the Winnipeg Electric Street Railway Company. The hydraulic plant was completed in 1906. The company also operates two auxiliary steam power plants situated in Winnipeg.

Capital.—Authorized, \$10,000,000. Issued, \$9,000,000.

Debtenture Stock.—Authorized, £1,300,000. Issued, £900,000.

Capital invested in Plant and Power Equipment.—\$3,601,224.

Plant. Officials.—B. Phillips, Winnipeg (Supt. Substations); John Ingram, Winnipeg (Supt. Ovhd. Distsbn.); Geo. A. Mills, Winnipeg (Elect. Engr.); F. W. Woodman, Pinawa (Supt. Hydro Elect. Plant); W. Johnston, Winnipeg (Supt. Steam Plant).

Location.—Hydraulic plant located on Pinawa channel of Winnipeg river, about 58 miles from Winnipeg and 7 miles from Lac du Bonnet station, on the Canadian Pacific Ry. One steam auxiliary plant located on Assiniboine Ave., and the other on Mill St., in Winnipeg.

Installation.—Plant operates under an average head of 40 feet. Water is conveyed from intake dam to power-house through eleven 14-foot and two 3½-foot steel penstocks about 45 feet in length. Turbines—5 S. Morgan-Smith, 42-inch, hor., 5 runner, 5,961 h.p. each, 180 r.p.m., 4 S. Morgan-Smith, 39-inch, hor., 4 runner, 2,698 h.p. each, 200 r.p.m., total 35,597 h.p.; Generators—4 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,000 k.w. each, 200 r.p.m., 5 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 2,000 k.w. each, 180 r.p.m., total 14,000 k.w.; Exciters—2 turbines, 15-inch, hor., 214.7 h.p. each, 600 r.p.m., 2 motors, 3-phase, 2,300 v., 514 r.p.m., 2 generators, 100 k.w., 600 r.p.m., 2 generators, 175 k.w., 514 r.p.m.; Transformers—1 bank of 6 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 2,300 v., secondary 50,000 v., 830 k.v.a. each, 1 bank of 9 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 2,300 v., secondary 50,000 v., 1,800 k.v.a. each.

Auxiliary Plant, Mill Street.—Boilers—10 Babcock & Wilcox, water tube, 650 h.p. each, total 6,500 h.p.; Steam Turbine Units—3 Gen. Elect., 3,000 k.w. each, total 9,000 k.w.; Storage Batteries—286 cells, Elect. Stor. Battery, R-85, 5,000 amp. hrs., 600 v.

Winnipeg Electric Railway Company.—Con.**Power.—Con.**

Auxiliary Plant, Assiniboine Avenue.—Boilers—14 Babcock & Wilcox, water tube, total 6,900 h.p.; Steam Engines—2 Goldie & McCullough, compound condensing, 300 h.p. each, 3 Goldie & McCullough, compound condensing, 600 h.p. each, 2 Goldie & McCullough, compound condensing, 1,200 h.p. each, 1 Goldie & McCullough, compound condensing, 1,400 h.p., total 6,200 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 800 k.w. each, 1 Can. Gen. Elect., A.C., 3-phase, 500 k.w., 2 Can. Gen. Elect., A.C., 3-phase, 200 k.w. each, 1 Gen. Elect., D.C., 850 k.w., 2 Gen. Elect., D.C., 400 k.w., total 4,150 k.w.

Power. *Transmission Lines.*—65 miles of steel tower line, double circuit, and 54 miles of wooden pole lines, serve the municipalities of Winnipeg, Selkirk, Stonewall, St. Boniface, Stony Mountain, St. Andrews, Lockport, Transcona, Rockwood, St. Pauls, Middlechurch, St. Vital, St. Norbert, Kildonan, and Fort Garry, and for industrial purposes at Fort Whyte.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing and general power purposes.

Power is sold in bulk to Winnipeg, Selkirk and Lake Winnipeg Railway Company, and Suburban Rapid Transit Company.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., Canadian Government Rys., Great Northern Ry., Northern Pacific Ry., Greater Winnipeg Water District Ry., and Lake Winnipeg navigation.

The company is prepared to tender on any power requirements.

NEW BRUNSWICK.**ANDOVER.**

Served by Maine and New Brunswick Electrical Power Co., Ltd.; see Grand Falls, N.B.

AROOSTOOK JUNCTION.

Served by Maine and New Brunswick Electrical Power Co., Ltd.; see Grand Falls, N.B.

BATHURST.

Jan., 1918.

Bathurst Electric Light and Power Company, Ltd. (Hydro Power Plant No. 1BJ₁).

Address.—Bathurst, N.B.

Officials.—John P. Leger, Bathurst (Pres. and Mgr.); H. Melanson, Bathurst (Vice-Pres.); P. J. Veniot, Bathurst (Sec.).

History.—Plant installed in December, 1912.

Capital.—Authorized, \$125,000. Issued, \$125,000.

Capital invested in Plant and Equipment.—\$63,531.

Plant. *Officials.*—P. J. Leger (Supt. and Ch. Engr.); H. Henry (Engr. Pwr. Sta.); L. Brennan (Engr. Pwr. Sta.).

Location.—Plant located on Tetagouche river.

Installation.—Plant operates under an average head of 60 feet; Turbine—1 Jenckes, 24-inch, hor., single runner, 1,000 h.p., 514 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 250 k.w., 514 r.p.m.

Power. *Transmission Lines.*—10 miles of wooden pole lines serve the municipalities of Bathurst, East Bathurst and West Bathurst.

Use of Power.—Power is used for lighting and general manufacturing

Power is delivered adjacent to Canadian Government Rys., and Caraquet and Gulf Shore Ry.

The plant is designed for an ultimate turbine capacity of 2,000 h.p.

NEW BRUNSWICK.

CAMPBELLTON.

Municipality of Campbellton. (Fuel Power Plant No. 1BJ₂). May, 1918.

Officials,—John T. Reid (Town Clerk); S. H. Lingley (Treas.).

History,—Original plant installed in 1898; present units installed in 1911.

Capital invested in Plant and Equipment,—\$91,000.

Plant. *Officials*,—H. C. V. Fairer (Mgr. and Ch. Engr.); James Robinson (Engr. Pwr. Sta.).

Location,—Plant located adjacent to water front, on Ritchie Street in Campbellford, N.B.,

Installation,—Gas Engines—1 Premier, 175 h.p., 1 Premier, 350 h.p., total 525 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.w., 900 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m., total 300 k.w.

Power. *Local distribution lines* serve the municipality of Campbellford.

Use of Power,—Power is used for lighting and operation of munition factory manufacturing shells.

Power is delivered adjacent to Canadian Government Rys., and coastal navigation.

Power rates range from 10 to 5 cents per k.w. hr.

CENTREVILLE.

C. M. Sherwood, Limited. (Hydro Power Plant No. 1AJ₁). Jan., 1918.

Address,—Centreville, N.B.

Officials,—R. Jack Lee, Centreville (Pres.); LeRoy Lec, Centreville (Sec.-Treas. and Mgr.).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$35,000.

Plant. *Location*,—Plant located on Presquile river at Centreville, N.B.

Installation,—Plant operates under an average head of 16 feet. Turbine—1 Wm. Hamilton, 35-inch, vert., Samson, single runner, 160 h.p., 160 r.p.m.; Generators—1 Edison, D.C., 30 k.w. 1 Can. Gen. Elect., D.C., 30 k.w., total 60 k.w.

Power. *Local distribution lines* serve the municipality of Centreville.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Government Rys.

CHATHAM.

Municipality of Chatham. (Fuel Power Plant No. 1BO₂). May, 1918.

Official,—J. Y. Misireau (Chmn. Comm.).

History,—Original plant destroyed by fire in 1916; present plant installed in 1917.

Capital invested in Plant and Equipment,—\$105,000.

Plant. *Official*,—A. N. MacKay (Supt.).

Location,—Plant located in Chatham, N.B.

Installation,—Oil Engines—2 Fairbanks Morse, 200 h.p. each, total 400 h.p.; Generators—2 Can. Fairbanks-Morse, A.C., 3-phase, 60-cycle, 170 k.v.a. each, 257 r.p.m., total 340 k.v.a.

Power. *Local distribution lines* serve the municipality of Chatham.

Use of Power,—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Government Rys., and Miramichi river and coastal navigation.

CHIPMAN.

King Lumber Company, Ltd. (Fuel Power Plant No. 1AN₁). Nov., 1918.

History,—Plant installed in 1910.

King Lumber Company, Ltd.—Con.

Plant. *Location*,—Plant located in Chipman, N.B.

Installation,—Boiler—1 return tubular; Steam Engine—1 at 100 h.p.; Generator—1 D.C., 25 k.w.

Power. *Local distribution lines* serve the municipality of Chipman.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Government Rys. and coastal navigation.

DALHOUSIE.

Municipality of Dalhousie. (Fuel Power Plant No. 1BJ₁). May, 1918.

Officials,—James Stewart (Mayor); Alex. J. LeBlanc (Clerk).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$37,143.

Plant. *Official*,—A. Gallop, Dalhousie (Supt.).

Location,—Plant located on Adelaide St., in Dalhousie, N.B.

Installation,—Gas Engine—1 at 125 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase 94 k.v.a., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Dalhousie.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys. and coastal navigation.

DEVON.

Served by Fredericton Gas Light Co., now Maritime Electric Co., Ltd.; see Fredericton, N.B.

DORCHESTER.

May, 1918.

Dorchester Electric Light and Power Company. (Fuel Power Plant No. 1BU₁).

Address,—Dorchester, N.B.

Officials,—J. H. Hickman, Dorchester (Pres. and Gen. Mgr.); J. A. Pencock, Dorchester (Sec.).

History,—Plant installed in 1908.

Capital invested in Plant and Equipment,—\$17,250.

Plant. *Location*,—Plant located in Dorchester, N.B.

Installation,—Steam Engine—1 reciprocating, 75 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 60 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Dorchester.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys.

DOUGLASTOWN.

Served by municipality of Newcastle; see Newcastle, N.B.

EAST BATHURST.

Served by Bathurst Electric Light and Power Co.; see Bathurst, N.B.

EDMUNDSTON.

Municipality of Edmundston. (Hydro Power Plant No. 1AF₁). July, 1918.

Official,—Thos. Guereite (Sec.-Treas.).

History,—Plant installed in July, 1912.

Capital invested in Plant and Equipment,—\$84,996.

Plant. *Officials*,—Florent Fournier (Supt.); Albert Fournier (Engr. Per. Supt.).

Location,—Plant located at Second falls of the Green river, 11 miles from Edmundston.

NEW BRUNSWICK.

Municipality of Edmundston.—Con.**Plant.**—*Con.*

Installation.—Plant operates under an average head of 20 feet; Turbines—2 Jencks, 25-inch, hor., single runner, 275 h.p. each, 155 r.p.m., total 550 h.p.; Generators—2 Allis-Chalmers, A.C., 3-phase, 60-cycle, 115 k.w., each, 250 r.p.m., total 230 k.w.; Exciters—2 Allis-Chalmers, generators, 4 k.w. each, belted to main units; Transformers—1 bank of 3 Allis-Chalmers, oil-insulated, 3-phase, primary 2,300 v., secondary 15,000 v., 75 k.v.a. each.

Power. *Transmission Lines.*—12 miles of wooden pole line serves the municipality of Edmundston.

Use of Power.—Power is used for lighting, and general power purposes, including operation of machine shops and municipal pumping plant.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Government Rys., and Temiscouata Ry.

Plant is designed for an ultimate turbine capacity of 1,000 h.p. A storage dam is to be built in 1918 when additional machinery will be installed to full capacity of turbines.

The municipality has at present available for sale about 150 h.p.; power rate 6 cents per k.w. hr.

FAIRVILLE.

Served by New Brunswick Power Co.; see St. John, N.B.

FREDERICTON.

Municipality of Fredericton. (Fuel Power Plant No. 1AK₃). April, 1918.

Official.—A. B. Kitchell (Chmn. Lt. Comm.).

History.—Plant installed in 1903.

Capital invested in Plant and Equipment.—\$47,000.

Plant. *Official.*—A. A. Davidson (Supt.).

Location.—Plant located on Carleton St., Fredericton, N.B.

Installation.—Steam Engine—1 Goldie & McCullough, 95 h.p.; Generator—1 Can. Gen. Elect., D.C., 75 k.w., 7 r.p.m.

Power. Power used for street lighting only.

Fredericton Gas Light Company (Fuel Power Plant No. 1AK₁), recently taken over by Maritime Electric Company, Ltd. June, 1918.

Address.—Head Office, Fredericton, N.B.

Directors.—Hon. Geo. E. Faulkner, B. G. Burrill, E. J. Murphy, E. K. Spinney.

Officials.—Hon. Geo. E. Faulkner, Halifax, N.S. (Pres.); E. J. Murphy, Halifax, N.S. (Vice-Pres.); B. G. Burrill, Halifax, N.S. (Gen. Mgr.).

History.—On April 30, 1918, while this report was being prepared, the Fredericton Gas Light Company was taken over by the Maritime Electric Company, Ltd. The new company also operates the Charlottetown plant on Prince Edward Island and the St. Stephen-Calais plant in New Brunswick, having amalgamated the three companies and discontinued the holding companies in each case. The Fredericton Gas Light Co., was formerly controlled by the Fredericton Electric Co. The plant was installed in 1903, with an additional unit in 1913 and a third in 1917.

Capital invested in Plant and Equipment.—\$113,077.

Plant. *Official.*—H. D. White (Branch Mgr.).

Location.—Plant located at No. 1 Shore St., Fredericton, N.B.

Installation.—Boilers—3 Robb, total 500 h.p.; Steam Engine—1 reciprocating, 300 h.p.; Steam Turbines—1 at 650 h.p., 3,600 r.p.m., 1 at 250 h.p., 7,200 r.p.m., total prime power 1,200 h.p.; Generators—1 Elect. Mfg., A.C., 2-phase, 60-cycle, 175 k.w., 225 r.p.m., 1 West., A.C., 2-phase, 60-cycle, 375 k.w., 3,600 r.p.m., 1 Elect. Mfg., A.C., 2-phase, 60-cycle, 150 k.w., 900 r.p.m., total 700 k.w.

Fredericton Gas Light Company.—Con.

Power. *Local distribution lines* serve the municipalities of Fredericton and Devon.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys., Canadian Pacific Ry., Fredericton Grand Lake & Coal Ry., and St. John River navigation.

GRAFTON.

Served by Woodstock Electric Railway and Power Co.; see Woodstock, N.B.

GRAND FALLS.

Served by municipality of Grand Falls with power purchased from Maine and New Brunswick Electrical Power Co., Ltd.

Maine and New Brunswick Electrical Power Company, Ltd. (Hydro Power Plant No. 1AG₁). July, 1918.

Address.—Head Office, Presque Isle, Maine, U.S.A.; Local Office, Aroostook Falls, N.B.

Officials.—N. M. Jones, St. John, N.B. (Pres.); L. B. Gould, Presque Isle, Maine (Vice-Pres.); A. R. Gould, Presque Isle, Maine (Gen. Mgr. and Treas.); R. H. McDonald, Presque Isle, Maine (Sec.).

History.—Plant installed in 1906, with an additional unit in 1911. The company formerly served power to, and operated distribution systems in, a number of municipalities in Maine, U.S.A., but these systems were taken over recently by the Gould Electric Company, of Presque Isle, Maine, to whom power is now sold in bulk.

Capital.—Authorized, \$300,000.

Bonds.—Authorized, \$175,000.

Capital invested in Plant and Equipment.—\$584,011.

Plant. *Officials.*—C. O. Austin (Gen. Supt.); J. C. Strout (Engr. Pwr. Sta.).

Location.—Plant located at Aroostook Falls on Aroostook river.

Installation.—Plant operates under an average head of 74 feet; Turbines—1 S. Morgan Smith, 33-inch, hor., double runner, 2,400 h.p., 400 r.p.m., 2 Jenkes, 27-inch, hor., double runner, 750 h.p. each, 600 r.p.m., total 3,900 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 1,500 k.w., 500 r.p.m., 2 Gen. Elect., A.C., 3-phase, 60-cycle, 500 k.w. each, 600 r.p.m., total 2,500 k.w.; Exciters—1 generator, 18 k.w., 900 r.p.m., 2 generators, 9 k.w. each, 900 r.p.m.

Power. *Transmission Lines.*—The company formerly operated 175 miles of wooden pole lines which served three municipalities in New Brunswick and eleven in Maine, U.S.A. Since the property in Maine was taken over by the Gould Electric Company, the company's transmission system serves only four municipalities: Perth, Andover, Grand Falls, and Aroostook Jct.

Use of Power.—Power is used for lighting, general manufacturing, and general power purposes.

Power is sold in bulk to Gould Electric Company of Presque Isle, Maine, U.S.A., and the municipalities of Perth, Andover and Grand Falls.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Government Ry.

KOUCHIBOUGUAC.

Served by municipalities of Richibucto and Rexton; see Richibucto, N.B.

LOWER WOODSTOCK.

Served by Woodstock Electric Railway and Power Co.; see Woodstock, N.B.

NEW BRUNSWICK.

MARYSVILLE.

Canadian Cottons, Ltd. (Fuel Power Plant No. 1AK₂). Feb., 1918.

Address,—Head Office, Montreal, Que. Local Office, Marysville, N.B.

Officials,—C. R. Hosmer, Montreal (Pres.); A. O. Dawson, Montreal (Vice-Pres.); A. Bruce, Montreal (Sec.-Treas.).

History,—Plant installed in 1916, and is operated in connection with and forms part of the company's cotton mill.

Capital invested in Plant and Equipment,—\$20,000.

Plant. *Official*,—P. E. Nickerson (Engr. Pwr. Sta.).

Location,—Plant located in Marysville, N.B.

Installation,—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 62½ k.v.a., 450 r.p.m.

Power. *Local distribution lines* serve the municipality of Marysville.

Use of Power,—Power is used for lighting and operation of the company's mill.

Power is delivered adjacent to Canadian Government Rys.

MILLTOWN.

Served by St. Stephen Electric Light Co., now Maritime Electric Co., Ltd.; see St. Stephen, N.B.

MONCTON.

Moncton Tramways, Electricity and Gas Company, Ltd. (Fuel Power Plant No. 1BU₂). May, 1918.

Address,—Head Office, 21 East 40th St., New York, N.Y.; Local Office, Moncton, N.B.

Directors,—Robt. Law, Jr., Pittsburg, Pa.; E. B. Beeser, Pittsburg, Pa.; S. S. Mehard, Pittsburg, Pa.; T. O. Sullivan, Pittsburg, Pa.; E. O. Bartlett, Pittsburg, Pa.; J. A. L. Henderson, London, Eng.; F. W. Summer, Moncton, N.B.

Officials,—Robt. Law, Jr. (Pres.); E. B. Beeser (Vice-Pres. and Gen Mgr.); E. O. Bartlett (Sec. Treas.).

History,—Original plant installed in 1886. Present units installed in 1902, 1906, 1910, 1911, and 1914. The plant is owned by the municipality of Moncton and is operated by the company under a 39-year lease, dated March 26, 1911.

Plant. *Official*,—George Scott (Supt. Distbn. and Ch. Engr. Pwr. Sta.).

Location,—Plant located in Moncton, N.B.

Installation,—Boilers—5 Robb, total 750 h.p.; Steam Engines—2 Robb, reciprocating, 450 h.p. each; 1 Peerless, reciprocating, 250 h.p., total 1,150 h.p.; Generators—2 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 300 k.w., 150 r.p.m., 1 Can. Gen. Elect., D.C., 233 k.w., 425 r.p.m., 1 Can. Gen. Elect., D.C., 143 k.w., 900 r.p.m., total 976 k.w.

Power. *Local distribution lines* serve the municipality of Moncton.

Use of Power,—Power is used for lighting, operation of electric railway, and general manufacturing.

Power is delivered adjacent to Canadian Government Rys., and Moncton & Buctouche Ry.

NEWCASTLE.

Municipality of Newcastle. (Fuel Power Plant No. 1BO₁). May, 1918.

Officials,—John H. Troy (Mayor); J. E. T. Lindon (Town Clerk).

History,—Plant installed in 1902.

Capital invested in Plant and Equipment,—\$42,000.

NEW BRUNSWICK.

Municipality of Newcastle.—Con.

Plant. *Official.*—S. M. Jones (Supt. and Ch. Engr.).

Location.—Plant located in Newcastle, N.B.

Installation.—Boilers—Canada Fdry, total 350 h.p.; Steam Engines—1 Goldie & McCullough, reciprocating, 100 h.p., 1 Leonard, reciprocating, 175 h.p., total 275 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 72 k.v.a., 150 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 150 k.v.a., 225 r.p.m., total 222 k.v.a.

Power. *Local distribution lines* serve the municipalities of Newcastle and Douglastown.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys., and Miramichi river and coastal navigation.

PERTH.

Served by Maine and New Brunswick Electrical Power Co., Ltd.; see Grand Falls, N.B.

PORT ELGIN.

Port Elgin Electric Light Plant. (Fuel Power Plant No. 1BT₂). July, 1918.

Address.—Port Elgin.

Lessee.—C. S. Hayward, Port Elgin (Engr. Pwr. Sta.).

History.—Plant installed in 1910, and is operated in connection with a saw-mill of which it forms part. Plant leased from S. C. Hayward.

Plant. *Location.*—Plant located in Port Elgin, N.B.

Installation.—Steam Engine—1 at about 75 h.p.; Generator—1 West, D.C., 56 k.w., 800 r.p.m.

Power. *Local distribution lines* serve the municipality of Port Elgin.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys., and coastal navigation.

REXTON.

Served by municipalities of Richibucto and Rexton; see Richibucto, N.B.

RICHIBUCTO.

July, 1918.

Municipalities of Richibucto and Rexton. (Hydro Power Plant No. 1BR₁).

Officials.—Fred. S. Sayre, Richibucto (Chmn. Comm.); Bruce M. Brown, Richibucto (Commr.); Alex. J. Girvan, Rexton (Commr.); Jas. L. Hutchinson, Rexton (Commr.).

History.—The municipalities of Richibucto and Rexton were incorporated for the purpose of generating and selling electric power. In 1916 the plant of the Kent Electric Company, which was then under construction, was taken over by the municipalities. The plant was completed in October, 1917, and is now operated by a commission.

Capital invested in Plant and Equipment.—\$69,000.

Plant. *Officials.*—Lester Brown (Supt.); Wm. Smith (Engr. Pwr. Sta.).

Location.—Plant located on Kouchibouguac river, at Kouchibouguac, 12 miles from Richibucto on Kent Northern Ry., and accessible by water.

Installation.—Plant operates under an average head of 21 feet; Turbine—1 Jenckes, 40-inch, hor., single runner, 260 h.p., 133 r.p.m.; Generator—1 West., A.C., 3-phase, 187½ k.v.a., 900 r.p.m.; Exciter—1 motor, 3-phase, 220 v., 800 r.p.m., 1 generator, 5 k.w., 1,400 r.p.m.; Transformer—4 Maloney, primary 2,200 v., secondary 11,000 v., 50 k.v.a. each, 2 West., primary 2,200 v., secondary, 11,000 v., 50 k.v.a. each.

NEW BRUNSWICK.

Municipalities of Richibucto and Rexton.—Con.

Power. *Transmission Lines*,—15 miles of wooden pole lines serve the municipalities of Richibucto, Rexton, Kouchibouguac, and St. Louis.

Use of Power,—Power is used for lighting, and general power purposes, including operation of a shipbuilding plant at Rexton.

Power is delivered adjacent to Kent Northern Ry.

The site is capable of further development.

The municipality has at present available for sale 160 h.p.; power rate 6 cents per k.w. hr.

ROTHESAY.

Served by New Brunswick Power Co.; see St. John, N.B.

SACKVILLE.

The Eastern Electric and Development Company, Ltd. (Fuel Power Plant No. 1BT₁). June, 1918.

Address,—Sackville, N.B.

Officials,—C. W. Fawcett, Sackville, N.B. (Pres.); M. G. Siddall, Sackville, N.B. (Vice-Pres.); K. S. Pickard, Sackville, N.B. (Sec. and Treas.).

History,—First unit installed in 1901; additional units installed in 1907 and 1908. Plant remodelled in 1910.

Capital,—Issued, \$40,000.

Bonds,—Issued, \$30,000.

Capital invested in Plant and Equipment,—\$60,000.

Plant. *Official*,—B. J. McHaffey (Ch. Engr.).

Location,—Plant located in Sackville, N.B.

Installation,—Boiler—1 Robb, 380 h.p.; Steam Engines—1 Robb, reciprocating, 115 h.p., 1 Robb, reciprocating, 125 h.p., 1 Robb, reciprocating 250 h.p., total 490 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 50 k.w., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 1,200 r.p.m., total 275 k.w.; Exciters—1 generator, 5.5 k.w., 1,800 r.p.m., 1 generator, 3.5 k.w., 2,000 r.p.m., 1 generator, 2.25 k.w., 2,000 r.p.m.

Power. *Local distribution lines* serve the municipality of Sackville.

Use of Power,—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Government Rys.

The company has power available for sale; power rates vary from 10 to 3 cents per k.w. hr.

ST. JOHN.

New Brunswick Power Company. (Fuel Power plant No. 1AP₁) June, 1918.

Address,—St. John, N.B.

Directors,—L. R. Ross, St. John; P. W. Thomson, St. John; F. R. Taylor, St. John; H. P. Robinson, St. John; R. B. Emerson, St. John; W. E. McGregor, Boston, Mass.; L. C. Gerry, Providence, R.I.

Officials,—L. R. Ross, St. John (Pres.); H. M. Hopper, St. John (Gen. Mgr. and Sec.); G. M. O. Peters, St. John (Treas.).

History,—The company was incorporated April 20, 1912, under the laws of the province of New Brunswick. The first two units were installed in 1905 and additional units were installed in 1906, 1911, and 1914. The company acquired all the property of the St. John Railway Company on April 1, 1917. The company also operates the street railway and gas plants in St. John.

Capital,—Authorized, \$7,000,000. Issued, \$3,350,000.

Bonds,—Authorized, \$5,000,000. Issued, \$1,750,000.

Capital invested in Plant and Equipment,—\$1,500,000.

New Brunswick Power Company.—Con.

Plant. *Officials*,—J. Garey (Ch. Engr.); H. A. Brown (Elect. Engr.); R. J. Cochrane (Supt. Ovhd. Distbn.).

Location,—Plant located on Union Street, St. John, N.B.

Installation,—Boilers—Babcock & Wilcox, total 1,800 h.p.; Steam Engines—2 reciprocating, 1,000 h.p. each, 1 reciprocating, 1,100 h.p., 1 reciprocating, 675 h.p.; Steam Turbine—1 at 3,000 h.p., total Prime Power 6,775 h.p.; Generators—1 Can. Gen. Elect., D.C., 600 k.w., 90 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 600 k.w., 150 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 600 k.w., 90 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 500 k.w., 3,600 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 2,000 k.w., 3,600 r.p.m., total 4,300 k.w.

Power. *Transmission Lines*,—Serve the municipalities of St. John, Fairville and Rothesay and the parishes of Rothesay, Lancaster and Simonds.

Use of Power,—Power is used for lighting, operation of electric railways, and general power purposes.

Power is delivered adjacent to Canadian Government Rys., Canadian Pacific Ry., and Ocean and St. John River navigation.

The company contemplates developing hydro-electric power on Magaguadavic and Lepreaux rivers in the vicinity of St. John.

ST. LOUIS.

Served by municipalities of Richibucto and Rexton; see Richibucto, N.B.

ST. STEPHEN.

St. Stephen Electric Light Company (Hydro Power Plant No. 1AR₃), recently taken over by Maritime Electric Company, Ltd. June, 1918.

Address,—Head Office, Fredericton, N.B.; Local Office, Milltown, N.B.

Directors and Officers,—See Fredericton Gas Light Company, Fredericton, N.B.

History,—On April 30, 1918, while this report was being prepared, the St. Stephen Electric Light Company was taken over by the Maritime Electric Company, Ltd. The new company also operates the Fredericton plant in New Brunswick and the Charlottetown plant on Prince Edward Island, having amalgamated the three companies and discontinued the holding companies in each case. The plant was installed in 1908 with additional units in 1917.

Plant. *Location*,—Plant located on St. Croix river at Milltown, N.B.

Installation,—Plant operates under an average head of 10 feet; Turbines—4 Dayton, total 400 h.p.; Generators—1 Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.v.a., 600 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.v.a., 600 r.p.m., total 500 k.v.a.; Exciters—2 Gen. Elect., 75 k.w. each, belted to main generators.

Power. *Transmission Lines*,—Serve the municipalities of St. Stephen and Milltown, in New Brunswick, and Calais and Milltown, in Maine, U.S.A.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and coastal navigation.

SHEDIAC.

July, 1918.

The Shediac Electric Light and Power Company. (Hydro Power Plant No. 1BT₁).

Address,—Shediac, N.B.

Directors,—Jas. E. White, Shediac; Jas. McQueen, Shediac; E. A. Smith, Shediac; J. C. Webster, M.D., Chicago, Ill.; W. H. Murray, D.D.S., Shediac.

Officials,—Jas. E. White, Shediac (Pres.); Jas. McQueen, Shediac (Sec.); E. A. Smith, Shediac (Mgr. and Treas.).

NEW BRUNSWICK.

The Shediac Electric Light and Power Company.—Con.

History,—Plant installed in 1910.

Capital,—Authorized, \$22,000. Issued, \$21,000.

Bonds,—Authorized, \$8,000. Issued, \$8,000.

Capital invested in Plant and Equipment,—\$29,000.

Plant. *Officials*,—Joseph Voutour (Supt. and Engr. Pwr. Sta.).

Location,—Plant located on Seadouc river, 2 miles from Shediac on Canadian Government Rys.

Installation,—Plant operates under an average head of 20 feet; Turbines—1 Wm. Kennedy, 16-inch, hor., double runner, 108 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.; Auxiliary Plant—1 Leonard, reciprocating steam engine, 100 h.p., 1 generator, 50 k.w., 1,200 r.p.m.

Power. *Transmission Lines*,—2 miles of wooden pole line serves the municipality of Shediac.

Use of Power,—Power is used for lighting and to operate municipal pumping plant.

Power is delivered adjacent to Canadian Government Rys.

SUSSEX.

June, 1918.

The Sussex Manufacturing Company, Ltd. (Fuel Power Plant No. 1A₂).

Address,—Sussex, N.B.

Officials,—S. H. White, Sussex (Pres. and Man. Dir.); S. J. Goodliffe, Sussex (Vice-Pres.); W. J. Mills, Sussex (Sec.-Treas.); W. N. Robinson, Sussex (Mgr.); J. P. Atherton, Sussex (Audr.).

Capital invested in Plant and Equipment,—\$26,355.

Plant. *Location*,—Plant located in Sussex, N.B.

Installation,—Steam Engines—1 reciprocating, 125 h.p., 1 reciprocating, 75 h.p., total 200 h.p.; Generators—1 Royal Elect., A.C., 2-phase, 133-cycle, 60 k.w., 1,333 r.p.m., 1 Royal Elect., A.C., 2-phase, 133-cycle, 40 k.w., 1,333 r.p.m., total 100 k.w.

Power. *Local distribution lines* serve the municipality of Sussex.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys.

UPPER WOODSTOCK.

Served by Woodstock Electric Railway and Power Co.; see Woodstock, N.B.

WEST BATHURST.

Served by Bathurst Electric Light and Power Co.; see Bathurst, N.B.

WOODSTOCK.

Woodstock Electric Railway, Light and Power Company. (Hydro Power Plant No. 1A₂). April, 1918.

Address, Woodstock, N.B.

Officials,—J. A. Hayden, Woodstock (Pres.); C. D. Johnston, Woodstock (Mng. Dir.); A. G. Bailey, Woodstock (Sec.-Treas.).

History,—Plant installed in 1904.

Capital invested in Plant and Equipment,—\$200,000.

Plant. *Officials*,—Geo. King (Engr. Pwr. Sta.); H. L. Marsten (Engr. Pwr. Sta.).

Location,—Plant located on Meduxnekeag river, 2 miles from Woodstock, N.B.

Installation,—Plant operates under an average head of 30 feet; Turbines—2 Jenckes, 21-inch, hor., single runner, 300 h.p. each, 240 r.p.m., total 600 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.w. each, 615 r.p.m., total 400 k.w.; Auxiliary Plant—1 Leonard, reciprocating steam engine, 300 h.p.

Woodstock Electric Railway, Light and Power Company.—Con.

Power. *Transmission Lines.*—Serve the municipalities of Woodstock and Grafton.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing, and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Government Rys.

NOVA SCOTIA.**AMHERST.**

Canada Electric Company, Ltd. (Fuel Power Plant No. 1DL₂), controlled by Maritime Coal, Railway and Power Company, Ltd. June, 1918.

Address.—Amherst, N.S.

Directors.—Alex. MacLaurin, Montreal; Hon. William Mitchell, Montreal; William Hanson, Montreal; A. E. Dymont, Toronto; G. Radcliffe Hulme, London, Eng.

Officials.—Alex. MacLaurin, Montreal (Pres.); Hon. Wm. Mitchell, Montreal (Vice-Pres.); R. J. Bell, Joggin Mine (Gen. Mgr.); N. T. Avar, Amherst (Sec.-Treas.).

History.—Company incorporated in 1889.

Capital.—Authorized, \$500,000. Issued, \$50,000.

Capital invested in Plant and Equipment.—\$402,629.

Plant. *Officials.*—W. S. Cooke (Mech. Engr.); S. L. Henley (Elect. Engr. and Supt. Distbn.).

Location.—Plant located at Chignecto Mines, 2½ miles from Meccan Junction on Canadian Government Rys., and adjacent to branch line of Maritime Coal, Railway and Power Company's railway.

Installation.—Boilers—Robb, total 1,550 h.p.; Steam Engines—2 Robb, reciprocating 730 h.p. each; Steam Turbine—1 Can. Gen. Elect., 1,350 h.p., total Prime Power 2,810 h.p.; Generators—1 West., and 2 Can. Gen. Elect., A.C., 3-phase, total, 1,990 h.p.

Power. *Transmission Lines.*—2½ miles of wooden pole lines serve the municipalities of Amherst, Maccan, Joggin Mines, Chignecto and River Herbert.

Use of Power.—Power is used for lighting, general manufacturing, operation of coal mines, and general power purposes.

Power is delivered adjacent to Canadian Government Rys., and branch line of Maritime Coal, Railway and Power Company's railway.

The power-house is designed to contain double the present installed capacity.

The company has at present available for sale 300 h.p.

ANNAPOLIS ROYAL.

Municipality of Annapolis Royal. (Hydro Power Plant No. 1DC₁). July, 1918.

Officials.—A. E. Ather (Mayor); F. W. Harris (Clerk and Treas.).

History.—Plant installed in 1913, with a new generator in 1911.

Capital invested in Plant and Equipment.—\$25,000.

Plant. *Officials.*—S. Rippey (Supt.); Jas. Rippey (Engr. Pwr. Sta.)

Location.—Plant located at village of Lequille, on Lequille river, 2 miles from Annapolis Royal station on Dominion Atlantic Ry. (C.P.Ry.).

Installation.—Plant operates under an average head of 45 feet. Water is conveyed from dam to power-house through 600 feet of wood stave pipe, 4 feet in diameter, ending in a steel penstock 100 feet long and 40 inches in diameter; Turbine—1 Jenckes, 20-inch, hor., single runner, 245 h.p., 400 r.p.m.; Generator—1 West., A.C., 2-phase, 60-cycle, 100 k.w., 900 r.p.m.; Exciter—1 West. generator, 4 k.w., 1,400 r.p.m.

NOVA SCOTIA.

Municipality of Annapolis Royal.—Con.

Power. *Transmission Line*,—2½ miles of wooden pole line serves the municipality of Annapolis Royal.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.).

ANTIGONISH.

Antigonish Electric Company. (Fuel Power Plant No. 1DR₁). May, 1918.

Address,—Antigonish, N.S.

Owner,—Jas. W. Taylor, Antigonish, N.S.

History,—First unit installed in 1914; an additional unit in 1915.

Capital invested in Plant and Equipment,—\$18,000.

Plant. *Official*,—J. W. Taylor (Mgr.).

Location,—Plant located in Antigonish, N.S.

Installation,—Boilers—1 Robb, and 1 Matheson, total 160 h.p.; Steam Engines—1 International, reciprocating, 90 h.p., 1 International, reciprocating, 25 h.p., total 115 h.p.; Generators—2 Can. Gen. Elect., D.C., 45 k.w. each, 975 r.p.m., 1 West., D.C., 15 k.w., 1,050 r.p.m., total 105 k.w.

Power. *Local distribution lines* serve the municipality of Antigonish.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys.

The company is installing an 85 h.p. crude oil engine and expect to remove the steam equipment.

BEAR RIVER.

Bear River and Digby Electric Light, Heating and Power Company. (Hydro Power Plant No. 1DB₁). Jan., 1918.

Address,—Bear River, N.S.

Officials,—C. H. Purdy, Bear River (Pres.); Jas. H. Purdy, Bear River (Vice-Pres.); W. G. Clarke, Bear River (Sec.-Treas.); W. M. Romans, Bear River (Mgr.).

History,—Plant installed in 1893, with a new generator in 1912.

Capital,—Authorized, \$7,000. Issued, \$7,000.

Capital invested in Plant and Equipment,—\$15,600.

Plant. *Official*,—D. Jack (Supt. and Engr. Pwr. Sta.).

Location,—Plant located on West Branch of Bear River, 5½ miles from Bear River station on Dominion Atlantic Ry., and 1 mile from the village of Bear River.

Installation,—Plant operates under an average head of 70 feet; Water-wheel—1 Pelton, 72-inch, hor., single runner, undershot, 65 h.p., 90 r.p.m.; Generator—1 West., A.C., 3-phase, 60-cycle, 50 k.w., 1,200 r.p.m.; Exciter—1 generator, 2 k.w., 1,400 r.p.m., belted to main unit.

Power. *Transmission Line*,—1 mile of wooden pole line serves the municipality of Bear river.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.), and Bay of Fundy navigation.

BEDFORD.

March, 1918.

Sackville River Electric Company, Ltd. (Hydro Power Plant No. 1EJ₂).

Address,—Head Office, Halifax, N.S.; Local Office, Bedford, N.S.

Officials,—A. C. Thraiston, Halifax (Pres.); L. A. Lovett, Halifax (Sec.); J. A. Dunn, Stewiacke (Mgr.).

Capital,—Authorized, \$50,000. Issued, \$39,000.

Capital invested in Plant and Equipment,—\$38,000.

NOVA SCOTIA.

Sackville River Electric Company, Ltd.—Con.

Plant. *Location*,—Plant located at the mouth of Sackville river in Bedford.

Installation,—Plant operates under an average head of 13 feet. Water is supplied to the wheel by 300 feet of open wooden flume. Turbine—1 S. Morgan Smith, 21-inch, hor., single runner, 50 h.p., 270 r.p.m.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.; Auxiliary Plant—1 International steam engine, 40 h.p.

Power. *Local distribution lines* serve the village of Bedford and adjacent district.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys., and Dominion Atlantic Ry. (C.P.Ry.).

NOTE.—Operation of the plant was discontinued in September, 1918, and the company now purchases power from Nova Scotia Tramways and Power Company, Ltd.

BLOCKHOUSE.

Served by Lunenburg Gas Co., Ltd.; see Lunenburg, N.S.

BRIDGETOWN.

The Bridgetown Electric Light and Power Company, Ltd. (Hydro Power Plant No. 1DC₃). Feb., 1918.

Address,—Bridgetown, N.S.

Officials,—Geo. Beckwith, Bridgetown (Pres. and Mgr.); T. R. Beckwith, Bridgetown (Sec.).

History,—Plant installed in 1905.

Capital,—Authorized, \$20,000. Issued, \$20,000.

Capital invested in Plant and Equipment,—\$18,622.

Plant. *Officials*,—T. R. Beckwith (Ch. Engn.); S. Sabeans (Eng. Pwr. Sta.).

Location,—Plant located on Bloody creek, 2 miles from Bridgetown on Dominion Atlantic Ry. (C.P.Ry.).

Installation,—Plant operates under an average head of 250 feet. A wood stave pipe, 16 inches in diameter, and 3,000 feet in length, conveys the water from the intake dam to the power-house; Turbine—1 Pelton, hor., impulse, single runner, 175 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 60-cycle, 90 k.w., 900 r.p.m.

Power. *Transmission Line*,—2 miles of wooden pole line serves the municipality of Bridgetown.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.).

BRIDGEWATER.

Municipality of Bridgewater. (Hydro Power Plant No. 1EE₁). April, 1918.

Official,—Jas. A. Curl (Clerk).

History,—Plant installed in 1907.

Capital invested in Plant and Equipment,—\$82,000.

Plant. *Officials*,—M. D. Hebb (Supt.); Ephraim Haines (Engr. Pwr. Sta.).

Location,—Plant located on Petite Riviere, 3 miles from Bridgewater on Halifax and South Western Ry.

Installation,—Plant operates under an average head of 23½ feet; Turbine—1 Jenckes, 25-inch, hor., double runner, 319 h.p., 260 r.p.m.; Generator—1 West., A.C., 2-phase, 60-cycle, 200 k.w., 600 r.p.m.; Exciter—1 generator, 7½ k.w., 1,200 r.p.m.

Power. *Transmission Line*,—3 miles of wooden pole line serves the municipality of Bridgewater.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Halifax and South Western Ry. (C.N.Ry.), and coastal navigation.

NOVA SCOTIA.

CANSO.

Municipality of Canso. (Fuel Power Plant No. 1EQ₁). June, 1918.

Officials.—H. A. Rice (Mayor); H. P. Moffatt (Clerk).

History.—Plant installed in 1914.

Capital invested in Plant and Equipment.—\$20,300.

Plant. *Officials.*—Theodore Snow (Mech. Engr.); Arthur J. Roberts (Elect. Engr.).

Location.—Plant located in Canso, N.S.

Installation.—Gas Engine—1 Premier, 95 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 62½ k.v.a., 1,200 r.p.m.

Power. *Transmission Lines.*—5 miles of wooden pole line serves the municipalities of Canso and Hazel Hill.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to coastal navigation.

CHIGNECTO.

Served by Canada Electric Company, Ltd.; see Amherst, N.S.

DARTMOUTH.

Served by Dartmouth Gas, Electric Light, Heating and Power Co., Ltd., with power purchased from Nova Scotia Tramways and Power Co., Ltd.; see Halifax, N.S.

Municipality of Dartmouth. (Hydro Power Plant No. 1EJ₁). Jan., 1918.

Official.—Alf. Elliott (Town Clerk).

History.—Plant installed in 1910.

Capital invested in Plant and Equipment.—\$9,000.

Plant. *Location.*—Plant located in Dartmouth.

Installation.—Plant operates under an average head of 150 feet. Water is supplied from the municipal water system, and is taken from Topsail lake; Turbine—1 Pelton, 36-inch, hor., 50 h.p., 280 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.; Exciter—1 generator, 2 k.w., 1,400 r.p.m.

Power. Power is used for street lighting only.

DIGBY.

Daley's Electric Light Plant. (Fuel Power Plant No. 1DB₁). Feb., 1918.

Address.—Digby, N.S.

Owner.—John Daley, Digby, N.S.

History.—Original plant installed in 1891. Units replaced as follows: Steam engine in 1904, boiler in 1910, generator in 1914.

Capital invested in Plant and Equipment.—\$25,000.

Plant. *Official.*—O. D. Daley (Mgr. and Engr. Pwr. Sta.).

Location.—Plant located in Digby, N.S., adjacent to Dominion Atlantic Ry.

Installation.—Boiler—1 Robb, return tubular, 150 h.p.; Steam Engine—1 Robb, reciprocating, 150 h.p.; Generator—1 Can. Gen. Elect., A.C., 2-phase, 125 k.v.a., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Digby.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.R.), and Bay of Fundy navigation.

The company has at present available for sale 100 h.p.

DOMINION.

Served by Cape Breton Electric Co., Ltd.; see Sydney, N.S.

FALMOUTH.

Served by the Windsor Electric Light and Power Co., Ltd.; see Windsor, N.S.

NOVA SCOTIA.

FLORENCE.

Served by Sydney Mines Electric Co.; see Sydney Mines, N.S.

GLACE BAY.

Municipality of Glace Bay. (Fuel Power Plant No. 1EJ₃). June, 1918.

Officials.—A. L. O'Neill (Mayor); N. F. McNeil (Clerk).

History.—Plant installed in 1902.

Capital invested in Plant and Equipment.—\$101,968.

Plant. *Official.*—F. W. Frizzell (Supt.).

Location.—Plant located on King Edward St., Glace Bay, N.S.

Installation.—Steam Engines—1 Robb, reciprocating, 400 h.p., 150 r.p.m., 1 Robb, reciprocating, 260 h.p., 1,000 r.p.m., total 660 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 250 k.w., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 150 k.w., total 400 k.w.; Exciters—1 at 30 k.w., and 1 at 75 k.w.

Power. *Local distribution lines* serve the municipality of Glace Bay.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Sydney and Louisbourg Ry.

HALIFAX.

June, 1918.

Nova Scotia Tramways and Power Company, Ltd. (Fuel Power Plant No. 1EJ₁).

Address.—50 Sackville St., Halifax, N.S.

Directors.—E. A. Robert, Montreal; O. E. Smith, Halifax; H. H. Smith, Halifax; W. H. Covert, Halifax; W. G. Ross, Montreal; F. H. Wilson, Montreal; J. W. McConnell, Montreal; F. P. Royce, New York, N.Y.

Officials.—E. A. Robert, Montreal (Pres.); O. E. Smith, Halifax (Vice-Pres.); H. R. Mallison, Halifax (Mng. Dir. and Sec.-Treas.); J. R. Blackett, Halifax (Compt.).

History.—Original plant installed in 1896. Present units were installed as follows: 2 in 1902; 1 in 1912, and 1 in 1917. The company was incorporated under a special Act of the Provincial Legislature in 1914 and acquired the plant and equipment of the Halifax Electric Tramway Co., Ltd., in 1917. Plans for a water-power development of 12,000 h.p. on the Gaspereau river, 55 miles from Halifax, have been under consideration by the company for some time.

Capital.—Authorized, \$6,000,000. Issued, \$4,586,000.

Bonds.—Authorized, \$10,000,000. Issued, \$2,250,000.

Plant. *Officials.*—J. W. Crosby (Mgr. and Ch. Elec.); P. A. Freeman (Supt. and Ch. Engr. Pwr. Sta.).

Location.—Plant located in Halifax, N.S., adjacent to Halifax Ocean Terminal and Railway station.

Installation.—Boilers—7 Babcock & Wilcox, Jones stoker, 300 h.p. each, 7 Babcock & Wilcox, underfeed, 300 h.p. each; Steam Engines—2 Rice & Sargent, reciprocating, 800 h.p. each; Steam Turbines—1 Gen. Elect., 2,600 h.p., 1 Gen. Elect., 4,000 h.p., total prime power 8,200 h.p.; Generators—2 Gen. Elect., A.C., 3-phase, 60-cycle, 600 k.w. each, 150 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 2,000 k.w., 3,600 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 3,000 k.w., 3,600 r.p.m., total 6,200 k.w.; Exciters—1 steam turbine, 25 k.w., 1 generator, 25 k.w., 1 generator, 50 k.w., induction motor driven, 1 generator, 20 k.w., induction motor driven.

Power. *Local distribution lines* serve the municipalities of Halifax and Dartmouth.

Use of Power.—Power is used for lighting, operation of electric railway, general manufacturing, and general power purposes.

Power is sold in bulk to Dartmouth Gas, Electric Light, Heating and Power Company, Ltd.

NOVA SCOTIA.

Nova Scotia Tramways and Power Company, Ltd.—Con.**Plant.—Con.**

Power is delivered adjacent to Canadian Government Rys., Halifax and South Western Ry. (C. N. Ry.), Dominion Atlantic Ry. (C. P. Ry.), and Ocean navigation.

The company has at present available for sale 3,000 h.p.; power rate, 8 cents per k.w. hr., with discounts ranging from 25 to 55 per cent.

Special consideration will be given to manufacturers requiring a large amount of power.

HANTSPORT.

Municipality of Hantsport. (Fuel Power Plant No. 1DE₁). Jan., 1918.

Official.—Geo. T. Ferguson (Town Clerk).

History.—The plant was installed in 1913, with steam engine only, by Hantsport Fruit Basket Company, to operate the company's factory. The generator and distribution system were installed in 1914, by the municipality, who have a contract with the company for the supply of prime power.

Capital invested in Plant and Equipment.—Owned by Hantsport Fruit Basket Co., \$7,000. Owned by municipality of Hantsport, \$5,000.

Plant. *Location.*—Plant located in Hantsport, N.S.

Installation.—Steam Engine—1 reciprocating, 75 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 62½ k.v.a., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Hantsport.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.R.), and Bay of Fundy navigation.

HAZEL HILL.

Served by municipality of Glace Bay; see Glace Bay, N.S.

HEBRON.

Served by Yarmouth Light and Power Co., Ltd.; see Yarmouth, N.S.

INVERNESS.

Inverness Railway and Coal Company. (Fuel Power Plant No. 1FB₁). June, 1918.

Address.—Inverness, N.S.

Officials.—J. McGillivray, Inverness, N.S. (Receiver and Mgr.); R. E. McLeod, Inverness, N.S. (Acct.).

History.—Plant installed in 1902.

Plant. *Location.*—Plant located in Inverness, N.S.

Installation.—Steam Engine—1 reciprocating, 75 h.p.; Generator—1 Can. Gen. Elect., D.C., 50 k.w., 280 r.p.m.

Power. Power is served in the municipality of Inverness for lighting only.

JOGGIN MINES.

Served by Canada Electric Co., Ltd.; see Amherst, N.S.

KENTVILLE.

June, 1918.

Kentville Electric Light and Power Company, Ltd. (Fuel Power Plant No. 1DD₂).

Address.—Kentville, N.S.

Officials.—Peter Innes, Kentville (Pres.); A. E. Calkins, Kentville (Mng. Dir.); Chas. Smith, Kentville (Sec.-Treas.).

History.—Present units installed in November, 1915.

Capital.—Authorized, \$40,000. Issued, \$25,000.

Capital invested in Plant and Equipment.—\$25,000.

Kentville Electric Light and Power Company, Ltd.—Con.

Plant. *Official*,—C. L. Baird (Supt. and Ch. Engr.).

Location,—Plant located in Kentville, N.S., adjacent to Dominion Atlantic Ry. (C. P. Ry.).

Installation,—Boilers—1 Leonard, 90 h.p., 1 Matheson, 90 h.p., total 180 h.p.; Steam Engines—1 Leonard, reciprocating, 120 h.p., 1 reciprocating, 10 h.p. (not in use); Generator—1 Can. West., A.C., 3-phase, 60-cycle, 75 k.v.a., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Kentville.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.).

NOTE.—The plant was sold to the municipality of Kentville on July 1, 1910.

LAWRENCETOWN.

Municipality of Lawrencetown. (Fuel Power Plant No. 1DC₁). June, 1918.

Official,—F. N. Longley (Clerk of Comm.).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$4,500.

Plant. *Location*,—Plant located in Lawrencetown, N.S.

Installation,—Steam Engine—1 reciprocating, 60 h.p.; Generator—1 Fairbanks-Morse, A.C., 3-phase, 30 k.v.a., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Lawrencetown.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.).

The municipality is contemplating installing an hydraulic plant.

LIVERPOOL.

Municipality of Liverpool. (Hydro Power plant No. 1ED₁). July, 1918.

Officials,—A. W. Hendry (Mayor); S. M. Bartling (Town Clerk and Pur. Agt.).

Capital invested in Plant and Equipment,—\$92,352.

Plant. *Official*,—A. H. Drew (Supt.).

Location,—Plant located on Mersey river, 5 miles from Liverpool station, on Halifax and South Western Ry. (C.N.Ry.).

Installation,—Plant operates under an average head of 21 feet. Turbine—1 Jenckes, 40-inch, hor., double runner, 750 h.p., 160 r.p.m.; Generators—2 Bullock, A.C., 2-phase, 60-cycle, 225 k.w. each, 600 r.p.m., total 450 k.w.

Power. *Transmission Line*,—5 miles of wooden pole line serves the municipalities of Liverpool and Milton.

Use of Power,—Power is used for lighting and general manufacturing.

Power is sold in bulk to the Milton Electric Light, Power and Manufacturing Company for distribution in Milton.

Power is delivered adjacent to Halifax and South Western Ry., and coastal navigation.

LUNENBURG.

Lunenburg Gas Company, Ltd. (Hydro Power Plant No. 1EG₁). March, 1918.

Address,—78 Lincoln St., Lunenburg, N.S.

Directors,—T. G. Nicol, Mahone; Capt. A. J. Wolfe, Lunenburg; E. L. Nash, Lunenburg; Jas. A. Hirthe, Lunenburg; J. Rudolphe, Lunenburg.

Officials,—T. G. Nicol (Pres. and Mng. Dir.); Capt. A. J. Wolfe (Vice-Pres.); S. D. Herman (Sec.-Treas.); E. L. Nash (Gen. Mgr.).

History,—Company commenced supplying power in 1884. Present plant installed in 1907.

Capital,—Authorized, \$45,000. Issued, \$45,000.

Capital invested in Plant and Equipment,—\$45,000.

NOVA SCOTIA.

Lunenburg Gas Company, Ltd.—Con.

Plant. *Official*,—C. E. Nicol (Engr. Pwr. Sta.).

Location,—Plant located on Mushamush river, 7 miles from Lunenburg.

Installation,—Plant operates under average head of 22 feet; Turbine—1 S. Morgan Smith, 22-inch, hor., double runner, 400 h.p., 400 r.p.m.; Generator 1 Can. West., A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m.

Power. *Transmission Lines*,—8½ miles of wooden pole lines serve the municipalities of Lunenburg and Blockhouse.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Halifax and South Western Ry., and coastal navigation.

MACCAN.

Served by Canada Electric Co., Ltd.; see Amherst, N.S.

MAHONE BAY.

Municipality of Mahone Bay. (Hydro Power Plant No. 1EG₂). April, 1918.

Official,—Robb W. Kedy (Sec.-Treas. Water Comn.).

Capital invested in Plant and Equipment,—\$21,000.

Plant. *Location*,—Plant located at outlet of Oakland lake, 2½ miles from Mahone Bay.

Installation,—Plant operates under an average head of 60 feet; Turbine—1 20-inch, vert., 50 h.p.; Generator—1 A.C., single phase, 60 k.w.

Power. *Transmission Line*,—2½ miles of wooden pole line serves the municipality of Mahone Bay.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Halifax and South Western Ry., and Coastal navigation.

MIDDLETON.

Municipality of Middleton. (Hydro Power Plant No. 1DC₂). July, 1918.

Official,—Jas. A. Gates (Town Clerk).

History,—The plant was formerly operated by a company but was acquired by the municipality in 1917 when extensive alterations were made to the power-house.

Capital invested in Plant and Equipment,—\$35,000.

Plant. *Official*,—H. E. Parker (Engr. Pwr. Sta.).

Location,—Plant located at Nietaux falls on Nietaux river, 3 miles from Middleton on Dominion Atlantic Ry. (C.P.Ry.), and one-half mile from Nietaux on Halifax and South Western Ry. (C.N.Ry.).

Installation,—Plant operates under an average head of 29 feet. Water is conveyed from dam to power-house through a closed wooden flume 400 feet long; Turbine—1 Jenckes, 30-inch, hor., single runner, 250 h.p., 250 r.p.m.; Generator—1 Can. Gen. Elect. A.C., 3-phase, 60-cycle, 150 k.w., 900 r.p.m.; Exciter—1 generator, 5 k.w., 1,200 r.p.m.; Auxiliary Plant,—1 R.H. gas engine, 66 h.p.

Power. *Transmission Line*,—4 miles of wooden pole line serves the municipality of Middleton.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.), and Halifax and South Western Ry. (C.N.Ry.).

MILFORD.

Served by Stewiacke Electric Light and Power Co.; see Stewiacke, N.S.

NOVA SCOTIA.

MILTON.

Served by Milton Electric Light, Power and Manufacturing Co., with power purchased from the municipality of Liverpool; see Liverpool, N.S.

NEW GLASGOW.

Served by Pictou County Electric Co., Ltd.; see Stellarton, N.S.

NEW WATERFORD.

Dominion Coal Company, Ltd. (Fuel Power Plant No. 1FJ₁), controlled by Dominion Steel Corporation. Sept., 1918.

Address,—Head Office, Montreal, Que.; Local Office, Glace Bay, N.S.

Directors,—Mark Workman, Montreal; Lt.-Col. the Hon. Frederic Nicholls, Toronto; F. L. Wanklyn, Montreal; J. H. Plummer, Toronto; W. D. Matthews, Toronto; Brig. Gen. the Hon. Jas. Mason, Toronto; Brig. Gen. Sir Henry M. Pellatt, C.V.O., Toronto; Sir Wm. Mackenzie, Toronto; Hon. R. Dandurand, Montreal; Wm. McMaster, Montreal; E. R. Wood, Toronto.

Officials,—Mark Workman, Montreal (Pres.); Lt.-Col. the Hon. Frederic Nicholls, Toronto (Vice-Pres.); C. S. Cameron, Sydney, N.S. (Sec.-Treas.); W. A. Doig, Montreal (Asst. Sec. and Asst. Treas.).

History,—Plant installed in 1911 with two additional units in 1912. The plant was installed for the operation of the company's coal mines and only a small amount of power is sold.

Capital invested in Plant and Equipment,—\$588,207.

Plant. *Location*,—Plant located at New Waterford, N.S.

Installation,—*Boilers*—4 No. 2 A. Bettington, 4 Babcock & Wilcox; Steam Turbines—1 Curtiss, 3,350 h.p., 1 Fraser & Chalmers, 3,350 h.p., total 6,700 h.p.; Generators—1 Gen. Elect., A.C., 3-phase, 25-cycle, 2,000 k.w., 1,500 r.p.m., 1 Siemens, A.C., 3-phase, 25-cycle, 2,000 k.w., 1,500 r.p.m., total 4,000 k.w.; Exciters—2 Siemens generators, connected to Bellis & Morcom high speed engines, 1 Can. West., generator, connected to Robb engine.

Power. *Local distribution lines* serve the municipality of New Waterford.

Power is sold in bulk to Waterford Public Utilities Co., for distribution in New Waterford and to Cape Breton Electric Company, Ltd.

Use of Power,—Power is used for lighting, general power purposes and operation of the company's coal mines.

The plant was installed primarily for the purpose of operating the coal mines for which purpose 95 per cent of the power generated is used.

The company has a second steam plant of 5,100 h.p. capacity located in New Aberdeen, where power is used in the operation of the company's coal mines.

NORTH SYDNEY.

Served by Cape Breton Electric Co., Ltd.; see Sydney, N.S.

OXFORD.

Feb., 1918.

Oxford Electric Light and Power Company, Ltd. (Hydro Power Plant No. 1DN₁).

Address,—Oxford, N.S.

Officials,—T. S. Rogers, Halifax (Pres.); C. C. McNeil, Oxford (Mgr. Dir.); Jas. M. Stewart, Halifax (Sec.).

History,—Plant was installed in 1911 by the Oxford Electric Light Company. Present company was incorporated in November, 1916, and two new generators were installed in 1917.

Capital,—Authorized, \$100,000. Issued, \$50,000.

Capital invested in Plant and Equipment,—\$75,000.

Plant. *Official*,—S. J. Downing (Supt.).

Location,—Plant located on Philip river, 2½ miles from Oxford station, Canadian Government Rys.

NOVA SCOTIA.

Oxford Electric Light and Power Company, Ltd.—Con.**Plant.—Con.**

Installation,—Plant operates under an average head of 16½ feet. Turbine—1 Samson, 56-inch, vert., single runner, 405 h.p., 96 r.p.m.; Generators—1 West., A.C., 3-phase, 60-cycle, 175 k.w., 900 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 100 k.w., 900 r.p.m., total 275 k.w.; Exciters—1 generator, 7½ k.w., 1,150 r.p.m., 1 generator, 3½ k.w., 1,150 r.p.m.; Auxiliary Plant—1 Robb, reciprocating steam engine, 125 h.p.

Power. *Transmission Line*,—3½ miles of wooden pole line serves the municipality of Oxford.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys.

PARRSBORO.

Municipality of Parrsboro. (Fuel Power Plant No. 1DK₁). Feb., 1918.

Officials,—H. T. Smith (Clerk); J. W. Beckwith (Gen. Mgr.).

History,—Plant installed in 1898, with an additional unit in 1901.

Capital invested in Plant and Equipment,—\$18,960.

Plant. *Official*,—Jules Choisset (Supt.).

Location,—Plant located in Parrsboro, N.S.

Installation,—Boiler—1 Robb, 250 h.p.; Steam Engines—2 Robb, reciprocating, 70 h.p. each, total 140 h.p.; Generators—1 R. E. Co., A.C., 2-phase, 133-cycle, 50 k.w., 1,300 r.p.m., 1 Warren, A.C., single-phase, 133-cycle, 45 k.w., 1,300 r.p.m., total 95 k.w.

Power. *Local distribution lines* serve the municipality of Parrsboro.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Cumberland Ry., and Minas Basin and Bay of Fundy navigation.

PICTOU.

Municipality of Pictou. (Fuel Power Plant No. 1DP₂). Nov., 1918.

Official,—Fred. McKaracher (Clerk).

History,—Plant installed in 1904.

Capital invested in Plant and Equipment,—\$61,600.

Plant. *Location*,—Plant located in Pictou, N.S.

Installation,—Boilers—3 return tubular, 125 h.p. each; Steam Engines—1 Corliss, 290 h.p., 1 compound condensing, 289 h.p., total 579 h.p.; Generators—1 A.C., 3-phase, 60-cycle, 156 k.w., 1 A.C., 3-phase, 60-cycle, 125 k.w., total 281 k.w.

Power. *Local distribution lines* serve the municipality of Pictou.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys. and coastal navigation.

Power rates range from 3 to 8 cents per k.w. hr., with a minimum monthly charge of \$1.

RESERVE.

Served by Cape Breton Electric Co., Ltd.; see Sydney, N.S.

RIVER HERBERT.

Served by Canada Electric Co., Ltd.; see Amherst, N.S.

SHELBURNE.

Municipality of Shelburne. (Hydro Power Plant No. 1EC₁). Feb., 1918.

Official,—M. S. Robertson (Town Clerk).

History,—Plant installed in February, 1910, with an additional unit in July, 1914.

Capital invested in Plant and Equipment,—\$33,500.

Municipality of Shelburne.—Con.

Plant. *Official.*—Gedeon Dexter (Supt.).

Location.—Plant located on Roseway river, 2½ miles from Shelburne, on Halifax and South Western Ry. (C.N.Ry.).

Installation.—Plant operates under an average head of 29 feet. Turbines—2 S. Morgan Smith, 18-inch, hor., double runner, 200 h.p. each, 450 r.p.m., total 400 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 156 k.v.a., 900 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 188 k.v.a., 900 r.p.m., total 344 k.v.a.; Exciters—1 generator, 7 k.w., 1,800 r.p.m., 1 generator, 3½ k.w., 1,800 r.p.m.

Power. *Transmission Line.*—2 miles of wooden pole line serves the municipality of Shelburne.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Halifax and South Western Ry., and coastal navigation.

SHUBENACADIE.

Served by Stewiacke Electric Light and Power Co.; see Stewiacke, N.S.

SPRINGHILL.

June, 1918.

Edison Electric Light and Power Company, Ltd. (Fuel Power Plant No. 1DL₁).

Address.—Spring Hill, N.S.

Officials.—W. J. Pippy, Spring Hill (Pres.); W. H. Murray, Spring Hill (Sec.-Treas.).

History.—First unit installed 1892; additional units in 1905, 1908, and 1912.

Capital invested in Plant and Equipment.—\$37,413.

Plant. *Location.*—Plant located in Spring Hill, N.S.

Installation.—Boilers—2 Robb, 150 h.p. each, total 300 h.p.; Steam Engines—1 Leonard Ball, reciprocating, 60 h.p.; 1 McIntosh & Seymour, reciprocating, 150 h.p., 1 Robb, reciprocating, 300 h.p., total 510 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 187 k.w., 164 r.p.m., 1 Can. Gen. Elect., A.C., single-phase, 60-cycle, 120 k.w., 900 r.p.m., 1 Bullock, A.C., single-phase, 60-cycle, 45 k.w., 1,200 r.p.m., total 352 k.w.

Power. *Local distribution lines* serve the municipality of Spring Hill.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Cumberland Railway and Coal Company Ry.

STELLARTON.

Pictou County Electric Company, Ltd. (Fuel Power Plant No. 1DP₁). March, 1918.

Address.—Stellarton, N.S.

Officials.—Chas. A. Flaherty, Boston, Mass. (Pres); L. T. Flaherty, Stellarton (Vice-Pres. and Gen. Mgr.); W. B. Rogers, Dedham, Mass. (Sec.-Treas.)

History.—First three units installed in 1909; additional unit in 1917.

Capital invested in Plant and Equipment.—\$996,277.

Plant. *Official.*—S. Ormiston (Engr. Pwr. Sta.).

Location.—Plant located at Stellarton, N.S.

Installation.—Boilers—Total boiler capacity 1,150 h.p.; Steam Engines—2 reciprocating, 450 h.p. each, 1 reciprocating, 287 h.p., 1 reciprocating, 500 h.p., total prime power 1,687 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.w., 450 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 425 k.w., 300 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 250 k.w., 200 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.w., 150 r.p.m., total 1,275 k.w.

Power. *Transmission Lines.*—Power is transmitted to the municipalities of Westville, New Glasgow and Trenton and local distribution lines serve the municipality of Stellarton.

Use of Power.—Power is used for lighting, operation of electric railway, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Government Rys.

NOVA SCOTIA.

STEWIACKE.

Jan., 1918.

Stewiacke Electric Light and Power Company. (Fuel Power Plant No. 1DG₁).*Address*,—Stewiacke, N.S.*Officials*,—G. R. Marshall, Stewiacke (Pres. and Mng. Dir.); N. B. Marshall, Stewiacke (Sec.).*History*,—Plant installed in 1910.*Capital invested in Plant and Equipment*,—\$12,000.**Plant.** Plant located in Stewiacke, N.S.*Installation*,—Steam Engines—2 reciprocating, 100 h.p. and 60 h.p., total 160 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 50 k.w., 1,250 r.p.m.**Power.** *Local distribution lines* serve the municipalities of Stewiacke, Shubenacadie and Milford.*Use of Power*,—Power is used for lighting only.*Power is delivered* adjacent to Canadian Government R.**SYDNEY.**

June, 1918.

Cape Breton Electric Company, Ltd., controls the Sydney and Glace Bay Railway Co., Ltd.*Address*,—Head Office, 147 Milk St., Boston, Mass.; Local Office, Esplanade, Sydney, N.S.*Directors*,—A. Stuart Pratt, F. S. Pratt, H. G. Bradler, J. C. Rice, A. Forbes, J. W. Hallowell, W. Hunnewell, Jr., R. Robb, N. H. Stone, E. S. Webster, all of Boston, Mass., and C. A. Stone, New York.*Officials*,—A. Stuart Pratt, Boston, Mass. (Pres.); F. S. Pratt, Boston, Mass. (Vice-Pres.); W. T. Crawford, Boston, Mass. (Sec.); H. B. Sawyer, Boston, Mass. (Treas.); C. C. Curtis, Sydney, N.S. (Manager).*History*,—The company was incorporated under an Act of the Provincial Legislature in 1900. Original plant was installed in 1912. Present units were installed in 1911. The Commercial Street plant in North Sydney is now used as a sub-station and only generates power as an auxiliary plant for peak load purposes. Besides lighting several municipalities, the company operates the ferry between Sydney and North Sydney and an interurban line between North Sydney and Sydney Mines. It also operates a 19-mile interurban line between Sydney and Glace Bay under a 99-year lease. Franchises expire in 1931 and 1932.*Capital*,—Authorized, \$2,000,000. Issued, \$1,359,000.*Capital invested in Plant and Equipment*,—\$2,960,526.**Plants.** *Officials*,—A. C. Webber (Ch. Engr.); J. B. Bulley (Supt. of Ry.); C. J. Campbell (Supt. of Distbn.); T. G. Sharpe (Master Mech.).**Townsend Street Plant.** (Fuel Power Plant No. 1FJ₆).*Location*,—Plant located on Townsend St., Sydney, Cape Breton, N.S.*Installation*,—Boilers—6 Robb, horizontal return tubular, 900 h.p.; Steam Engines—3 reciprocating, 450 h.p. each; Steam Turbines—1 at 670 h.p., total Prime Power 2,020 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 300 k.w., 100 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 300 k.w., 450 r.p.m., 1 Allis-Chalmers, A.C., 2-phase, 60-cycle, 500 k.w., 3,600 r.p.m., 1 Can. Gen. Elect., D.C., 300 k.w., 720 r.p.m., 1 Can. Gen. Elect., D.C., 300 k.w., 100 r.p.m., total 1,400 k.w. and 600 k.v.a.; Transformers—4 step-up at 1,000 k.w. each.**Commercial Street Plant.** (Fuel Power Plant No. 1FJ₄), now used as auxiliary plant.*Location*,—Plant located in North Sydney, Cape Breton, N.S.

NOVA SCOTIA.

Commercial Street Plant.—Con.

Installation.—Boilers—2 Robb Mumford and 1 return tubular, total 400 h.p.; Steam Engines—1 reciprocating, 150 h.p., 1 reciprocating, 375 h.p., total 525 h.p.; Generators—1 Ft. Wayne, D.C., 150 k.w., 550 r.p.m., 1 Crocker-Wheeler, D.C., 250 k.w., 550 r.p.m., total 400 k.w.

Power. *Transmission Lines.*—40 miles of wooden pole lines serve the municipalities of North Sydney and Reserve; also the sub-stations at Middle Lake, Bras d'Or Mines, Sydney Mines and McKay Mines.

Local distribution lines serve the municipality of Sydney.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing, operation of coal mines and general power purposes.

Power is delivered adjacent to Canadian Government Rys., Sydney and Louisburg Ry., and Bras d'Or lakes, and Ocean navigation.

Power is purchased in bulk from the Dominion Iron and Steel Co., Ltd., and the Dominion Coal Co., Ltd.

Power is sold in bulk to the municipality of Dominion.

Power rates vary from 10 to 3½ cents per k.w. hr. based on monthly consumption.

SYDNEY MINES.

Sydney Mines Electric Company. (Fuel Power Plant No. 1FJ₆). Oct., 1918.

Address.—Sydney Mines, Cape Breton, N.S.

Officials.—Hon. J. J. Murphy, St. John's, Nfld. (Pres.); Robert H. Murphy, St. John's, Nfld. (Vice-Pres. and Mag. Dir.); C. S. Egan, Sydney Mines, N.S. (Sec. and Treas.).

Capital.—Authorized, \$50,000. Issued, \$50,000.

Capital invested in Plant and Equipment.—\$77,018.

Plant. *Official.*—C. S. Boucher (Ch. Engr.).

Location.—Plant located in Sydney Mines, Cape Breton, N.S.

Installation.—Steam Engines—1 Gates, reciprocating, 100 h.p., 1 Corliss, reciprocating, 300 h.p., total 400 h.p.; Generators—1 West, A.C., 2-phase, 60-cycle, 75 k.w., 1 Allis-Chalmers, A.C., 2-phase, 200 k.w., total 275 k.w.

Power. *Power is served* to municipalities of Sydney Mines and Florence.

Power is used for lighting and general power purposes.

Power is purchased in bulk from Nova Scotia Steel and Coal Co.

Nova Scotia Steel and Coal Company. (Fuel Power Plant No. 1FJ₇). Nov., 1918.

Address.—Head Office, New Glasgow, N.S.

Officials.—Frank H. Crockard, New Glasgow, N.S. (Pres.); Col. Thos. Cantley, New Glasgow, N.S. (Chmn.); W. D. Ross, Toronto, Ont. (Vice-Pres.); L. W. Adams, New Glasgow, N.S. (Gen. Supt.); A. McColl, New Glasgow, N.S. (Sec.).

History.—Plant installed in 1903, with additional units as required. One 2,000 k.w. generator added in 1917. The plant is operated in connection with the company's steel and coal undertakings and a small amount of power is sold in bulk.

Plant. *Location.*—Plant located in Sydney Mines, N.S.

Installation.—Boilers—Total capacity, 2,965 h.p.; Steam Engines—Total capacity, 800 h.p.; Steam Turbines—Total capacity 3,970 h.p.; total prime power, 4,770 h.p.; Generators—Total capacity, 3,550 k.w.

Power. *Power is used* principally in the operation of the company's mines.

Power is sold in bulk to Sydney Mines Electric Company at Sydney Mines.

TRENTON.

Served by Picton County Electric Co., Ltd.; see Stellarton, N.S.

NOVA SCOTIA.

TRURO.

Municipality of Truro. (Fuel Power Plant No. 1DH₁). Feb., 1918.

Officials,—H. McDougall (Town Clerk); J. H. Stackford (Sec.).

History,—Plant was purchased by municipality in 1916 from the Chalmers Electric Light and Power Co.

Capital invested in Plant and Equipment,—\$66,118.

Plant. *Location*,—Plant located in Truro, N.S.

Installation—Steam Engines—5 Robb-Armstrong, reciprocating, total 545 h.p.;

Generators—1 Can. Gen. Elect., D.C., 30 k.w., 1 Can. Gen. Elect., D.C., 60 k.w., 2 Eddy, D.C., 65 k.w. each, 1 West., D.C., 75 k.w., 2 West., D.C., 30 k.w. each, 2 West., D.C., 60 k.w. each, total 475 k.w.

Power. *Local distribution lines* serve the municipality of Truro.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Government Rys. and Dominion Atlantic Ry.

The municipality also operates a fuel power plant for street lighting only. Equipment consists of two boilers of 300 h.p. total capacity, one 75 h.p. steam engine, and one 50 k.w., 3-phase, 60-cycle generator. The municipal water-works is operated in connection with this plant.

WESTVILLE.

Served by Pictou County Electric Co., Ltd.; see Stellarton, N.S.

WINDSOR.

The Windsor Electric Light and Power Company, Ltd. (Fuel Power Plant No. 1DG₂). March, 1918.

Address,—Windsor, N.S.

Officials,—E. N. Dimock, Windsor (Pres.); G. H. Curry, Windsor (Secy.).

History,—First two units installed in 1898; additional unit in 1916.

Capital invested in Plant and Equipment,—\$35,325.

Plant. *Official*,—P. J. Mosher (Supt.).

Location,—Plant located in Windsor, N.S.

Installation,—Steam Engines—2 reciprocating, total 375 h.p., 1 Ball, 80 h.p. (not in use); *Generators*—1 S.K.C., A.C., 2-phase, 60-cycle, 45 k.w., 1,150 r.p.m., 1 S.K.C., A.C., 2-phase, 60-cycle, 90 k.w., 1,150 r.p.m., 1 West., A.C., 3-phase, 125 k.v.a., 257 r.p.m.

Power. *Local distribution lines* serve the municipalities of Windsor and Falmouth.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.), and Bay of Fundy navigation.

WOLFVILLE.

Acadia Electric Light Company. (Fuel Power Plant No. 1DD₁). Feb., 1918.

Address,—Wolfville, N.S.

Officials,—D. R. Munro, Wolfville (Mgr. and Sec.); G. W. Munro, Wolfville (Treas.).

History,—Plant installed in 1899; oil engine and generator added in 1915.

Capital invested in Plant and Equipment,—\$14,466.

Plant. *Location*,—Plant located in Wolfville, N.S., adjacent to Dominion Atlantic Ry. (C.P.Ry.).

Installation,—Boiler—1 International, 130 h.p.; Steam Engine—1 Leonard, reciprocating 130 h.p.; Oil Engine—1 Stockholm, 45 h.p., total Prime Power 175 h.p.; *Generators*—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 37½ k.w., 1,200 r.p.m., total 112½ k.w.

Acadia Electric Light Company.—Con.

Power. *Local distribution lines* serve the municipality of Wolfville.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.), and Bay of Fundy navigation.

YARMOUTH.

Yarmouth Light and Power Company, Ltd. (Hydro Power Plant No. 1EA₁).

Address.—Yarmouth, N.S.

Officials.—Carl M. Pihl, Boston, Mass. (Pres. and Gen. Mgr.); Thos. I. Wiles, Boston, Mass. (Vice-Pres.); Carl T. Keller, Boston, Mass. (Treas.); A. J. Markle, Yarmouth, N.S. (Asst. Mgr.); D. B. Stoneman, Yarmouth, N.S. (Supt.).

History.—Steam plant installed in 1890, with an additional unit in 1914. Hydro plant installed in 1908, and steam plant used as auxiliary.

Capital invested in Plant and Equipment.—\$169,072.

Plant. *Official.*—J. C. Ross, Yarmouth (Supt. and Ch. Eng.).

Location.—Hydraulic plant located at Carleton on Carleton Branch of Tusket river. Steam plant located in Yarmouth.

Installation.—Plant operates under an average head of 26.5 feet; Turbine—1 S. Morgan Smith, 33-inch, hor., double runner, 350 h.p., 330 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.w., 330 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., 3-phase, water-cooled, primary 2,200 v., secondary 22,000 v., 100 k.v.a. each; Steam Auxiliary Plant—1 Leonard, reciprocating, steam engine, 100 h.p., 1 B. J. Iron Co., reciprocating steam engine, 150 h.p., 1 Nash gas engine, 80 h.p., total 330 h.p.; Generators—1 A.C., 125 k.w. and 1 D.C., 150 k.w., belted to steam units. 1 A.C., 100 k.w., and 1 D.C., 100 k.w. belted to gas unit.

Power. *Transmission Lines.*—17 miles of wooden pole lines serve the municipalities of Yarmouth and Hebron.

Use of Power.—Power is used for lighting, operation of electric railway, and general power purposes.

Power is delivered adjacent to Dominion Atlantic Ry. (C.P.Ry.), Halifax and South Western (C.N.Ry.), and ocean navigation.

The company contemplates installing an additional turbine of 600 h.p. capacity.

ONTARIO.**ACTON.**

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

AILSA CRAIG.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

ALDRESHOT.

Served by Dominion Power & Transmission Co., Ltd.; see Hamilton, Ont.

ALEXANDRIA.

Municipality of Alexandria. (Fuel Power Plant No. 2MC₁). July, 1918.

Officials.—George Simon (Mayor); Sam. Macdonnell (Town Clerk); R. H. Cowan (Chmn. Lt. Comn.); Albert Laurin (Comr.); Dr. H. L. Cheape (Comr.).

History.—Plant installed in 1902.

Capital invested in Plant and Equipment.—\$17,250.

ONTARIO

Municipality of Alexandria.—Con.

Plant. *Official.*—Wm. Ritchie (Engr. Pwr. Sta.).

Location.—Plant located 1½ mile east of Alexandria.

Installation.—Boilers—1 at 100 h.p., 1 at 78 h.p.; total 178 h.p.; Steam Engine—1 Laurie, reciprocating, 200 h.p.; Generator—1 Can. Gen. Elect., A.C., 2-phase, 100 k.w., 1,000 r.p.m.

Power. *Local distribution lines* serve the municipality of Alexandria.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Ry.

ALLISTON.

Alliston Electric Light Company. (Hydro Power Plant No. 2ED₃). Feb., 1918.

Address.—Alliston, Ont.

Owner.—W. J. Cunningham, Alliston, Ont.

History.—Original plant installed in 1899; present turbine installed in 1903.

Capital invested in Plant and Equipment.—\$28,000.

Plant. *Location.*—Plant located on Boyne river.

Installation.—Plant operates under an average head of 16½ feet; Turbine—1 Chas. Barber, 50-inch, vert., 150 h.p., 100 r.p.m.; Generator—1 Royal Elect., A.C., single-phase, 133-cycle, 60 k.w., 1,333 r.p.m.; Auxiliary Plant—1 Goldie & McCullough, reciprocating steam engine, 150 h.p.; Exciter—1 generator, 1 k.w., 1,800 r.p.m.

Power. *Local distribution lines* serve the municipality of Alliston.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Grand Trunk Ry.

Served also by—

Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

ALMONTE.

Municipality of Almonte. (Hydro Power Plant No. 2KF₃). Feb., 1918.

Officials.—J. T. Kirkland (Clerk); P. A. Greig (Treas.); C. W. Young (Chmn. Comn.); R. L. McDonald (Sec. Comn.).

History.—Plant installed in 1900; present turbine installed in 1904. The plant was remodelled and the present generator installed in 1916.

Capital invested in Plant and Equipment.—\$50,500.

Plant. *Official.*—Duncan Forgie (Ch. Engr. Mgr.).

Location.—Plant located on Mississippi river in Almonte.

Installation.—Plant operates under an average head of 25 feet; Turbine—1 Chas. Barber, 42-inch, hor., double runner, 336 h.p., 157 r.p.m.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 250 k.w., 257 r.p.m.; Exciter—1 generator, 13 k.w., 1,100 r.p.m.

Power. *Local distribution lines* serve the municipality of Almonte.

Use of Power.—Power is used for lighting, and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

ALTON.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

Served by Cataract Electric Co., Ltd.; see Orangeville, Ont.

ALVINSTON.

Alvinston Power Company. (Fuel Power Plant No. 2GG₁). May, 1918.

Address.—Alvinston, Ont.

Directors.—H. A. Gilroy, Alvinston; D. C. Munro, Alvinston; Robt. McLaughlin's Estate, Alvinston; M. Harkness, Alvinston; Mrs. F. B. Gilroy, Alvinston; F. C. Rilett, Alvinston; T. Gordon, Sarnia.

Officials.—H. A. Gilroy, Alvinston (Pres.); D. C. Munro, Alvinston (Vice-Pres.); F. C. Rilett, Alvinston (Sec.-Treas. and Gen. Mgr.).

Alvinston Power Company.—Con.

History.—Company incorporated in 1904.

Capital.—Authorized, \$40,000. Issued, \$11,400.

Capital invested in Plant and Equipment.—\$11,400.

Plant. *Location*.—Plant located in Alvinston, Ont.

Installation.—Boiler—1 at 80 h.p.; Steam Engine—1 reciprocating, 60 h.p.;

Generator—1 D.C., 35 k.w., 1,050 r.p.m.

Power. *Local distribution lines* serve the municipality of Alvinston.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry.

AMHERSTBURG.

Served by Essex County Light and Power Co., Ltd.; see Leamington, Ont.

ANDREWSVILLE.

Served by the Kemptville Milling, Light, Heat and Power Co., Ltd.; see Kemptville, Ont.

ARKONA.

Rock Glen Power Company, Ltd. (Hydro Power Plant No. 2FF₁). June, 1918.

Address.—Arkona, Ont.

Directors.—J. L. Fuller, J. L. Huffman, M.D.; J. Geo. Brown, W. J. Fuller, C. W. Lucas, Fred. Patterson, W. G. Hall

Officials.—John L. Fuller, Arkona (Pres.); W. J. Fuller, Arkona (Mgr. Dir.); Fred. Nelson, Arkona (Sec.-Treas.)

History.—Plant installed in 1907.

Capital.—Authorized, \$40,000. Issued, \$14,400.

Capital invested in Plant and Equipment.—\$18,000.

Plant. *Official*.—Wm. Woolvett, Sr. (Engr. Pwr. Sta.)

Location.—Plant located on Ausable river, 7 miles from Thedford station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 12 feet. Turbines—2 Chas. Barber, 42-inch, vert., single runner, 57½ h.p. each, 100 r.p.m., total 115 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.; Exciter—1 generator, 3.5 k.w., 1,125 r.p.m.

Power. *Local distribution lines* serve the municipality of Arkona.

Use of Power.—Power is used for lighting and operation of flour mill.

ARNPRIOR.

Served by the Galetta Electric Power and Milling Company, Ltd.; see Galetta, Ont.

ARTHUR.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

ATHERLEY.

Served by municipality of Orillia; see Orillia, Ont.

AURORA.

Served by Toronto and York Radial Railway Co., with power purchased through Toronto Power Co., Ltd., from Electrical Development Company of Ontario, Ltd.; see Niagara Falls, Ont.

AVENING.

Avening Chop Mill. (Hydro Power Plant No. 2ED₁). July, 1918

Address.—Avening, Ont.

Owner.—Mrs. Jean Carruthers.

History.—First turbine installed in 1880; second turbine installed in 1907; generator installed in 1910.

Capital invested in Plant and Equipment.—\$4,200.

ONTARIO.

Avening Chop Mill.—Con.

Plant. *Official*,—D. C. Carruthers, Avening (Mgr.).

Location,—Plant located on Mad river near Avening, one-half mile from Grand Trunk Ry.

Installation,—Plant operates under an average head of 8 feet; Turbines—1 Leffel, 30-inch, vert., double runner, 15 h.p., 200 r.p.m.; 1 Leffel, 35-inch, vert., double runner, 20 h.p., 200 r.p.m., total 35 h.p.; Generator—1 Toronto and Hamilton Elect., D.C., 25 k.w. 850 r.p.m.

Power. *Local distribution lines* serve the municipality of Avening.

Use of Power,—Power is used for lighting, operation of grist mill, and general farm purposes.

Power is delivered adjacent to Grand Trunk Ry.

AYLMER.

Municipality of Aylmer. (Fuel Power Plant No. 2GC₁). May, 1918.

Officials,—H. H. Wright (Mayor); D. C. Davies (Town Clerk).

Capital invested in Plant and Equipment,—\$30,000.

Plant. *Official*,—J. L. Millard (Supt.).

Location,—Plant located in town of Aylmer.

Installation,—Steam Engines—2 reciprocating, 100 h.p. each, total 200 h.p.; Generator—1 Can. Gen. Elect., A.C., 60-cycle, 100 k.w., 600 r.p.m.

Power. *Local distribution lines* serve the municipality of Aylmer.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

The Hydro-Electric Power Commission of Ontario will supply the municipality with power in 1918.

AYR.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

AYTON.

Wenger Milling Company. (Hydro Power Plant No. 2FC₆). June, 1918.

Address,—Ayton, Ont.

Owner,—Estate of Aaron Wenger.

Official,—Robt. Wenger, Ayton (Mgr.).

History,—The plant is operated in connection with a grist mill of which it forms part. The turbine was installed in 1906 and the generators in January, 1917, and February, 1918.

Capital invested in Plant and Equipment,—\$950.

Plant. *Location*,—Plant located on Saugeen river, three-quarters of a mile from Ayton station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 17½ feet; Turbine—1 J. C. Wilson, 12-inch, vert., Little Giant, 10 h.p., 240 r.p.m.; Generators—1 West., D.C., 10 k.w., 1,600 r.p.m.

Power. *Local distribution lines* serve the municipality of Ayton.

Use of Power,—Power is used for lighting and operation of grist mill.

BADEN.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

BALA.

Jan., 1919.

Bala Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2EB₄).

Address,—Bala, Ont.

Officials,—J. W. Burgess (Pres.); A. M. Burgess (Sec.-Treas. and Mgr.).

History,—Plant installed in April, 1917.

Capital invested in Plant and Equipment,—\$25,000.

Bala Electric Light and Power Company, Ltd.—Con.

Plant. *Official*,—John A. Moore (Gen. Supt.).

Installation,—Plant operates under an average head of 8 feet; Turbine—1 Wm. Hamilton, 30-inch, hor., single runner, 160 h.p., 140 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 125 k.v.a., 900 r.p.m.; Exciter,—1 generator, 5 k.w., 1,800 r.p.m., belted to main unit.

Power. *Transmission Line*,—1½ mile of wooden pole line serves the municipality of Bala.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry., Canadian Pacific Ry., and Muskoka Lakes navigation.

The plant is designed for an additional installation of 160 h.p. capacity which will be installed when required.

BANCROFT.

Bancroft Electric Light Plant. (Hydro Power Plant No. 2KD₁). July, 1918.

Address,—Bancroft, Ont.

Owners,—R. C. Fair, Bancroft, Ont.; C. W. Mullett, Bancroft, Ont.

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$5,800.

Plant. *Official*,—Amos Hawley, Bancroft (Engr. Pwr. Sta.).

Location,—Plant located on York river, tributary to Madawaska river, one-quarter mile from Bancroft station on Canadian Northern Ry.

Installation,—Plant operates under an average head of 15 feet. Water is conveyed from dam to power-house by wooden flume. Turbines—1 Wm. Hamilton, 40-inch, vert., Leffel, single runner, 40 h.p., 1 Jos. Hall, 35-inch, vert., Leffel, single runner, 35 h.p., total 75 h.p.; Generator—1 Jones & Moore, D.C., 40 k.w., 750 r.p.m.

Power. *Transmission Lines*,—4 miles of wooden pole line serves the municipality of Bancroft.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

BARRIE.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

BEACHVILLE.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BEAMSVILLE.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

BEAVERTON.

Served by Hydro-Elect. Power Comm., Wasdell's System; see Toronto, Ont.

BEETON.

Municipality of Beeton. (Fuel Power Plant No. 2ED₁). Nov., 1918.

Officials,—Joseph Wright (Clerk); T. Hammell (Treas.); M. L. Aitken (Chmn. Comm.).

History,—Plant installed in 1898.

Capital invested in Plant and Equipment,—\$4,600.

Plant. *Official*,—A. V. Guy (Supt.).

Location,—Plant located on Main Street, Beeton, Ont.

Installation,—Boiler—1 Goldie & McCullough, 85 h.p.; Steam Engine—1 Goldie & McCullough, reciprocating, 60 h.p.; Generator—1 W. A. Johnson, A.C., single-phase, 66-cycle, 25 k.w., 1,000 r.p.m.

ONTARIO.

Municipality of Beeton.—Con.

Power. *Local distribution lines* serve the municipality of Beeton.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry., and Grand Trunk Ry.

Served also by—

Hydro Elect. Power Comm., Severn System; see Toronto, Ont.

BELLEVILLE.

Served by Hydro-Elect. Power Comm., Central Ontario System; see Toronto, Ont.

BLENHEIM.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BLIND RIVER.

Blind River Electric Plant. (Hydro Power Plant No. 2CD₁). March, 1918.

Address.—Blind River, Ont.

Owner.—Fred. Deagle, Blind River, Ont.

History.—Plant installed in 1911.

Capital invested in Plant and Equipment.—\$29,000.

Plant. *Location.*—Plant located 10 miles north of town of Blind River.

Installation.—Plant operates under an average head of 55 feet; Turbine—1 Chas. Barber, 22-inch, hor., double runner, 300 h.p., 513 r.p.m.; Generator—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 250 k.v.a., 513 r.p.m.; Exciter—1 generator, 5 k.w., 1,500 r.p.m.

Power. *Transmission Lines.*—8 miles of wooden pole line serves the municipality of Blind River.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry. and Great Lakes navigation.

BLYTH.

Municipality of Blyth. (Fuel Power Plant No. 2FE₁). May, 1918.

Official.—A. Elder (Clerk).

History.—Plant originally owned by the Molsons Bank and purchased by the municipality in 1911.

Capital invested in Plant and Equipment.—\$5,600.

Plant. *Official.*—W. Taylor.

Location.—Plant located in Blyth, Ont.

Installation.—Boilers—2 Waterous, 160 h.p.; Steam Engine—1 Leonard, reciprocating, 45 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 133-cycle, 30 k.v.a., 1,500 r.p.m.; Exciter—1 Can. Gen. Elect., 1½ k.w.

Power. *Local distribution lines* serve the municipality of Blyth.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry., and Grand Trunk Ry.

BOBCAYGEON.

Municipality of Bobcaygeon. (Hydro Power Plant No. 2HH₃). July, 1918.

Officials.—A. T. Brock (Reeve); Chas. E. Stewart (Clerk and Treas.); W. C. Moore (Chmn. Comm.); J. Lithgow (Sec.-Treas. Comm.).

History.—Original plant installed in 1906 and destroyed by fire in December, 1912. Present plant commenced operations in June, 1913.

Capital invested in Plant and Equipment.—\$25,000.

Plant. *Official.*—J. J. Thurston (Engr. Pwr. Sta.).

Location.—Plant located on Little Bob river (Upper Trent river), at Bobcaygeon on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 5 feet; Turbines—2 Williams, 56-inch, vert., single runner, 100 h.p. each, total 200 h.p.; Generator—1 Gen. Elect., A.C., 3-phase, 100 k.w., 600 r.p.m.; Exciter—(Belted to main generator shaft.)

Municipality of Bobcaygeon.—Con.

Power. *Local distribution lines* serve the municipality of Bobcaygeon.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Trent Canal navigation.

Any surplus power there is available for sale will shortly be used for the operation of a "Toy and Novelty" factory which is being established.

Additional power can be developed at this site.

BOLTON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BOTHWELL.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BOWMANVILLE.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

BRACEBRIDGE.

Municipality of Bracebridge. July, 1918.

Officials.—Alex. Walker (Mayor); A. C. Salmon (Clerk).

Plants. *Official.*—W. C. Simmons (Mgr.).

Town Plant. (Hydro Power Plant No. 2EB₁).

Capital invested in Plant and Equipment.—\$61,500.

History.—Plant installed in 1894, with additional units in 1900 and 1905.

Location.—Plant located on Muskoka river in Bracebridge.

Wilson's Falls Plant. (Hydro Power Plant No. 2EB₂).

Capital invested in Plant and Equipment.—\$53,300.

History.—Plant installed in 1911.

Location.—Plant located on Muskoka river, 1½ mile from Bracebridge.

Installation.—(Both plants combined.) Turbines—1 Kennedy, 30-inch, vert., double runner, 800 h.p., 700 r.p.m., 1 Kennedy, 25-inch, vert., double runner, 500 h.p., 700 r.p.m., 1 Jenckes, 20-inch, hor., double runner, 355 h.p., 300 r.p.m., total 1,655 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 600 k.w., 600 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 300 k.w., 400 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 250 k.w., 400 r.p.m., total 1,150-k.w.

Power. *Transmission Line.*—1 mile of wooden pole line serves the municipality of Bracebridge. The two plants operate in parallel.

The municipality operates a separate pumping plant with a total turbine capacity of 315 h.p.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Grand Trunk Ry., and Great Lakes navigation.

Power rates vary according to service from \$12.50 to \$16 per horse-power per annum.

BRADFORD.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

BRAMPTON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BRANTFORD.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

ONTARIO.

BRECHIN.

Served by Hydro-Elect. Power Comm., Wasdell's System; see Toronto, Ont.

BRESLAU.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BRIDGEBURG.

Served by Canadian Niagara Power Co., Ltd.; see Niagara Falls, Ont.

BRIGDEN.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

BRIGHTON.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

BROCKVILLE.

Municipality of Brockville. (Fuel Power Plant No. 2MB₁). Oct., 1918.

Officials,—John A. Derbyshire (Mayor); W. H. Kyle (Chmn. Comm.); Dr. H. A. Clarke (Comr.); W. B. Reynolds (Comr.); J. R. A. Laing (Comr.); Geo. K. Dewey (Town Clerk); C. A. McLean (Treas.).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$120,536.

Plant. *Official*,—J. A. Johnston (Mgr.).

Location,—Plant located on bank of St. Lawrence river and 300 feet from Canadian Pacific Ry. siding.

Installation,—Boilers—3 Babcock & Wilcox, total 850 h.p.; Steam Engines—2 Belliss & Morcom, reciprocating, 450 h.p. each, 1 Belliss & Morcom, reciprocating, 150 h.p., total 1,050 h.p.; Generators—2 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 375 k.w. each, 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 140 k.w., total 890 k.w.; Exciters—2 generators, 7.5 k.w. each, 1 generator, 3.6 k.w.

Power. *Local distribution lines* serve the municipality of Brockville.

Use of Power,—Power is used for lighting, general manufacturing, and general power purposes.

Power is delivered adjacent to Canadian Northern Ry., Canadian Pacific Ry., St. Lawrence River and Great Lakes navigation.

Power is purchased in bulk from Hydro-Electric Power Commission of Ontario.

Served also by—

Hydro-Elect. Power Comm., St. Lawrence System; see Toronto, Ont.

BRUCE MINES.

Municipality of Bruce Mines. (Fuel Power Plant No. 2CA₂). Nov., 1918.

The municipality owns a steam-power plant valued at about \$3,000, which has not been in operation since 1917. The equipment consists of one 80 h.p. boiler; one 50 h.p. steam engine and one 45 k.w. single-phase, 133-cycle generator. The municipality has under consideration the advisability of applying to the Hydro-Electric Power Commission of Ontario for a supply of power.

BRUSSELS.

Brussels Electric Light Plant. (Fuel Power Plant No. 2FE₂). April, 1918.

Address,—Brussels, Ont.

Owners,—James Thuell, Brussels, Ont.; Robt. Thuell, Brussels, Ont.

History,—Plant installed in 1903, with an addition in 1914.

Capital invested in Plant and Equipment,—\$5,000.

Plant. *Location*,—Plant located in Brussels, Ont.

Installation,—Steam Engine—1 Goldie & McCullough, reciprocating, 100 h.p.; Generator—1 Union Elect., A.C., 2-phase, 75 k.w., 1,300 r.p.m.

Brussels Electric Light Plant.—Con.

Power. *Local distribution lines* serve the municipality of Brussels.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

BURFORD.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

BURGESSVILLE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

BURKS FALLS.

The Knight Bros. Company, Ltd. (Hydro Power Plant No. 3EA₂). Mar., 1918.

Address.—Burks Falls, Ont.

Officials.—Henry Knight, Burks Falls (Pres.); Walter Sharpe, Toronto (Vice-Pres.); G. Knight, Burks Falls (Sec.); John H. Cole, Burks Falls (Gen. Mgr.).

Plant. *Official.*—J. S. Parker, Burks Falls (Supt. and Ch. Electn.).

Location.—Plant located at Burks Falls on Maganatawan river, Parry Sound District.

Installation.—Plant operates under an average head of 27 feet. The plant is operated in connection with the planing mills of the company and the turbine used in connection with the lighting plant is also used as direct power for a machine shop and a blacksmith shop. A flume conveys the water from bulk-head to power-house. Turbines—2 Chas. Barber, 36-inch, 100 h.p. each, 185 r.p.m., total 200 h.p.; Generators—2 Can. Gen. Elect., A.C., single-phase, 125-cycles, 116 k.w. each, total 232 k.w.; Exciters—2 generators belted to main generator shafts.

Power. *Local distribution lines* serve the municipality of Burks Falls.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry., and Maganatawan river navigation.

The company has also two 100-h.p. turbines installed in connection with their factory.

BURLINGTON.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

BURLINGTON JCT.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

BURRITTS RAPIDS.

Served by the Kemptville Milling, Light, Heat and Power Co., Ltd.; see Kemptville, Ont.

CACHE BAY.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

CALABOGIE.

M. J. O'Brien, Ltd. (Hydro Power Plant No. 2KE₅). Nov., 1918.

Plant. *Location.*—Plant located on Madawaska river at Calabogie, Ont.

Installation.—Plant operates under an average head of 30 feet. Turbines—3 at 3,000 h.p. each, total 9,000 h.p.; Generators—3 A.C., 3-phase, 60-cycle, 2,200 k.v.a., total 6,000 k.v.a.

Power. *Local distribution lines* serve the municipality of Calabogie.

Power is also supplied to Renfrew and Mount St. Patrick.

Power is sold in bulk to the municipality of Renfrew.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

ONTARIO.

CALEDONIA.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

CALLANDER.

Served by Hydro-Elect. Power Comm., Nipissing System; see Toronto, Ont.

CAMDEN EAST.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

CAMPBELLFORD.

Municipality of **Campbellford**. (Hydro Power Plant No. 2HK₁). Jan., 1918.

Officials,—A. E. Caddy (Chmn. Comm.); E. C. West (Town Clerk); F. W. Wood (Treas.).

History,—First units of present plant installed in 1909, additional units installed in 1911.

Capital invested in Plant and Equipment,—\$230,000.

Plant. *Official*,—James Carr (Engr. Pwr. Sta.).

Location,—Plant located at Middle falls on Trent river, 2½ miles from Campbellford station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 25 feet. Turbines—1 S. Morgan Smith, 51-inch, hor., double runner, 1,470 h.p., 150 r.p.m., 1 S. Morgan Smith, 60-inch, hor., double runner, 1,900 h.p., 120 r.p.m., total 3,370 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 750 k.v.a., 150 r.p.m., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 1,250 k.v.a., 120 r.p.m., total 2,000 k.v.a.; Exciters—1 turbine, 15-inch, 80 h.p., 550 r.p.m., 1 motor, 3-phase, 2,400 v., 1,200 r.p.m., 1 generator, 50 k.w., 1,200 r.p.m., 1 generator, 55 k.w., 550 r.p.m.; Transformers—1 bank of 3 Can. West., oil-insulated, single-phase, primary 2,400 v., secondary 4,000 v., total 1,200 k.v.a.

Power. *Transmission Line*,—2½ miles of wooden pole line serves the municipality of Campbellford.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

The entire output of the 1,250 k.v.a. generator is sold in bulk to Hydro-Electric Power Commission of Ontario.

Power is delivered adjacent to Grand Trunk Ry.

CAMP BORDEN.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

CANNINGTON.

Served by Hydro-Elect. Power Comm., Wasdell's System; see Toronto, Ont.

CARDINAL.

Served by Cardinal Electric Light Company with power supplied by Canada Starch Company.

Canada Starch Company. (Fuel Power Plant No. 2MB₂). Nov., 1918.

History,—Plant installed in 1908.

Capital invested in Plant and Equipment,—\$6,600.

Plant. *Location*,—Plant located in Cardinal, Ont.

Installation,—Steam Engines—2 reciprocating, 275 h.p. each; Generators—2 60-cycle, 125 k.v.a. each.

Power. *Local distribution lines* serve the municipality of Cardinal.

Power is sold in bulk to the Cardinal Electric Light Company for distribution.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry., and St. Lawrence river navigation.

CARGILL.

Cargill, Limited. (Hydro Power Plant No. 2FC₁). Sept., 1918.

Address,—Cargill, Ont.

Directors,—W. D. Cargill, Cargill; E. Cargill, Cargill; C. Kyle, Cargill; J. J. Donnelly, Pinkerton; W. M. Shaw, Walkerton.

Officials,—W. D. Cargill, Cargill (Pres. and Mng. Dir.); Chas. Kyle, Cargill (Sec.-Treas.).

History,—Plant formerly owned by H. Cargill & Son. Turbines installed in 1905; generator installed in 1910. The power plant is operated in connection with the company's manufacturing plant.

Capital invested in Plant and Equipment,—\$11,000.

Plant. *Officials*,—F. H. Martin, Cargill (Mgr. and Engr. Pwr. Sta.).

Location,—Plant located in Cargill, at Cargill falls on Teeswater river, one-half mile from Cargill station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 14 feet. Water is conveyed from intake dam to power-house by concrete flume. Turbine—1 Chas. Barber, 50-inch, hor., single runner, 104 h.p., 100 r.p.m.; Generator—1 Allis-Chalmers-Bullock, D.C., 85 k.w., 725 r.p.m.

Power. *Local distribution lines* serve the municipality of Cargill.

Use of Power,—Power is used for lighting and general power purposes, including operation of heading mill and foundry.

Power is delivered adjacent to Grand Trunk Ry.

CARLETON PLACE.

H. Brown & Sons. (Hydro Power Plant No. 2KF₁). July, 1918.

Address,—Carleton Place, Ont.

Partners—J. M. Brown, Carleton Place, Ont.; A. C. Brown, Carleton Place, Ont.

History,—Plant installed in 1910, and additional generator in 1913.

Capital invested in Plant and Equipment,—\$120,000.

Plant. *Official*,—J. Bennett (Ch Engr. and Electn.).

Location,—Plant located on Mississippi river, in Carleton Place, one-half mile from Canadian Pacific Ry. station.

Installation,—Plant operates under an average head of 10½ feet. Turbines—3 Leffel, 62-inch, single runner, 245 h.p. each, 80 r.p.m., total 735 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 250 k.w., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 600 r.p.m., total 400 k.w.; Exciters—3 generators, 7½ k.w. (one used as spare).

Power. *Local distribution lines* serve the municipality of Carleton Place.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The company contemplates installing an additional unit of 245 h.p.

CARLSRUHE.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

CASSELMAN.

J. N. Coupal. (Hydro Power Plant No. 2LB₃). Nov., 1918.

History,—Plant installed in 1911 and is operated in connection with a saw and grist mill.

Plant. *Location*,—Plant located on Nation river, at Casselman, Ont.

Installation,—Plant operates under an average head of 35 feet. Turbine—1 500 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 300 k.w.

Power. *Local distribution lines* serve the municipality of Casselman.

Use of Power,—Power is used for lighting and operation of flour and saw-mill.

Power is delivered adjacent to Grand Trunk Ry.

ONTARIO.

CATARACT.

Served by Cataract Electric Co., Ltd.; see Orangeville, Ont.

CHAPLEAU.

Jan., 1918.

Chapleau Electric Light and Power Company. (Hydro Power Plant No. 4LE₁).

Address,—Chapleau, Ont.

Owner,—J. McN. Austin, Chapleau, Ont.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$40,000.

Plant. *Location*,—Plant located on Kelsquashing river.

Installation,—Plant operates under an average head of 28 feet. Turbine—1 Kennedy, 30-inch, hor., double runner, 350 h.p., 375 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.v.a., 600 r.p.m.; Exciter—1 generator, 7.5 k.w., 900 r.p.m.

Power. *Transmission Line*,—4 miles of wooden pole line serves the municipality of Chapleau.

Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

CHARLTON.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

CHATHAM.

Chatham Gas Company. (Fuel Power Plant No. 2GE₂). April, 1918.

Address,—Chatham, Ont.

Officials,—J. E. Murphy, Toronto (Pres.); Arch. Park, Chatham (Vice-Pres.); P. S. Coate, Chatham (Sec.-Treas. and Mgr.).

Capital invested in Plant and Equipment,—\$308,397.

Plant. *Officials*,—F. F. Hayes, Chatham (Supt.); Ed. Grandbois, Chatham (Engr. Pwr. Sta.).

Location,—Plant located in Chatham, Ont.

Installation,—Steam Engine—1 Belliss & Morecom, reciprocating, 400 h.p.; Gas Engines—1 Belliss & Morecom, 1,000 h.p., 1 Belliss & Morecom, 360 h.p., 1 Belliss & Morecom, 125 h.p., 1 Belliss & Morecom, 85 h.p., total prime power, 1,970 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 275 k.w., 360 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 50 k.w., 900 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 666 k.w., 150 r.p.m., 1 Can. Gen. Elect., D.C., 250 k.w., 752 r.p.m., 1 Can. Gen. Elect., D.C., 250 k.w., 500 r.p.m., total 1,566 k.w.

Power. *Local distribution lines* serve the municipality of Chatham.

Use of Power,—Power is used for lighting, for general manufacturing and street railway purposes.

Power is delivered adjacent to Pere Marquette Ry., Wabash Ry., Grand Trunk Ry., Canadian Pacific Ry., and Great Lakes navigation.

Served also by—

Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

CHATSWORTH.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

CHESLEY.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

CHESTERVILLE.

Served by Hydro-Elect. Power Comn., St. Lawrence System; see Toronto, Ont.

CHIPPAWA.

Served by Canadian Niagara Power Co., Ltd.; see Niagara Falls, Ont.

ONTARIO.

CLARKSBURG.

Clarksburg Electric Plant. (Hydro Power Plant No. 2FB₁). March, 1918.

Address,—Clarksburg, Ont.

Owner,—Geo. Clendenan.

History,—Plant installed in December, 1912.

Capital invested in Plant and Equipment,—\$11,500.

Plant. *Location*,—Plant located on Beaver river.

Installation,—Plant operates under an average head of 15 feet. Turbine—1 Chas. Barber, 52-inch, hor., 50 h.p., 90 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 75 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Clarksburg.

Use of Power,—Power is used for lighting and general power purposes.

The owner has about completed a new plant of 200 h.p. capacity.

CLINTON.

Served by Hydro-Elect. Power Conn., Niagara System; see Toronto, Ont.

COBALT.

Northern Ontario Light and Power Company, Ltd.

Address,—Head Office, Toronto, Ont. General Office, Cobalt, Ont.

Directors,—David Fasken, K.C., Toronto; F. O. Blackwell, C.E., New York; Alexander Fasken, Toronto; O. B. Willeox, New York; Edwin Hanson, Montreal; Wm. Hanson, Montreal; W. H. Brouse, Toronto.

Officials,—David Hasken, K.C., Toronto (Pres.); F. O. Blackwell, C.E., New York (Vice-Pres.); D. G. Allen, Cobalt (Gen. Mgr.); Jas. Atkinson, Toronto (Sec. and Treas.); H. A. Seymour, Cobalt (Acct.); G. A. Halsey, Cobalt (Gen. Supt.); R. T. Anderson, Cobalt (Asst. to Gen. Mgr.).

Capital,—Authorized, \$7,500,000. Issued, \$6,985,000.

First Mortgage Bonds,—Authorized, \$15,000,000. Issued, \$4,606,000.

Expenditure on Capital Account,—\$12,459,687.

Plants.

Hound Chutes Plant. (Hydro Power Plant No. 2JD₁).

History,—First three units installed in 1910 by the Cobalt Power Company, Ltd. This plant commenced supplying power in 1910 and was acquired by the Northern Ontario Light and Power Company in 1911.

Location,—Plant located on Montreal river, about 6 miles south of Cobalt and about 5 miles southeast of Gillies Depot, on the Temiskaming and Northern Ontario Ry., and is reached by road from Cobalt and by boat from Gillies Depot.

Installation,—Plant operates under an average head of 32½ feet. A partially excavated head-race, following the old river bed, 1,400 feet long, conveys the water from the dam to the power-house. Turbines—2 I. P. Morris, 75-inch, vert., Francis, single runner, 1,335 h.p. each, 150 r.p.m., 2 Wm. Kennedy, 75-inch, vert., Francis, single runner, 1,335 h.p. each, 150 r.p.m., total 5,340 h.p.; Generators—4 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 875 k.v.a., 150 r.p.m., total 3,500 k.v.a.; Exciters—2 Swedish Gen. Elect., vert., turbines, 100 h.p. each, 500 r.p.m., 1 Siemens motor, 3-phase, 550 v., 900 r.p.m., 1 Siemens generator, 75 k.w., 900 r.p.m., 2 Swedish Gen. Elect. generators, 60 k.w. each, 500 r.p.m.

Fountain Falls Plant. (Hydro Power Plant No. 2JD₂).

History,—Plant installed in 1914 and commenced supplying power May, 1914.

Location,—Plant located at Fountain falls, on Montreal river, 9½ miles south of Cobalt and 8½ miles southeast of Gillies Depot, on Temiskaming and Northern Ontario Ry., and is reached by road from Cobalt and by boat from Gillies Depot.

ONTARIO

Fountain Falls Plant.—Con.

Installation.—Plant operates under an average head of 30 feet. A short intake canal conveys the water from the dam to the power-house. Turbines—2 I. P. Morris, 78½-inch, vert., Francis, single runner, 1,500 h.p. each, 150 r.p.m., total 3,000 h.p.; Generators—2 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 1,250 k.v.a. each, 150 r.p.m., total 2,500 k.v.a.; Exciters—2 Swedish Gen. Elect. motors, 3-phase, 220 v., 1,200 r.p.m., 2 Swedish Gen. Elect. generators, 22 k.w. each, 1,200 r.p.m.

Matabitchouan Plant. (Hydro Power Plant No. 2JD₂).

History.—Plant installed in 1910 by the British Canadian Power Company and acquired by the Northern Ontario Light and Power Company in September, 1912.

Location.—Plant located at Matabitchouan falls, on Matabitchouan river, one-half mile above the mouth and 26 miles by Temiskaming Lake route from Haileybury station on Temiskaming and Northern Ontario Ry., and 35 miles from Timiskaming, on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 312 feet. Water is conveyed to the power-house by two 5-foot penstocks. Turbines—4 Allis-Chalmers-Bullock, 34½-inch, hor., Francis, single runner, 2,750 h.p. each, 600 r.p.m., total 11,000 h.p.; Generators—4 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,875 k.v.a. each, 600 r.p.m., total 7,500 k.v.a.; Exciters—2 Pelton turbines, 41½-inch, hor., 180 h.p. each, 475 r.p.m., 2 Allis-Chalmers-Bullock generators, 100 k.w. each, 475 r.p.m.

Charlton Plant. (Hydro Power Plant No. 2JC₁).

History.—Plant installed in 1914.

Location.—Plant located on Blanche river, 1 mile from Charlton station on Temiskaming and Northern Ontario Ry., and reached by road from Charlton.

Installation.—Plant operates under an average head of 37 feet. Turbines—2 Wm. Hamilton, 35-inch, vert., Samson, single runner, 540 h.p. each, 300 r.p.m., total 1,080 h.p.; Generators—2 A.E., A.C., 3-phase, 60-cycle, 400 k.v.a. each, 300 r.p.m., total 800 k.v.a.; Exciters—2 A.E. generators, 10 k.w. each, 1,070 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., single-phase, oil-insulated, primary 2,300 v., secondary 33,000 v., 250 k.v.a. each, 1 bank of 3 Maloney, single-phase, oil-insulated, primary 2,300 v., secondary 11,000 v., 75 k.v.a. each.

Cochrane Plant. (Fuel Power Plant No. 4MD₁). Nov., 1918.

History.—Plant installed in 1911.

Capital invested in Plant and Equipment.—\$50,000.

Location.—Plant located in Cochrane, Ont.

Installation.—Gas Producers—1 at 300 h.p. and 1 at 200 h.p., total 500 h.p.; Gas Engines—1 at 200 h.p. and 2 at 100 h.p. each, total 400 h.p.; Generators—1 at 175 k.w., 1 at 100 k.w., and 1 at 75 k.w., all 3-phase, 60-cycle, total 350 k.w.

Chester Falls Plant.

History.—This plant was installed in 1909 and consisted of one 350 h.p. turbine and one 250 k.w. generator. The company discontinued operations in 1917 and dismantled the plant.

Location.—Plant was located on Wabi river at Chester falls, 3 miles from New Liskeard.

Tagged Chutes Plant.

History.—This plant consists of a Taylor hydraulic air-compressor. It was installed by the Cobalt Hydraulic Company and acquired by Northern Ontario Light and Power Company, Ltd., in 1911. The plant is located on

ONTARIO.

Ragged Chutes Plant.—Con.

Montreal river at Ragged Chutes, 4 miles east of Johnston station, on Temiskaming and Northern Ontario Ry., and is used to supply compressed air for mining operations.

Power. *Transmission Lines.*—All plants operate in parallel and 151 miles of wooden pole lines serve the municipalities of Cobalt, Haileybury, New Liskeard, Porcupine, Timmins, Cochrane, Sturgeon Falls, Englehart, Charlton, Selkacher, South Porcupine, Cache Bay, and Kirkland Lake, as well as various mines in the district.

Power is purchased in bulk from Spanish River Pulp and Paper Mills, Ltd., and from Northern Canada Power Company, Ltd.

Power is used for lighting, general manufacturing, operation of electric railways, general power purposes, and operation of gold and silver mines.

Power is delivered adjacent to Temiskaming and Northern Ontario Ry., and Lake Timiskaming navigation.

COBDEN.

Municipality of Cobden. (Hydro Power Plant No. 2KC₄). Jan., 1918.

Officials.—G. A. Parr (Clerk and Treas.).

History.—Plant installed in 1916.

Capital invested in Plant and Equipment.—\$17,837.

Plant. *Location.*—Plant located on Gould creek below Olmsted lake.

Installation.—Plant operates under an average head of 47 feet. The water is conveyed from Olmsted lake through about 7 miles of natural channel to a pond; thence through 200 feet of canal to the gate-house; and thence through a 30-inch wood-stave pipe to the power-house. Turbine—1 Boving, 14-inch, hor., single runner, 160 h.p., 720 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.v.a., 720 r.p.m.; Exciter—1 generator, 5 k.w., 1,800 r.p.m.

Power. *Local distribution lines* serve the municipality of Cobden.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

COBOURG.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

COCHRANE.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

COLBOURNE.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

COLDWATER.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

COLLINGWOOD.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

COMBER.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

CONISTON.

The Lorne Power Co., Ltd., controlled by the Mond Nickel Company, Ltd. Jan., 1918.

Address.—Coniston, Ont.

Plants. The company operates two plants:

Spanish River Plant. (Hydro Power Plant No. 2CE₁). Located at Nairn falls, on Spanish river, near Nairn Centre.

Installation consists of a total turbine capacity of 4,800 h.p. and a total generator capacity of 3,000 k.v.a.

ONTARIO.

Vermilion River Plant. (Hydro Power Plant No. 2CF₁). Located at Wabageshik falls, on Vermilion river, four miles from Nairn Centre.

Installation consists of a total turbine capacity of 4,800 h.p. and a total generator capacity of 3,000 k.v.a.

Power. All power is sold to the Mond Nickel Company, Ltd., and is used for mining purposes.

COOKSTOWN.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

COPPER CLIFF.

The Huronian Company, Ltd. (Hydro Power Plant No. 2CE₂). Plant operated by the Canadian Copper Company on a rental basis. Both companies are controlled by the International Nickel Company. Aug., 1918.

Address.—Head Office, Dominion Bank Building, Toronto, Ont. General Office, Copper Cliff, Ont. Local Office, High Falls, Ont.

Directors.—Britton Osler, Toronto; J. L. Agnew, Copper Cliff; Wallace Nesbitt, Toronto; Geo. C. Loves, Toronto.

Officials.—A. D. Miles, Copper Cliff (Vice-Pres.); Geo. C. Loves, Toronto (Treas.); Britton Osler, Toronto (Sec.); Jas. W. Beard, New York, N.Y. (Compt.).

History.—First two units installed in 1905; additional units installed in 1908, 1913, and 1917.

Capital.—Authorized, \$1,000,000. Issued, \$500,000.

Capital invested in Plant and Equipment.—\$1,721,028.

Plant. *Official.*—Geo. Hartman, High Falls (Supt.).

Location.—Plant located at High Falls, on Spanish river, in Sudbury county, Ont., about 3 miles from Turbine station on Canadian Pacific Ry., and Algoma Eastern Ry.

Installation.—Plant operates under an average head of 85 feet. Turbines—3 I. P. Morris, 48-inch, hor., 3,100 h.p. each, 375 r.p.m., 1 I. P. Morris, 48-inch, hor., 3,800 h.p., 375 r.p.m., 1 I. P. Morris, 88½-inch, vert., 7,500 h.p., 150 r.p.m., total 20,600 h.p.; Generators—4 Can. Crocker Wheeler, A.C., 3-phase, 25-cycle, 2,000 k.v.a. each, 375 r.p.m., 1 Can. West., A.C., 3-phase, 25-cycle, 5,555 k.v.a., 150 r.p.m., total 13,555 k.v.a.; Exciters—2 turbines, 22-inch, 320 h.p. each, 550 r.p.m., 2 generators, 200 k.w. each, 320 r.p.m. each; Transformers—6 banks of 3 Can. Crocker Wheeler, single-phase, water-cooled, primary 2,600 v., secondary 34,000 v., 2,000 k.v.a. each. Auxiliary Plant—I Nordberg reciprocating steam engine, 400 h.p., used for converters, 2 Nordberg reciprocating steam engines, 350 h.p. each, used for blast furnaces, total 1,100 h.p.

Power. *Transmission Lines.*—37 miles of wooden pole lines serve the municipality of Copper Cliff and also Creighton Mine and Crean Hill Mine.

Use of Power.—Power is used for lighting and operation of nickel and copper mines.

Power is delivered adjacent to Canadian Pacific Ry. and Algoma Eastern Ry.

The designed capacity of the existing plant is fully installed and the company has at present under advisement an additional development.

All power excepting that used for lighting purposes in Copper Cliff is utilized by the company in the operation of its mines.

CORNWALL.

St. Lawrence Power Company, Ltd. (Hydro Power Plant No. 2MC₂). July, 1918.

Address.—Cornwall, Ont.

Officials.—F. A. Stoughton (Pres.); Leighton McCarthy (Vice-Pres.); Paul B. Murphy (Sec.-Treas.).

History.—Plant installed in 1901.

Capital invested in Plant and Equipment.—\$753,999.

58553—7

ONTARIO.

St. Lawrence Power Company, Ltd.—Con.

Plant. *Official*,—D. C. F. Poste, Cornwall (Supt.).

Location,—Plant located on Cornwall canal (St. Lawrence river), one-half mile from Mille-Roches station on Grand Trunk Ry., and adjacent to St. Lawrence river navigation.

Installation,—Plant operates under an average head of 25 feet. Turbines—2 S. Morgan Smith, 36-inch, hor., five runners, 1,300 h.p. each, 180 r.p.m., total 2,600 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 1,000 k.v.a., 180 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,000 k.v.a., 180 r.p.m., total 2,000 k.v.a.; Exciters—2 turbines, 20-inch, hor., 62½ h.p. each, 285 r.p.m., 2 generators, 50 k.w. each, 285 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 2,200 v., secondary, 11,000 v., 500 k.v.a. each.

Power. *Transmission Lines*,—13 miles of wooden pole lines serve the municipalities of Mille-Roches, Moulinette, Wales, Dickinsons Landing and Cornwall.

Use of Power,—Power is used for lighting and general power purposes.

Power is sold in bulk to the Stormont Electric Company.

Power is delivered adjacent to Grand Trunk Ry., New York and Ottawa Ry., Canadian Pacific Ry., and St. Lawrence river and Great Lakes navigation.

The company has at present available for sale 1,000 h.p. from 6 p.m. to 6 a.m.

The plant is designed for an additional turbine capacity of 1,300 h.p.

Stormont Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2MC₁₀). July, 1918.

Address,—Cornwall, Ont.

Officials,—S. H. Ewing, Montreal (Pres.); A. Kingsman, Montreal (Vice-Pres.);

E. A. Mackutt, Montreal (Sec.-Treas.); C. U. Peeling, Cornwall (Mgr.).

History,—Plant installed in 1901, present generator installed in 1917. Plant at present used as auxiliary to purchased power.

Capital invested in Plant and Equipment,—\$89,138.

Plant. *Location*,—Plant located in Cornwall, on south bank of Cornwall canal.

Installation,—Plant operates under an average head of 15 feet. Turbines—2 J. C. Wilson, Little Giant, 30-inch, vert., single runner, 65 h.p. each, total 130 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.v.a., 600 r.p.m.; Exciter—1 Can. Gen. Elect. generator, 5 k.w., 600 r.p.m.

Power. *Local distribution lines* serve the municipality of Cornwall.

All power distributed is purchased in bulk from St. Lawrence Power Company, Ltd., and is received by the company in Cornwall. Company's plant used as auxiliary.

Power is used for lighting and general manufacturing.

Power is delivered adjacent to Grand Trunk Ry., Canadian Pacific Ry., New York Central Ry., and St. Lawrence River and Great Lakes navigation.

The company has at present available for sale 100 h.p.

COTTAM.

Served by Essex County Light and Power Co., Ltd.; see Leamington, Ont.

CREEMORE.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

CRYSTAL BEACH.

Served by Canadian Niagara Power Co.; see Niagara Falls, Ont.

DASHWOOD.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

DELAWARE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ONTARIO.

DELHI.

Delhi Light and Power Company, Ltd. (Hydro Power Plant No. 2GC₁). Jan., 1918.

Address,—Delhi, Ont.

Directors,—P. Quance, Delhi; S. Strant, Delhi; E. Morgan, Delhi; R. Quance, Delhi; G. H. Smith, Delhi.

Officials,—P. Quance, Delhi (Pres.); Geo. E. Quance, Delhi (Sec.-Treas. and Mgr.).

History,—Plant installed in 1906; additional units installed in 1910.

Capital invested in Plant and Equipment,—\$50,740.

Plant. *Location*,—Plant located on Big creek, about 3½ miles from Delhi station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 22½ feet. Turbines—1 Chas. Barber, 36-inch, hor., double runner, 165 h.p., 166 r.p.m., 1 Chas. Barber, 30-inch, hor., double runner, 125 h.p., 201 r.p.m., total 290 h.p.; Generators—1 Warren, A.C., 3-phase, 60-cycle, 200 k.v.a., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 55 k.v.a., 900 r.p.m., total 255 k.v.a.; Exciters—1 generator, 5 k.w., 1,150 r.p.m., 1 generator, 5½ k.w., 1,800 r.p.m.

Power. *Transmission Lines*,—3.5 miles of wooden pole line serves the municipality of Delhi.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry. and Wabash Ry.

DELTA.

Served by Lyndhurst Electric Light System; see Lyndhurst, Ont.

DESERONTO.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

DICKINSONS LANDING.

Served by the St. Lawrence Power Co., Ltd.; see Cornwall, Ont.

DORCHESTER.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

DRAYTON.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

DRESDEN.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

DRUMBO.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

DRYDEN.

Served by the Municipality of Dryden with power purchased from Dryden Pulp and Paper Company, Ltd.

Dryden Pulp and Paper Company, Ltd. (Hydro Power Plant No. 5QD₁). July, 1918.

Address,—Dryden, Ont.

Officials,—D. L. Mather, Winnipeg (Pres.); J. B. Beveridge, Dryden (Gen. Mgr.).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$102,000.

Dryden Pulp and Paper Company, Ltd.--Con.

Plant. *Official.*—F. H. Beveridge, Dryden (Supt.).

Location.—Plant located at Dryden falls, on Wabigoon river, one-eighth mile from Dryden station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 44½ feet. Water is conveyed from intake dam to power-house through 1,500 feet of 9-foot wooden penstock and 200 feet of 9-foot reinforced concrete pipe (under C.P.Ry. right of way). Turbines—2 Jas. Gordon, 42-inch, hor., double runner, 800 h.p. each, 350 r.p.m., total 1,600 h.p.; Generators—2 Lancashire, A.C., 3-phase, 60-cycle, 750 k.v.a. each, 350 r.p.m., total 1,500 k.v.a.; Exciters—Direct connected to main generator shafts.

Power. *Local distribution lines* serve the municipality of Dryden.

Use of Power.—Power is used to operate the company's pulp and paper mills (of which the plant is a part), and a small amount sold in bulk to the municipality.

DUBLIN.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

DUNDALK.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

DUNDAS.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

DUNNVILLE.

Municipality of Dunnville. (Hydro Power Plant No. 2GB₁). June, 1918.

Officials.—Geo. M. Marshall (Mayor); J. W. Holmes (Town Clerk); Chas. Stevens (Town Treas.).

History.—Turbine installed about 1897, generator installed in 1913 by Dunnville Electric Light Co., and later acquired by the municipality. The municipality will be served by the Hydro-Electric Power Commission when the transmission line from Welland is completed.

Capital invested in Plant and Equipment.—\$15,000.

Plant. *Official.*—W. E. Swartz (Mgr.).

Location.—Plant located at Dunnville falls, on Grand river, one-third mile from Toronto, Hamilton and Buffalo Ry., and 7 miles from Grand Trunk Ry.

Installation.—Plant operates under an average head of 5½ feet. Turbine—1 Leffel, 72-inch, vert., 250 h.p., 60 r.p.m.; Generator—1 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 150 k.w., 900 r.p.m.; Exciter—1 generator, 6 k.w., 1,650 r.p.m. Auxiliary Plant—1 Ferrar & Tufts gas engine, 150 h.p.

Power. *Local distribution lines* serve the municipality of Dunnville.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry., and Toronto, Hamilton and Buffalo Ry.

A new system is now in course of construction by Hydro-Electric Power Commission of Ontario which will provide power from Niagara falls, and when completed the municipality expects to have 300 horse-power available for sale at the rate of about \$33 per horse-power per annum.

DURHAM.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

DUTTON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

ONTARIO.

EGANVILLE.

J. D. McRAE. (Hydro Power Plant No. 2 KC₁₅). Nov., 1918.

History.—Plant installed in 1906.

Plant. *Location.*—Plant located on the Bonnechere river, 1½ mile below Eganville.

Installation.—Plant operates under an average head of 10 feet. Turbines—1 at 120 h.p. and 1 at 75 h.p., total 195 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 150 k.w.

Power. *Local distribution lines* serve the municipality of Eganville.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry. and Canadian Pacific Ry.

ELK LAKE.

Elk Lake Power Company. (Hydro Power Plant No. 2JD₄). Nov., 1918.

History.—Plant installed in 1910.

Capital invested in Plant and Equipment.—\$24,000.

Plant. *Location.*—Plant located on Bear creek at Elk Lake.

Installation.—Plant operates under a head of 15 feet. Turbine—1 at 350 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 100 k.w.

Power. *Local distribution lines* serve the municipality of Elk Lake.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Temiskaming and Northern Ontario Ry.

ELMIRA.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

ELMVALE.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

ELMWOOD.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

ELORA.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

EMBRO.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

ENGLEHART.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

ERIN.

Served by Cataract Electric Co., Ltd.; see Orangeville, Ont.

ESPANOLA.

Nov., 1918.

Spanish River Pulp and Paper Mills, Ltd. (Hydro Power Plant No. 2CE₃).

For details of company see under Sturgeon Falls, Ont.

History.—Plant installed in 1911 to operate the company's mills.

Plant. *Location.*—Plant located on Spanish river, at Espanola, Ont.

Installation.—Plant operates under a head of 63 feet. Turbines—3 at 1,650 h.p. each, total 4,950 h.p.; Generators—3 A.C., 3-phase, 60-cycle, 1,250 k.v.a. each, total 3,750 k.v.a.

Power. *Local distribution lines* serve the company's employees in Espanola.

Practically all the power is used in the operation of the company's mills.

ESSEX.

Served by Essex County Light and Power Co., Ltd.; see Leamington, Ont.

EXETER.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

ONTARIO.

FENELON FALLS.

Municipality of Fenelon Falls (Hydro Power Plant No. 2HH₂). June, 1918.

Officials,—E. Fitzgerald (Clerk); W. L. Robson (Treas.); J. L. Arnold (Sec.-Treas. Comm.).

Capital invested in Plant and Equipment,—\$68,250.

Plant. *Official*,—Archie Juenzies (Supt.).

Location,—Plant located between Cameron and Sturgeon lakes, on Fenelon river, about one-quarter mile from Fenelon Falls station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 23 feet. Turbine—1 Jenckes, 35-inch, hor., 600 h.p., 200 r.p.m.; Generator—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 400 k.w., 200 r.p.m.; Exciters—1 turbine, 15-inch, 600 r.p.m., 1 motor, 110 v., 600 r.p.m., 1 generator, 25 k.w., 600 r.p.m.

Power. *Local distribution lines* serve the municipality of Fenelon Falls.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry. and Trent canal navigation.

The municipality has at present available for sale about 275 h.p. at \$10 per horsepower per annum.

The plant is designed for an ultimate capacity of 1,200 h.p.

FENWICK.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

FERGUS.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

FLESHERTON.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

FLORENCE.

June, 1918.

Florence Power, Light and Milling Company. (Hydro Power Plant No. 2GG₁).

Address,—Head Office, Bothwell, Ont. Local Office, Florence, Ont.

Directors,—W. R. Walker, Detroit; C. H. Bethel, Gary, Ind.; S. P. Campbell, Bothwell; James McLean, Bothwell; W. R. Hickey, Bothwell.

Officials,—W. R. Hickey, Bothwell (Pres.); J. A. McLean, Bothwell (Sec.-Treas.).

History,—Plant installed in 1912.

Capital,—Authorized, \$5,000. Issued, \$5,000.

Capital invested in Plant and Equipment,—\$5,000.

Plant. *Location*,—Plant located in Florence at Florence falls on Sydenham river.

Installation,—Plant operates under an average head of 7 feet. Turbine—1 48-inch, hor., 20 h.p.; Generator—1 A.C., 20 k.w. Auxiliary Equipment—1 International gas engine, 15 h.p.

Power. *Local distribution lines* serve the municipality of Florence.

Use of Power,—Power is used for lighting. The company's grist mill adjoins the power-house, from which the power is received by shaft connection.

FONTHILL.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

FOREST.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

FORMOSA.

Served by Formosa Electric Light Co., Ltd., with power purchased from Walkerton Electric Light and Power Co., Ltd.; see Walkerton, Ont.

FORT ERIE.

Served by Canadian Niagara Power Co., Ltd.; see Niagara Falls, Ont.

ONTARIO.

FORT FRANCES.

July, 1918.

Ontario and Minnesota Power Company, Ltd. (Hydro Power Plant No. 5PC₁).
Controlled by Minnesota and Ontario Power Company and affiliated with Fort
Frances Pulp and Paper Company, Ltd.

Address,—Fort Frances, Ont.

Directors,—E. W. Backus, Minneapolis; S. W. Backus, International Falls; B. G.
Dalberg, International Falls.

Officials,—E. W. Backus, Minneapolis, Minn., U.S.A. (Pres.); S. W. Backus,
International Falls, Minn., U.S.A. (Vice-Pres.); B. G. Dalberg, International
Falls, Minn., U.S.A. (2nd Vice-Pres.); Thos. McLaren, Fort Frances, Ont.
(Sec.); W. F. Brooks, Minneapolis, Minn., U.S.A. (Treas.).

History,—Plant completed in 1910. Company incorporated under the Ontario
Companies Act, February, 1905.

Capital,—Authorized, \$3,000,000. Issued, \$250,500.

Plant. *Location*,—Plant located in Fort Frances at Koochiching falls on Rainy river.

Installation,—Plant operates under an average head of 28 feet. Turbine—4 Holy-
oke, 36-inch, hor., Type C Hercules, four runner, 1,700 h.p. each, 212
r.p.m., total 6,800 h.p.; Generators—4 West., A.C., 3-phase, 1,250 k.v.a. each,
212 r.p.m., total 5,000 k.v.a.; Exciters—4 West. D.C. generators, 50 k.w. each,
212 r.p.m., connected to main unit.

Power. *Distribution lines* serve the municipality of Fort Frances and power is
transmitted across Rainy river to the municipality of International Falls,
Minn.

Use of Power,—Power is used principally in the operation of pulp and paper mills
and a small amount for lighting.

The company has five 1,710-horsepower turbines installed to operate pulp grinding
machinery by direct connection.

Power is sold in bulk to Fort Frances Pulp and Paper Company, Ltd., and the
municipalities of Fort Frances, Ont., and International Falls, Minn.

Power is delivered adjacent to Canadian Northern Ry., Minnesota and Inter-
national Ry., and Duluth, Winnipeg and Pacific Ry. (Branch of Can. Nor.
Ry.).

FORT WILLIAM.

Kaministiquia Power Company, Ltd. (Hydro Power Plant No. 2AB₁). June, 1918.

Address,—Head Office, Fort William, Ont.; Executive Office, 307 Power Bldg.,
Montreal, Que.

Directors,—Sir H. S. Holt, Montreal; C. R. Hosmer, Montreal; W. A. Black,
Montreal; J. E. Aldred, Montreal; F. H. Phippen, K.C., Toronto; J. S.
Norris, Montreal; W. L. Bird, Fort William.

Officials,—Sir H. S. Holt, Montreal (Pres.); C. R. Hosmer, Montreal (Vice-
Pres.); W. A. Black, Montreal (Mng. Dir.); W. L. Bird, Fort William
(Mgr. and Sec.); J. E. Norris, Montreal (Asst. Sec. and Treas.); H. S.
Kelsch, Montreal (Cons. Engr.).

History,—The company was incorporated in 1905 and commenced supplying power
in December, 1906. First two units installed in 1906, with additional units
in 1911 and 1914.

Capital,—Authorized, \$2,500,000. Issued, \$2,200,000.

Bonds,—Authorized, \$2,000,000. Issued, \$1,922,500.

Capital invested in Plant and Equipment,—\$4,608,738.

Plant. *Officials*,—W. J. Hoover, Fort William (Line and Optg. Supt.); P. R. Farrow,
Kakabeka Falls (Plant Supt.).

Location,—Plant located at Kakabeka falls on the Kaministiquia river, one-half
mile from Kakabeka Falls station on the Canadian Northern Railway and
23 miles from Port Arthur and Fort William.

ONTARIO.

Kaministiquia Power Company, Ltd.—*Con.***Plant.—*Con.***

Installation.—Plant operates under an average head of 180 feet. Turbines—3 J. M. Voith, 58-inch, hor., Francis, inward flow, 7,250 h.p. each, 1 J. M. Voith, 62½-inch, hor., Francis, inward flow, 12,500 h.p., total 34,250 h.p.; Generators—3 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 4,415 k.v.a. each, 277 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 9,375 k.v.a., 257 r.p.m., total 22,620 k.v.a.; Exciters—2 30-inch turbines, 285 h.p. each, 2 generators, 150 k.w. each, 500 r.p.m.; Transformers—4 banks of 6, Can. Gen. Elect., air-cooled, single-phase, primary 2,310 v., secondary 14,700 v., 1,475 k.v.a. each, 1 bank of 3, Can. Gen. Elect., air-cooled, single-phase, primary 2,310 v., secondary 14,700 v., 1,475 k.v.a. each; Storage Batteries—55 cells Elect. Stor. Batt., D-9, 80 amp. hrs., 110 v., to operate power-house switches, 55 cells Elect. Stor. Batt., E-11, 200 amp. hrs., 110 v., to operate forebay penstock gates, 55 cells Elect. Stor. Batt., E-11, 200 amp. hrs., 110 v., to operate sub-station switches.

Power. *Transmission Lines.*—48 miles of wooden pole lines serve the municipalities of Fort William and Port Arthur.

Use of Power.—Power is used for lighting, operation of street railway and for general industrial purposes, including the operation of pulp and paper mill, terminal grain elevators, coal plants, milling plants, shipbuilding plant and car plants.

Power is sold in bulk to the municipality of Fort William and through Hydro-Electric Power Commission of Ontario to the municipality of Port Arthur.

Power is delivered adjacent to Canadian Northern Ry., Canadian Government Rys., Canadian Pacific Ry., and the head of Great Lakes navigation.

The company has at present 100,000 horse-power available for sale; power rate \$25 per horse-power year, twenty-four hour service, and is in a position to increase the installation as the demand increases.

The company has had twelve years of operation and claims an exceptional record for continuous and dependable service and freedom from serious interruptions or power shortage.

FRANKFORD.

Served by Frankford Electric Light Company with power purchased from Canada Box Board Company, Ltd., at Frankford, Ont.

Canada Box Board Company. (Hydro Power Plant No. 2 HK_a). Nov., 1918.

The plant is located in Frankford, on Trent river, and operates under an average head of 13 feet.

Plant. *Installation.*—Total turbine capacity, 1,064 h.p., used principally in connection with the company's factory. Generator—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 75 k.w., connected to one of the turbines.

Power. Power is sold in bulk to Frankford Electric Light Company for distribution in Frankford.

FREEMAN.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

FRUITLAND.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

GALETTA.

The Galetta Electric Power and Milling Company, Ltd. (Hydro Power Plant No. 2KF₂). July, 1918.

Address.—Arnprior, Ont.

ONTARIO.

The Galetta Electric Power and Milling Company, Ltd.—Con.

Officials.—John Brennan, Arnprior (Pres.); Jas. W. Munro, Arnprior (Vice-Pres.); Thos. Moran, Arnprior (Mng. Dir.); Marlagh Sullivan, Arnprior (Sec.-Treas.).

History.—Plant installed in 1907.

Capital invested in Plant and Equipment.—\$92,973.

Plant. *Official*.—John R. Dodd, Arnprior (Supt.).

Location.—Plant located at Hubbells falls on Mississippi river, 400 yards from Galetta station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 22 feet; Turbines—1 Wm. Kennedy, 22-inch, hor., double runner, 700 h.p., 240 r.p.m., 1 Boving, 22-inch, hor., double runner, 700 h.p., 240 r.p.m., total 1,400 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle 400 k.v.a. each, 240 r.p.m., total 800 k.v.a.; Exciters—2 turbines, 50 h.p. each, 420 r.p.m., 2 generators, 30 k.w. each, 420 r.p.m.; Transformers—1 bank of 3 Can. West., single-phase, air-cooled, oil-insulated, primary 2,300 v., secondary 10,000 v., 60 k.v.a. each, 1 bank of 2 Can. West., single-phase, air-cooled, oil-insulated primary 2,300 v., secondary 10,000 v., 12.5 k.v.a. each.

Power. *Transmission Lines*.—6 miles of wooden pole lines serve the municipalities of Galetta and Arnprior.

Use of Power.—Power is used for lighting, general manufacturing, operation of mines and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Grand Trunk Ry.

The company has at present available for sale 300 h.p.; power rates range from \$20 to \$25 per horse-power per annum.

GALT.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

GANANOQUE.**Gananoque Electric Light and Water Supply Company.**

Address.—Gananoque, Ont.

Officials.—J. M. Campbell, Kingston (Pres.); L. A. Campbell, Rossland, B.C. (Vice-Pres.); B. W. Heaslep, Gananoque (Sec.-Treas.).

History.—Gananoque plant installed in 1914. Kingston Mills plant installed in 1915.

Capital.—Authorized, \$100,000. Issued, \$83,300.

Debentures.—Authorized, \$50,000. Issued, \$30,000.

Capital invested in Plant and Equipment.—\$139,692 for both plants.

Plants. *Officials*.—R. Sinclair, Gananoque (Gen. Supt.); W. Mills, Gananoque (Plant Supt.).

Gananoque Plant. (Hydro Power Plant No. 2MA₂). July, 1918.

Location.—Plant located on Gananoque river, in Gananoque, one-half mile from Grand Trunk Ry. station.

Installation.—Plant operates under an average head of 14 feet; Turbine—1 Boving, 36-inch, hor., double runner, 225 h.p., 180 r.p.m.; Generators—1 Can. Gen. Elect., D.C., 150 k.w., 180 r.p.m.; Auxiliary Plant—1 McEwen boiler, 300 h.p., 1 Inglis reciprocating steam engine, 250 h.p., 1 Can. Gen. Elect., D.C., generator, 150 k.w., 250 r.p.m.

Kingston Mills Plant. (Hydro Power Plant No. 2MA₁). July, 1918.

Location.—Plant located on Cataraqui river (part of Rideau Canal system), in Kingston Mills one mile from Grand Trunk Ry. station.

Installation.—Plant operates under an average head of 44 feet. Turbine—1 Can. Allis-Chalmers, 30-inch, hor., double runner, 900 h.p., 360 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 600 k.w., 360 r.p.m.;

ONTARIO.

Kingston Mills Plant.—Con.

Exciter—1 generator, 12½ k.w., 360 r.p.m.; Transformers—3 Can. Gen. Elect., 3-phase, air-cooled, primary, 2,300 v., secondary 13,200 v., 200 k.v.a. each.

Power. *Transmission Lines*,—20 miles of wooden pole lines serve the municipalities of Kingston and Gananoque and townships of Kingston and Pittsburg.

Use of Power,—Power is used for lighting and general power purposes, including the operation of flour mills, drop forge mills, electric welders, steamrolling ovens and numerous small industries.

Power is sold in bulk to the municipality of Kingston.

Power is delivered adjacent to Grand Trunk Ry., Canadian Pacific Ry., Canadian Northern Ry., Rideau Canal, Great Lakes, and St. Lawrence River navigation.

The company has made provision for an additional unit of 1,500 h.p., for peak load purposes in Kingston Mills plant.

GARSON.

Served by Lorne Power Co., Ltd.; see Coniston, Ont.

GEORGETOWN.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

GLENCOE.

Municipality of Glencoe. (Fuel Power Plant No. 2GE₁). May, 1918.

Officials,—A. J. Wright (Reeve); Chas. George (Clerk); E. T. Huston (Treas.); W. A. Currie (Sec.-Treas. Comn.).

History,—First unit installed in 1908, present generator installed in 1910.

Capital invested in Plant and Equipment,—\$14,600.

Plant. *Official*,—R. Donaldson (Ch. Engr.).

Location,—Plant located on Main Street, Glencoe, Ont.

Installation,—Gas Engine—1 producer gas, 100 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.

Power. *Local distribution* lines serve the municipality of Glencoe.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., and Wabash Ry.

GODERICH.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

GOWGANDA.

Gowganda Power Company. (Hydro Power Plant No. 2JD₅). Nov., 1918.

Address,—Gowganda, Ont.

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$68,600.

Plant. *Location*,—Plant located on East branch of Montreal river.

Installation,—Plant operates under a head of 29 feet. Turbines—2 at 400 h.p. each, total 800 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 640 k.w.

Power. All power served to Miller Lake-O'Brien mine and a small amount used for lighting; the balance used for mining.

GRAND VALLEY.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

GRANTON.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ONTARIO.

GRAVENHURST.

Served by Hydro-Elect. Power Comn., Muskoka System; see Toronto, Ont.

GRIMSBY

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

GUELPH.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

Municipality of Guelph. (Hydro Power Plant No. 2GA₁). Nov., 1918.

The plant, which is used as auxiliary to power purchased from the Hydro-Electric Power Commission of Ontario, is located on Speed river and operates under an average head of 12 feet. Turbine capacity about 100 h.p. During the past year the plant was operated only a short time.

HAGERSVILLE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

HAILEYBURY.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

HAMILTON.

July, 1918.

Dominion Power and Transmission Company, Ltd. (Hydro Power Plant No. 2HA₄).

Controls and operates The Hamilton Cataract Power, Light and Traction Company, Ltd.; The Hamilton Electric Light and Power Company, Ltd.; The Dundas Electric Company, Ltd.; Welland Electric Company, Ltd.; The Lincoln Electric Light and Power Company, Ltd.; The Western Counties Electric Company, Ltd.; Hamilton Terminal Company, Ltd.; The Hamilton Street Railway Company; The Hamilton and Dundas Street Railway Company; The Hamilton Radial Electric Railway Company; Hamilton, Grimsby and Beamsville Electric Railway Company; Brantford and Hamilton Electric Railway Company.

Address.—Terminal Bldg., Hamilton, Ont.

Directors.—Lt.-Col. J. R. Moodie, Hamilton; Cyrus A. Birge, Hamilton; James Dixon, Hamilton; Wm. C. Hawkins, Hamilton; Lloyd Harris, Brantford; Sir John M. Gibson, K.C.M.G., K.C., Hamilton; Chas. E. Neil, Montreal; Wm. E. Phin, Hamilton; Robt. Hobson, Hamilton; John Dickensen, Hamilton.

Officials.—Lt.-Col. J. R. Moodie, Hamilton (Pres.); Cyrus A. Birge, Hamilton (Vice-Pres.); Wm. C. Hawkins, Hamilton (Mng. Dir. and Sec.); E. P. Coleman, Hamilton (Gen. Mgr.); James Dixon, Hamilton (Treas.).

History.—The Cataract Power Company was formed in 1896 and the name changed to The Hamilton Electric Light, and Cataract Power Company, Ltd., in 1899. The Hamilton Cataract Power, Light and Traction Company, Ltd., was incorporated in 1903 and purchased The Hamilton Electric Light and Cataract Power Company. The Dominion Power and Transmission Company, Ltd., was incorporated under Dominion Charter, January 11, 1907, and has since acquired practically the entire stock of The Hamilton Cataract Power, Light and Traction Company, Ltd.

Capital.—Preference, Authorized \$10,000,000, Issued \$3,681,000. Ordinary, Authorized \$15,000,000, Issued \$7,714,500.

Bonds.—Authorized, \$25,000,000. Issued, \$5,260,000.

Plant. *Officials.*—Wm. Angus (Gen. Supt.); C. H. Hutton (Elect. Engr. and Supt. Steam Plant); W. Durland (Engr. Pwr. Hydro Sta.).

Location.—Hydraulic plant located at Power Glen, Decew falls, 2 miles from St. Catharines, Ont. Steam Auxiliary plant located in Hamilton.

ONTARIO.

Dominion Power and Transmission Company, Ltd.—Con.**Plant.—Con.**

Installation.—Plant operates under an average head of 263 feet. Turbines—6 J. M. Voith, hor., single runner, 6,000 h.p. each, 286 r.p.m., 1 Riva, hor., single runner, 3,000 h.p., 286 r.p.m., total 42,000 h.p.; Generators—6 West., A.C., 3-phase, 66-cycle, 6,400 k.v.a. each, 286 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 66-cycle, 2,000 k.v.a. each, 286 r.p.m., 1 West., A.C., 3-phase, 66-cycle, 2,500 k.v.a., 400 r.p.m., total 44,900 k.v.a.; Exciters—2 turbines, 40 h.p. each, 1,000 r.p.m., 1 turbine, 750 h.p., 800 r.p.m., 4 motors, 3-phase, 2,400 v., 645 r.p.m., 4 generators, 100 k.w. each, 645 r.p.m.; Transformers—1 bank of 5 West., single-phase, water-cooled, oil-insulated, primary 2,400 v., secondary 45,000 v., 2,500 k.v.a. each, 1 bank of 5 West., single-phase, water-cooled, oil-insulated, primary 2,400 v., secondary 45,000 v., 3,200 k.v.a. each, 1 bank of 6 West., single-phase, water-cooled, oil-insulated, primary 2,400 v., secondary 22,500 v., 2,000 k.v.a. each. Auxiliary Plant—2 West. steam turbines, 11,000 h.p. each, total 22,000 h.p.

Power. *Transmission Lines.*—31.6 miles of steel tower line and 156.8 miles of wooden pole lines serve the municipalities of Hamilton, Beamsville, Burlington, Brantford, St. Catharines, Welland, Dundas, Oakland, Stoney Creek, Winona, Fruitland, Burlington Jet., Freeman, Aldershot, Fonthill, Fenwick, Smithville, Grimsby and Oakville; some of which are served through subsidiary companies.

Use of Power.—Power is used for lighting, general manufacturing, operation of electric railways, operation of electro-chemical industries, and general power purposes.

Power is sold in bulk to municipalities of Oakville and Smithville.

Power is delivered adjacent to Grand Trunk Ry., Canadian Pacific Ry., and Great Lakes navigation.

The company is developing 14,000 h.p. continuously at its auxiliary steam plant in Hamilton and requires the full capacity of this plant for a period of two hours, so that no power is available for sale at present.

Served also by—

Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

HANOVER.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

HARRISTON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

HARROW.

Served by Essex County Light and Power Co., Ltd.; see Leamington, Ont.

HASTINGS.

Fowlds Company, Ltd. (Hydro Power Plant, No. 2HK₃). June, 1918.

Address.—Hastings, Ont.

Officials.—J. D. Berry, Port Perry (Pres.); C. R. Fowlds, Hastings (Gen. Mgr. and Sec.-Treas.).

History.—Original plant installed in 1891; additional turbine installed in 1897; generator installed in August, 1906.

Capital.—Authorized, \$40,000. Issued, \$20,000.

Capital invested in Plant and Equipment.—\$27,000.

Plant. *Official.*—C. R. Fowlds, Hastings (Ch. Engr.).

Location.—Plant located at Hastings, at Dam No. 14, on Trent river, and adjacent to Grand Trunk Ry. and Trent Canal navigation.

ONTARIO.

Fowlds Company, Ltd.—Con.**Plant.—Con.**

Installation.—Plant operates under an average head of 8 feet. Turbines—1 Wm. Hamilton, 58-inch, hor., single runner, 60 h.p., 100 r.p.m., 1 Leffel, 48-inch, hor., single runner, 30 h.p., 200 r.p.m., total 90 h.p.; Generator—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 150 k.w.; Exciter—1 generator, 15 k.w., 1,100 r.p.m.

Power. *Local distribution lines* serve the municipality of Hastings.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry. and Trent Canal navigation.

Additional power can be developed at this site.

HAVELOCK.

Havelock Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2HK₁). June, 1918.

Address.—Havelock, Ont.

Directors.—Geo. Young, Alex. Rose, Robt. Barlow, Dr. Jos. Holdcroft, K. P. Jack.

Officials.—Geo. Young, Toronto (Pres.); Robt. Barlow, Havelock (Vice-Pres.); Alex. Rose, Havelock (Sec.); Dr. Jos. Holdcroft, Havelock (Mgr.).

History.—Plant installed in 1903; an additional turbine installed in 1905.

Capital.—Authorized, \$20,000. Issued, \$10,875.

Capital invested in Plant and Equipment.—\$27,000.

Plant. *Location.*—Plant located at Burnt Hill falls, on North river, about 7 miles north of Havelock station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 18 feet. Water is conveyed to power-house by flume, 12 feet square and 125 feet in length, connected to a penstock 16 feet in diameter. Turbines—2 Wm. Hamilton, 23-inch, vert., Samson, single runner, 75 h.p. each, 300 r.p.m., total 150 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 135 k.w., 900 r.p.m.; Exciter—1 Can. Gen. Elect. generator, 2.5 k.w., 1,900 r.p.m. Auxiliary Plant—1 McEwen, reciprocating steam engine, 300 h.p.

Power. *Transmission Line.*—7 miles of wooden pole line serves the municipality of Havelock.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

HAWKESBURY.

Hawkesbury Electric Light and Power Company, Ltd. July, 1918.

Address.—Hawkesbury, Ont.

Directors.—James Ross, Hawkesbury; Mrs. Agnes Ross, Hawkesbury; Miss Georgiana Waddell, Hawkesbury.

Officials.—James Ross, Hawkesbury (Pres. and Mgr.); A. G. McIntosh, Hawkesbury (Sec.).

History.—Table Falls plant installed in 1902, with additional units in 1904 and 1907. Bell Falls plant installed in 1915.

Capital.—Authorized, \$100,000. Issued, \$100,000.

Bonds.—Authorized, \$250,000. Issued, \$250,000.

Capital invested in Plants and Equipment.—Both plants, \$427,352.

Plants.

Table Falls Plant. (Hydro Power Plant No. 2LC₃).

Location.—Plant located at Table falls on Rouge river, 5 miles north of Calumet station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 27 feet. The water is conveyed from intake dam to power-house through four steel penstocks, 5 feet to 9½ feet in diameter and 25 feet long; Turbines—2 Jenckes, 30-inch,

ONTARIO.

Table Falls Plant.—Con.

hor., double runner, 450 h.p. each, 225 r.p.m., 1 Wm. Kennedy, 37-inch, hor., double runner, 850 h.p., 225 r.p.m., total 1,750 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.v.a. each, 225 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 500 k.v.a., 225 r.p.m., total 1,100 k.v.a.; Exciters—1 17-inch turbine, 80 h.p., 600 r.p.m., 1 generator, 48 k.w., direct connected to exciter turbine; 1 generator, 45 k.w., 275 r.p.m., belted to main unit.

Bell Falls Plant. (Hydro Power Plant No. 210.)

Location.—Plant located at Bell falls on Rouge river, 11 miles north of Calumet station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 53 feet. The water is conveyed from intake dam to power-house through a rock tunnel, 145 feet long leading to an open flume 90 feet long, and thence through two concrete penstocks; Turbines—2 Allis-Chalmers, 52-inch, hor., double runner, 2,400 h.p. each, 277 r.p.m., total 4,800 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 2,000 k.v.a. each, 277 r.p.m., total 4,000 k.v.a.; Exciters—1 19-inch, turbine, 120 h.p., 600 r.p.m., 1 generator, 75 k.w., direct connected to exciter turbine, 1 motor-generator set, motor single-phase, 2,200 v., generator 75 k.w., 720 r.p.m.

Power. *Transmission Lines.*—17 miles of wooden pole lines serve the municipalities of Hawkesbury, Ont., West Hawkesbury, Ont., Grenville, Que., Vankleek Hill, Ont., and L'Orignal, Ont., and Riordan Pulp and Paper Co.

Use of Power.—Power is used for lighting, operation of pulp and paper-mill, general manufacturing, operation of magnesite mines and general power purposes.

Power is sold in bulk to Vankleek Hill Electric Company and K. Marsten, of L'Orignal, Ont.

Power is delivered adjacent to Canadian Northern Ry., Grand Trunk Ry., Canadian Pacific Ry., and Ottawa River navigation.

The company has at present 1,500 h.p. available for sale at rates ranging from \$25 to \$30 per h.p. per annum, and contemplates installing 2,000 h.p. additional turbine capacity at Bell Falls plant, making a total of 6,800 h.p.

HENSALL.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

HESPELER.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

HIGHGATE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

HOLSTEIN.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

HORNING'S MILLS.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

HUNTSVILLE.

Served by Hydro-Elect. Power Comn., Muskoka System; see Toronto, Ont.

INGERSOLL.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ONTARIO.

IROQUOIS.

Municipality of Iroquois. (Hydro Power Plant No. 2MB₂). April, 1918.

Officials,—D. Fink (Clerk).

History,—Present generator installed in 1917. Steam plant installed in 1901 and now used as reserve.

Capital invested in Plant and Equipment,—\$38,000.

Plant. *Officials*,—Herbert Coons (Engr. Pwr. Sta.).

Location,—Plant located in Iroquois on Williamsburg canal, St. Lawrence river, and adjacent to St. Lawrence River navigation.

Installation,—Plant operates under an average head of 12 feet. Turbines—2 J. C. Wilson, Little Giant, 44-inch, vert., double runner, 106 h.p. each, 75 r.p.m., 1 J. C. Wilson, vert., single runner, 75 h.p., total 287 h.p.; Generator—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 125 k.v.a., 1,200 r.p.m.; Exciter—1 generator, 2.5 k.w., 1,200 r.p.m. Auxiliary Plant—1 reciprocating steam engine, 40 h.p.

Power. *Transmission Line*,—3 miles of wooden pole line serves the municipality of Iroquois.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry., and St. Lawrence river and Great Lakes navigation.

Beach Hydro-Electric System. (Hydro Power Plant No. 2MB₁). July, 1918.

Address,—Iroquois, Ont.

Owner,—M. F. Beach, Iroquois, Ont.

History,—Plant installed in 1909.

Capital invested in Plant and Equipment,—\$130,000.

Plant. *Official*,—M. W. Beach, Iroquois (Mgr.).

Location,—Plant located on Williamsburg canal (Galop section).

Installation,—Plant operates under an average head of 12 feet. Turbines—2 Dayton Globe, 51-inch, vert., Improved American, single runner, 250 h.p. each, 97 r.p.m., total 500 h.p.; Generators—2 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 210 k.v.a. each, 97 r.p.m., total 420 k.v.a.

Power. *Local distribution lines* serve the municipality of Iroquois.

Use of Power,—Power is used for lighting and general power purposes.

Power is sold in bulk to Hydro-Electric Power Commission of Ontario.

Power is delivered adjacent to Grand Trunk Ry., and St. Lawrence river and Great Lakes navigation.

The plant has an ultimate designed capacity of 2,000 h.p.

IROQUOIS FALLS.

Abitibi Power and Paper Company. (Hydro Power Plant No. 4MC₁). Nov., 1918.

Address,—Head Office, Montreal, Que. Local Office, Iroquois Falls, Ont.

Officials,—F. H. Anson, Montreal (Pres.); L. R. Wilson, Montreal (Sec.);

History,—Plant installed in 1915 and operated in connection with the company's ground-wood pulp and newsprint mills.

Plant. *Location*,—Plant located on Abitibi river at Iroquois Falls.

Installation,—Plant operates under a head of 42 feet. Turbines—4 at 2,000 h.p. each, total 8,000 h.p.; Generators—4 A.C., 3-phase, 60-cycle, 1,250 k.v.a. each, total 5,000 k.v.a.

Power. Almost the entire output is used in the operation of the company's mills, only a small amount being sold for lighting in Iroquois Falls.

The company has a total installed turbine capacity of 22,500 h.p. of which 14,500 h.p. is direct connected to machinery.

KEEWATIN.

Served by the municipality of Kenora; see Kenora, Ont.

KEMPTVILLE.

Kemptville Milling, Light, Heat and Power Company, Ltd. (Hydro Power Plant No. 2LA₁). Jan., 1918.

Address,—Kemptville, Ont.

Officials,—A. A. Bowen, Kemptville (Pres.); L. T. Bowen, Kemptville (Sec.-Treas. and Mgr.).

History,—Plant installed in 1903.

Capital,—Authorized, \$100,000.

Capital invested in Plant and Equipment,—\$50,000.

Plant. *Location*,—Plant located at Andrews ville, on Rideau river.

Installation,—Plant operates under an average head of 12 feet. Turbines—2 Williams, 72-inch, hor., double runner, 150 h.p. each, 450 r.p.m., total 300 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 250 k.w., 450 r.p.m.

Power. *Transmission Lines*,—14 miles of wooden pole line serves the municipalities of Kemptville, Burritts Rapids, and Andrews ville.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry. and Rideau Canal navigation.

Served also by—

Hydro-Elect. Power Comn., Rideau System; see Toronto, Ont.

KENORA.

Municipality of Kenora. (Hydro Power Plant No. 5PE₁). July, 1918.

Officials,—J. P. Earngey (Mayor); G. E. Kent (Clerk and Treas.); S. A. Saylor (Gen. Supt.).

History,—Plant originally installed in 1892; additional units were installed in 1894 and 1896. In 1906 the original plant was removed and a new plant installed. An additional unit was added in 1912.

Capital invested in Plant and Equipment,—\$601,443.

Plant. *Official*,—C. E. McMurdie (Engr. Pwr. Sta.).

Location,—Plant located in Kenora at the Eastern Outlet from the Lake of the Woods, on the Winnipeg river, one-half mile from Kenora station on Canadian Pacific Ry.

Installation,—Plant operates under an average head of 20 feet. Turbines—4 Wm. Kennedy, 40-inch, hor., four runner, 850 h.p. each, 150 r.p.m., total 3,400 h.p.; Generators—4 Allis-Chalmers, A.C., 3-phase, 60-cycle, 625 k.w. each, 150 r.p.m., total 2,500 k.w.; Exciters—2 turbines, 20-inch, hor., 235 h.p. each, 175 r.p.m., 2 generators, 175 k.v.a. each, 175 r.p.m.

Power. *Transmission Lines*,—4 miles of wooden pole lines serve the municipalities of Kenora, Keewatin, and Norman.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes, including operation of flour mills.

Power is delivered adjacent to Canadian Pacific Ry.

The municipality has at present considerable power available for sale.

An additional turbine capacity of 1,500 h.p. is to be installed when required.

The plant is designed for an ultimate capacity of 4,500 h.p.

KINCARDINE.

Municipality of Kincardine. (Fuel Power Plant No. 2FD₂). July, 1918.

Officials,—James Malcolm (Mayor); J. H. Scougall (Clerk); Robert Ross (Treas.); B. Wood (Chmn. Comm.).

History,—Plant installed in 1894.

Capital invested in Plant and Equipment,—\$25,161.

ONTARIO.

Municipality of Kincardine.—Con.

Plant. *Official.*—A. McLachlan (Supt. and Engr. Pwr. Sta.).

Location.—Plant located on Durham street, Kincardine, Ont.

Installation.—Steam Engines—1 Goldie & McCullough, reciprocating, 125 h.p., 1 John Inglis, reciprocating, 125 h.p., total 250 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 185 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Kincardine.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Ry.

KINGSTON.

Served by Hydro-Elect. Power Comm., Central Ont. System: see Toronto, Ont.

Served by Gananoque Electric Light and Water Supply Co.; see Gananoque, Ont.

Municipality of Kingston. (Fuel Power Plant No. 2MA₁). Nov., 1918.

The plant, which is used as auxiliary to power purchased from the Hydro-Electric Power Commission of Ontario, was originally installed in 1892 and was formerly the main source of power.

Installation consists of seven return tubular boilers with a total capacity of 800 h.p.; one 670 h.p. steam turbine, and one A.C., 3-phase, 60-cycle, 500 k.w. generator.

KINGSVILLE.

Served by Essex County Light and Power Co., Ltd.; see Leamington, Ont.

KIRKLAND LAKE.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

KITCHENER.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

LAKEFIELD.

Lakefield Electric Light Company. (Hydro Power Plant No. 2HJ₂). April, 1918.

Address.—Lakefield, Ont.

Owner.—S. R. Liggett, Lakefield.

History.—Plant installed in 1909.

Capital invested in Plant and Equipment.—\$9,000.

Plant. *Official.*—S. T. Liggett, Lakefield (Engr.).

Location.—Plant located on Otonabee river, in village of Lakefield.

Installation.—Plant operates under an average head of 12 feet. Turbines—1 Leffel, 60-inch, hor., single runner, 60 h.p., 80 r.p.m., 1 Leffel, 48-inch, hor., single runner, 40 h.p., 95 r.p.m., total 100 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.; Exciter—1 generator, 15 k.w., 1,050 r.p.m.

Power. *Local distribution lines* serve the municipality of Lakefield.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry. and Trent Canal navigation.

LAMBETH.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

LANARK.

Served by Hydro-Elect. Power Comm., Rideau System; see Toronto, Ont.

LEAMINGTON.

Essex County Light and Power Company, Ltd. (Fuel Power Plant No. 2GH₂).

Controlled by Detroit Edison Company. Jan., 1918.

Address.—Leamington, Ont.

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ONTARIO.

Essex County Light and Power Company, Ltd.—Con.

Officials,—R. S. Stewart, Detroit, Mich. (Pres.); A. C. Marshall, Detroit, Mich. (Vice-Pres.); Jas. V. Oxtoby, Leamington (Sec.); M. L. Martin, Leamington (Audr.); G. B. Hayes, Leamington (Gen. Mgr.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$589,932.

Plant. *Location*,—Plant located in Sandwich, Ont.

Installation,—Steam turbine—1 at 1,000 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 750 k.w., 1,800 r.p.m.

Power. *Transmission Lines*,—55.9 miles of wooden pole lines serve the municipalities of Leamington, Kingsville, Cottam, Essex, Harrow, Amherstburg and Louis-ville.

Use of Power,—Power is used for lighting, general manufacturing, and for operation of electric railway.

Power is delivered adjacent to Michigan Central Ry., Pere Marquette Ry., and Great Lakes navigation.

The company purchases steam from Canadian Salt Company, Sandwich, Ont., for the operation of the plant.

The company purchases power from and sells power to Sandwich, Windsor and Amherstburg Railway Company.

The Hydro-Electric Power Commission of Ontario took over the distribution system of this company on June 1, 1918.

LEVACK.

Served by The Lorne Power Co., Ltd.; see Coniston, Ont.

LINDSAY.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

LISTOWEL.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

LITTLE CURRENT.

Municipality of Little Current. (Fuel Power Plant No. 2CG₁). May, 1918.

Officials,—D. M. McGilvery (Clerk); Thos. C. Sims (Treas.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$25,302.

Plant. *Location*,—Plant located in Little Current.

Installation,—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 Can. Crocker Wheeler, A.C., 2-phase, 60-cycle, 100 k.v.a., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Little Current.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Algoma Eastern Ry. and Great Lakes navigation.

LOISELLEVILLE.

Served by Essex County Light and Power Co., Ltd.; see Leamington, Ont.

LONDON.

Toronto and Niagara Power Company. (Fuel Power Plant No. 2GD₂). Includes the London Electric Company, Ltd.; controlled by The Toronto Power Company, Ltd., which is controlled by the Toronto Railway Company. Feb., 1918.

Address,—Head Office, 12 Adelaide St., East, Toronto.

Officers,—Brig.-Gen. Sir Henry M. Pellatt, Toronto (Pres.); Robt. J. Fleming, Toronto (Gen. Mgr.); H. H. Macrae, Toronto (Sec.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$809,117.

ONTARIO.

Toronto and Niagara Power Company.—Con.

Plant Official.—O. Boden, London (Engr. Pwr. Sta.).

Location.—Plant located on York St., London, Ont.

Installation.—Steam Engines—3 reciprocating, 250 h.p. each, 1 reciprocating, 500 h.p., 1 reciprocating, 1,200 h.p., total 2,450 h.p.; Generators—4 Can. Gen. Elect., A.C., single-phase, 60-cycle, 200 k.w. each, 360 r.p.m., 1 Can. Gen. Elect., A.C., single-phase, 60-cycle, 400 k.w., 360 r.p.m., 2 Can. Gen. Elect., D.C., 450 k.w. each, 300 r.p.m., 3 Can. Gen. Elect., D.C., 160 k.w. each, 230 r.p.m., total 2,580 k.w.

Power. *Local distribution lines* serve the municipality of London.

Use of Power.—Power is used for lighting, operation of electric railway, general manufacturing and for general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Michigan Central Ry., and London and Port Stanley Ry.

NOTE.—The company discontinued the operations of the plant on April 1, 1918.

Helena Costume Company. (Fuel Power Plant No. 2GD₁). May, 1918.

Address.—190 King Street, London, Ont.

Officials.—A. Little, London (Pres.); E. S. Little, London (Sec.); H. P. Elliott, London (Consulting Engr.).

History.—First unit installed in 1910, with additional unit in 1913.

Capital invested in Plant and Equipment.—\$40,000.

Plant. *Location.*—Plant located at 190 King Street, London, Ont.

Installation.—Steam Engines—1 reciprocating, 150 h.p., 1 reciprocating 350 h.p., total 500 h.p.; Generators—1 West., D.C., 75 k.w., 375 r.p.m., 1 West., D.C., 200 k.w., 375 r.p.m., total 275 k.w.

Power. *Local distribution lines* serve the municipality of London.

Use of Power.—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., London and Port Stanley Ry., and Michigan Central Ry.

The plant is designed for an ultimate capacity of 1,000 h.p.

Served also by—

Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

LONGFORD.

Served by the municipality of Orillia; see Orillia, Ont.

L'ORIGINAL.

Served by K. Marsten, with power purchased from Hawkesbury Electric Light and Power Co., Ltd.; see Hawkesbury, Ont.

LUCAN.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

LUCKNOW.

Lucknow Electric Light Plant. (Fuel Power Plant No. 2FD₁). Jan., 1918.

Address.—Lucknow, Ont.

Owner.—A. P. Stewart, Lucknow, Ont.

History.—Plant installed in 1897.

Capital invested in Plant and Equipment.—\$8,000.

Plant. *Location.*—Plant located in Lucknow, Ont.

Installation.—Steam Engine—1 reciprocating, 100 h.p.; Generators—2 Easton, D.C., 18½ k.w. each, 1,150 r.p.m.; 1 Easton, D.C., 7 k.w., 1,800 r.p.m., total 44 k.w.

Power. *Local distribution lines* serve the municipality of Lucknow.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

LYNDEN.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

LYNDHURST.

Lyndhurst Electric Light System. (Hydro Power Plant No. 2MA₁₃). Nov., 1918.

Owner,—Geo. E. Roddick, Lyndhurst, Ont.

History,—Plant installed in 1912.

Plant. *Location*,—Plant located on Gananoque river at Lyndhurst.

Installation,—Plant operates under a head of 17 feet; Turbine—1 at 200 h.p.;

Generator—1 A.C., 3-phase, 60-cycle, 30 k.w.

Power. *Transmission Lines*,—7 miles of wooden pole lines serve the municipalities of Lyndhurst and Delta.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

MADOC.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

MARKDALE.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

MARKHAM.

Municipality of Markham. (Fuel Power Plant No. 2HC₃). Jan., 1918.

Officials,—M. White (Clerk); A. P. Graham (Treas.); O. S. Hicks (Chmn. Lt. Comm.).

History,—Plant installed in 1890.

Capital invested in Plant and Equipment,—\$10,100:

Plant. *Official*,—W. A. Morrison (Ch. Engr.).

Location,—Plant located in Markham, Ont.

Installation,—Boiler—1 Goldie & McCullough, 100 h.p.; Steam Engine—1 Goldie & McCullough, reciprocating, 100 h.p.; Generator—1 Can. Gen. Elect., A.C., 2-phase, 133-cycle, 75 k.w., 1,000 r.p.m.

Power. *Local distribution lines* serve the municipality of Markham.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

MARKSVILLE.

Stone Lumber Company. (Fuel Power Plant No. 2CA₃). Nov., 1918.

History,—Plant installed in 1911.

Plant. A 30-k.w. generator is operated by the steam engines installed in connection with the mill.

Power. *Local distribution lines* serve the municipality of Marksville.

Use of Power,—Power is used for lighting.

MARMORA.

Municipality of Marmora. (Hydro Power Plant No. 2HK₅). Jan., 1918.

Officials,—H. W. Sabine (Clerk); C. A. Bleecker (Treas. and Mgr.).

History,—Plant installed in 1910.

Capital invested in Plant and Equipment,—\$6,500.

Plant. *Official*,—A. Eggleton (Ch. Engr.).

Location,—Plant located on Crow river.

Installation,—Plant operates under an average head of 12 feet; Turbine—1 Chas. Barber, 60-inch, hor., single runner, 100 h.p., 80 r.p.m.; Generator—1 Gen. Elect., A.C., single-phase, 125-cycle, 60 k.w., 1,500 r.p.m.

Power. *Transmission Line*,—4½ miles of wooden pole line serves the municipality of Marmora.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

ONTARIO.

MATTAWA.

The Mattawa Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2JE₁). July, 1918.

Address,—Mattawa, Ont.

Officials,—Dr. C. W. Haentschel, Haileybury (Pres.); Robt. Shanks, Sault Ste. Marie (Vice-Pres.); T. J. Harwood, Cobalt (Mng. Dir.); M. J. Burke, Mattawa (Gen. Mgr.); T. H. Dougall, Mattawa (Sec. Treas.).

History,—Plant installed in 1896.

Capital,—Authorized, \$30,000. Issued, \$30,000.

Capital invested in Plant and Equipment,—\$28,864.

Plant. *Official*,—E. Belanger, Mattawa (Engr. Pwr. Sta.).

Location,—Plant located at Plein Chant rapids on Mattawa river, 2½ miles from Mattawa station on Canadian Pacific Ry.

Installation,—Plant operates under an average head of 12 feet. Turbine—1 Allis-Chalmers-Bullock, 108-inch, hor., double runner, 250 h.p., 120 r.p.m.; Generator—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m.; Exciter—(Belted to main generator shaft.)

Power. *Transmission Line*,—2½ miles of wooden pole line serves the municipality of Mattawa.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The company has at present available for sale about 150 h.p.

MEAFORD.

The Georgian Bay Milling and Power Company, Ltd. (Hydro Power Plant No. 2FB₃). April, 1918.

Address,—Meaford, Ont.

Officials,—W. G. Moore, Meaford (Pres. and Mgr.); F. R. Moore, Meaford (Vice-Pres. and Sec.-Treas.).

History,—Plant installed in 1906.

Capital invested in Plant and Equipment,—\$49,000.

Plant. *Official*,—J. Weller, Meaford (Engr. Pwr. Sta.).

Location,—Plant located on Big Head river, Grey county.

Installation,—Plant operated under an average head of 43 feet. Turbine—1 Chas. Barber, 30-inch, hor., double runner, 300 h.p., 300 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m. Auxiliary Plant—1 Waterous, reciprocating steam engine, 300 h.p., 1 gas engine, 100 h.p.

Power. *Local distribution lines* serve the municipality of Meaford.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry. and Great Lakes navigation.

The plant is designed for an ultimate capacity of 400 h.p.

MELVILLE.

Served by Cataract Electric Co., Ltd.; see Orangeville, Ont.

MERLIN.

Merlin Electric Light Plant. (Fuel Power Plant No. 2GE₃). Nov., 1918.

Owner,—James McHardy, Merlin, Ont.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$5,000.

Plant. *Location*,—Plant located in Merlin, Ont.

Installation,—Gas Engine—1 at 50 h.p.; Generator—1 D.C., 40 k.w.

Power. *Local distribution lines* serve the municipality of Merlin.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Pere Marquette Ry.

MERRICKVILLE.

The Rideau Power Company, Ltd. (Hydro Power Plant No. 2LA₁₄). July, 1918.

Address,—Merrickville, Ont.

Officers,—M. G. Henniger, Smiths Falls (Pres.); Jas. S. Gould, Smiths Falls (Sec.-Treas.).

History,—Plant originally owned by the Merrickville Electric Light and Power Co. Present units installed in January, 1916.

Debenture Stock,—Authorized, \$30,000. Issued, \$30,000.

Capital invested in Plant and Equipment,—\$52,000.

Plant. *Official*,—Geo. P. McMullen (Supt.).

Location,—Plant located on Rideau river, adjacent to Rideau Canal navigation.

Installation,—Plant operates under an average head of 26½ feet. Turbine—1 Wm. Hamilton, 32-inch, hor., double runner, 750 h.p., 240 r.p.m.; Generator—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 562 k.v.a., 240 r.p.m.; Exciter—1 generator, 10.4 k.w., 240 r.p.m., direct connected to main unit.

Power. *Transmission Line*,—6 miles of wooden pole line serves the municipality of Merrickville.

Use of Power,—Power is used for lighting and general power purposes.

Arrangements are completed whereby the company will sell power in bulk through the Hydro-Electric Power Commission of Ontario to the municipalities of Smiths Falls and Perth. The Commission has transmission lines from the power-house to these municipalities.

Power is delivered adjacent to Canadian Pacific Ry.

The plant is designed for a second unit of the same capacity as that already installed, giving a total ultimate capacity of 1,500 h.p.

Served also by—

Hydro-Elect. Power Comm., Rideau System; see Toronto, Ont.

MERRITON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

MIDLAND.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

MILDMAY.

Served by Mildmay Electric Light Co., Ltd., with power purchased from Walkerton Electric Light and Power Co., Ltd.; see Walkerton, Ont.

MILLBROOK.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

MILLE ROCHES.

Served by St. Lawrence Power Co., Ltd.; see Cornwall, Ont.

MINE CENTRE.

H. C. McMahon and Company. (Fuel Power Plant No. 5PB₁). Nov., 1918.

History,—Plant installed in 1912.

Plant. *Location*,—Plant located in Mine Centre, Ont.

Installation,—Oil Engine—1 at 6 h.p.; Generator—1 D.C., 5 k.w.

Power. *Local distribution lines* serve the municipality of Mine Centre.

Use of Power,—Power is used for lighting only.

MILTON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

MILVERTON.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

ONTARIO.

MIMICO.

Served by Hydro-Elect. Power Comm., Niagara System: see Toronto, Ont.

MITCHELL.

Served by Hydro-Elect. Power Comm., Niagara System: see Toronto, Ont.

The municipality of Mitchell owns a steam power plant, used only as a standby, which contains one 120 h.p. steam engine and one A.C. 2-phase, 60-cycle, 75 k.w. generator. The waterworks plant is also installed in the power-house.

MOND.

Served by the Lorne Power Co., Ltd.; see Coniston, Ont.

MORRISBURG.

Municipality of Morrisburg. May, 1918.

Official,—F. R. Chalmers (Clerk).

History,—Plant No. 1 installed in 1908. Plant No. 2 has not been operated since 1915.

Capital invested in Plants and Equipment,—Plant No. 1, \$34,500. Plant No. 2, \$76,100.

Plant No. 1. (Hydro Power Plant No. 2MC₉).

Location,—Plant located in Morrisburg at foot of Williamsburg canal (St. Lawrence river), and adjacent to St. Lawrence River navigation.

Installation,—Plant operates under an average head of 9 feet; Turbine—1 Samson, 250 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 200 k.w., 600 r.p.m.; Exciter—1 generator, 3 k.w.

Plant No. 2. (Hydro Power Plant No. 2MC₈). Not in operation.

Location,—Plant located in Morrisburg on outer bank of Williamsburg canal, and adjacent to St. Lawrence River navigation.

Installation,—Plant operates under an average head of 10 feet; Turbines—4 hor., 250 h.p. each., 105 r.p.m., total 1,000 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 460 k.v.a., 300 r.p.m.

Power. *Local distribution lines* serve municipality of Morrisburg.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry., and St. Lawrence River navigation.

MOULINETTE.

Served by St. Lawrence Power Co., Ltd.; see Cornwall, Ont.

MOUNT ALBERT.

Mount Albert Electric Light Plant. (Fuel Power Plant No. 2EC₁). Jan., 1918.

Address,—Mount Albert, Ont.

Owners,—A. Dike, Mount Albert, Ont.; W. Dike, Mount Albert, Ont.

History,—Plant installed in 1911.

Capital invested in Plant and Equipment,—\$6,700.

Plant. *Location*,—Plant located in Mount Albert, Ont.

Installation,—Oil Engine—1 at 65 h.p.; Generator—1 D.C., 30 k.w., 1,000 r.p.m.

Power. *Local distribution lines* serve the municipality of Mount Albert.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry., and Canadian Northern Ry.

MOUNT BRYDGES.

Served by Hydro-Elect. Power Comm., Niagara System: see Toronto, Ont.

MOUNT FOREST.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

ONTARIO.

MUSKOKA FALLS.

Served by Hydro-Elect. Power Comm., Muskoka System; see Toronto, Ont.

NAPANEE.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

NEUSTADT.

Served by Hydro-Elect. Power Comm., Eganville System; see Toronto, Ont.

NEWBURGH.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

NEWCASTLE.

Served by Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

NEW HAMBURG.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

NEW LISKEARD.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

NEWMARKET.

Served by Toronto and York Radial Railway Co., with power purchased through Toronto Power Co., Ltd., from Electrical Development Company of Ontario, Ltd.; see Niagara Falls, Ont.

NEW TORONTO.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

NIAGARA FALLS.

Canadian Niagara Power Company. (Hydro Power Plant No. 2HA₂), controlled by the Niagara Falls Power Company, Niagara Falls, N.Y. Jan., 1918.

Address.—Head Office and Works,—Niagara Falls, Ont.

Directors.—Hon. Wallace Nesbitt, K.C., Toronto; A. Monroe Grier, K.C., Toronto; W. H. Brouse, Toronto; Carlton M. Smith, Buffalo, N.Y.; de Lancey Rankine, Niagara Falls, N.Y.

Officials.—Hon. Wallace Nesbitt, K.C., Toronto (Pres.); A. Monroe Grier, K.C., Toronto (Vice-Pres. and Sec.); W. Paxton Little, New York, N.Y. (Treas.); Philip P. Barton, Niagara Falls (Gen. Mgr.); C. M. Saxe, Niagara Falls (Pur. Agt.).

History.—Under agreements dated 1892, 1899 and 1901 with the Ontario Government the company placed the first unit in operation in 1904. Additional units were installed in 1913 and 1916.

Capital.—Authorized, \$3,000,000. Issued, \$2,939,600.

Debentures.—First Mortgage, Series A.—Authorized, \$3,000,000. Issued, \$3,000,000.

First Mortgage, Series B.—Authorized, \$2,000,000. Issued, \$1,980,000.

Second Mortgage, Series C.—Authorized, \$3,000,000. Issued, \$1,500,000.

Capital invested in Plant and Equipment.—\$8,524,713.

Plant. *Officials*.—L. E. Imlay (Supt.); C. C. Egbert (Engr. Pwr. Sta.).

Location.—Plant located at Niagara Falls, on Canadian side of Niagara river, in Queen Victoria Niagara Falls Park, Niagara Falls, Ont.

Installation.—Plant operates under an average head of 128 feet. Water is drawn from Niagara river, at a point about 500 feet above the crest of the Horseshoe falls through intake excavated in the left river bank and passed through penstocks to the turbines located in excavated wheel pit. Water is discharged from turbines into tailrace tunnel and is returned to the river just below the falls. Turbines—3 Escher Wyss, 64-inch, vert., Francis, double runner, 10,250 h.p. each, 250 r.p.m., 2 I. P. Morris, 64-inch, vert., Francis, double runner,

ONTARIO.

Canadian Niagara Power Company.—Con.**Plant.—Con.**

10,250 h.p. each, 250 r.p.m., 2 Beth. Steel, 64-inch, vert., Francis, double runner, 12,750 h.p. each, 250 r.p.m., 3 Wellman-Seaver-Morgan, 64-inch, vert., Francis, double runner, 10,750 h.p. each, 250 r.p.m., total 109,000 h.p.; Generators—5 Can. Gen. Elect., A.C., 3-phase, 25-cycle, 7,500 k.w. each, 250 r.p.m., 5 Can. West., A.C., 3-phase, 25-cycle, 10,400 k.w. each, 250 r.p.m., total 89,500 k.w.; Exciters—3 turbines, 35-inch, 270 h.p. each, 600 r.p.m., 8 generators, 200 k.w. each, 600 r.p.m.; Transformers—1 bank of 15 Can. Gen. Elect., 3-phase, water-cooled, primary 11,000 v., secondary 22,000 v., 1,250 k.v.a. each, 1 bank of 6 Can. West., 3-phase, water-cooled, primary 11,000 v., secondary 22,000 v., 4,375 k.v.a. each.

Power. Transmission Lines.—32 miles of steel tower line and 25.5 miles of wooden pole lines serve the municipalities of Niagara Falls, Bridgeburg, Chippawa, Fort Erie, Ridgeway, Crystal Beach, and townships of Stamford and Bertie.

Use of Power.—Power is used for lighting, operation of electric railways, operation of electro-chemical industries, general manufacturing and general power purposes.

Power is sold in bulk to Buffalo General Electric Company, Niagara Falls Power Company and Hydro-Electric Power Commission of Ontario.

Power is delivered adjacent to Michigan Central Ry., Grand Trunk Ry., Canadian Northern Ry., and Wabash Ry.

The company contemplates installing in the immediate future an additional unit of 6,000 h.p. turbine capacity. The plant is designed for an ultimate turbine capacity of 128,000 h.p.

Electrical Development Company of Ontario, Ltd. (Hydro Power Plant No. 2HIA₂). Controlled by The Toronto Power Company, Ltd. July, 1918.

Address.—Head Office, 12 Adelaide St. East, Toronto, Ont. Local Office, Niagara Falls, Ont.

Directors.—Brig. Gen. Sir Henry M. Pellatt, Toronto; Hon. Frederic Nicholls, Toronto; Sir Wm. Mackenzie, Toronto; E. R. Wood, Toronto; Robt. C. Brown, Toronto; R. J. Fleming, Toronto; D. B. Hanna, Toronto; H. H. Macrae, Toronto.

Officials.—Brig.-Gen. Sir M. Pellatt, Toronto (Pres.); Hon. F. Nicholls, Toronto (1st Vice-Pres.); Sir Wm. Mackenzie, Toronto (2nd Vice-Pres.); Robt J. Fleming, Toronto (Gen. Mgr.); J. C. Grace, Toronto (Sec.); D. H. McDougall, Toronto (Treas. and Asst. Gen. Mgr.); F. G. Clark, Toronto (Ch. Engr.).

History.—Company incorporated on February 18, 1903. First four units installed in 1906-07, with additional units in 1910 and 1914.

Capital.—Authorized, Common, \$3,016,000, Preference, \$2,993,900; Issued, Common, \$3,016,100, Preference, \$2,993,900.

Debenture Stock.—Authorized, \$10,000,000. Issued, \$9,547,000.

Capital invested in Plant and Equipment.—\$21,987,860.

Plant. Official.—N. B. Ambler (Supt.).

Location.—Plant located at Niagara Falls, in Queen Victoria Niagara Falls Park, and adjacent to Montrose Junction, Michigan Central Ry., Canadian Northern Ry., and Grand Trunk Ry.

Installation.—Plant operates under an average head of 130 feet. Turbines—4 L. P. Morris, 69-inch, vert., double runner, 14,000 h.p. each, 250 r.p.m., 7 I. P. Morris, 75½-inch, vert., double runner, 15,500 h.p. each, 250 r.p.m., total 164,500 h.p.; Generators—4 Can. Gen. Elect., A.C., 3-phase, 25-cycle, 8,000 k.w. each, 250 r.p.m., 7 Can. Gen. Elect., A.C., 3-phase, 25-cycle, 10,000 k.w. each, 250 r.p.m., total 132,000 k.w.; Exciters—2 turbines, 27½-inch, vert., 500 h.p. each, 500 r.p.m., 2 motors, 3-phase, 2,200 v., 500 r.p.m., 4 generators,

ONTARIO.

Electrical Development Company of Ontario, Ltd.—Con.

300 k.w. each, 500 r.p.m., 11 generators, 50 k.w. each, 250 r.p.m., direct connected to main units; Transformers—3 banks of 3 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 12,000 v., secondary 60,000 v., 2,670 k.v.a. each, 2 banks of 3 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 12,000 v., secondary 90,000 v.

Power. *Transmission Lines*,—79 miles of steel tower lines and 55 miles of wooden pole lines serve the municipalities of Toronto, Thorold, and Welland.

Use of Power,—Power is used for lighting, operation of electric railways, operation of electro-chemical industries, operation of pulp and paper mills, and general manufacturing and general power purposes (through Toronto Electric Light Company).

Power is sold in bulk to Toronto Electric Light Company, Ontario Power Company, and Toronto and Niagara Power Company.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., Michigan Central Ry., and Great Lakes navigation.

The total output of the plant is utilized at present.

International Railway Company. (Hydro Power Plant No. 2HA₃). July, 1918.

Address,—Head Office, Littell Bldg., Buffalo, N.Y. Local Office, Niagara Falls, Ont.

Officials,—E. G. Connette, Buffalo (Pres.); E. J. Dickson, Buffalo (Vice-Pres. and Gen. Mgr.).

History,—The International Railway Company, which is an amalgamation of the Niagara Falls Park and Railway Company and the Buffalo Railway Company, was incorporated in 1902. Plant was installed in 1893, with an additional unit in 1905.

Capital invested in Plant and Equipment,—\$454,929.

Plant. *Official*,—N. E. Dennis (Foreman).

Location,—Plant located in Queen Victoria Niagara Falls Park, near head of Horseshoe falls, and adjacent to Montrose Junction, Michigan Central Ry., and Canadian Ont. Division of International Ry.

Installation,—Plant operates under an average head of 65 feet. Turbines—1 Francis, 60-inch, vert., single runner, 2,000 h.p., 175 r.p.m., 2 Globe, 45-inch, vert., single runner, 1,000 h.p. each, 300 r.p.m., total 4,000 h.p.; Generators—1 Gen. Elect. D.C., 1,500 k.w., 175 r.p.m., 5 Gen. Elect., D.C., 200 k.w. each, 475 r.p.m., total 2,500 k.w.

Power. *Local distribution lines* serve the municipality of Niagara Falls and Queen Victoria Niagara Falls Park.

Use of Power,—Power is used for the operation of electric railways and a small amount used for lighting and for general power purposes.

Power is delivered adjacent to Michigan Central Ry., Canadian Northern Ry., and Grand Trunk Ry.

Served also by—

Hydro-Elect. Power Comn., Niagara System.; see Toronto, Ont.

NIAGARA-ON-THE-LAKE.

Served by Hydro-Elect. Power Comn., Niagara System: see Toronto, Ont.

NIPISSING.

Served by Hydro-Elect. Power Comn., Nipissing System: see Toronto, Ont.

NORMAN.

Served by the municipality of Kenora; see Kenora, Ont.

NORTH BAY.

Served by Hydro-Elect. Power Comn., Nipissing System; see Toronto, Ont.

ONTARIO.

NORWICH.

Served by Hydro-Elect. Power Comn., Niagara System: see Toronto, Ont.

NORWOOD.

Norwood Electric Light Plant. (Fuel Power Plant No. 2HJ₁). Jan., 1918.

Address,—Norwood, Ont.

Owner,—W. C. Harrison, Norwood, Ont.

History,—Plant installed in 1898.

Capital invested in Plant and Equipment,—\$3,000.

Plant. Official,—W. H. Harper (Engr. Pwr. Sta.).

Location,—Plant located in Norwood, Ont.

Installation,—Boiler—1 Can. Fdry., 80 h.p.; Steam Engine—1 Warwick, reciprocating, 70 h.p.; Generator—1 United Elect., A.C., single-phase, 133-cycle, 30 k.w., 1,000 r.p.m.

Power. *Local distribution lines* serve the municipality of Norwood.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

OAKLAND.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

OAKVILLE.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

OIL SPRINGS.

Served by Hydro-Elect. Power Comn., Niagara System: see Toronto, Ont.

OJIBWAY.

Served by Sandwich, Windsor and Amherstburg Ry.; see Windsor, Ont.

OMEMEE.

Omeme Electric Light Plant. (Hydro Power Plant No. 2III₁). Jan., 1918.

Address,—Omeme, Ont.

Owner,—W. G. Stephenson, Omeme.

History,—Plant installed in 1907.

Capital invested in Plant and Equipment,—\$3,800.

Plant. *Location*,—Plant located on Pigeon river.

Installation,—Plant operates under an average head of 6 feet; Turbines—2 Wm. Hamilton, 30-inch, vert., single runner, 30 h.p. each, 140 r.p.m.; Generator—1 Can. Gen. Elect., D.C., 25 k.w., 1,100 r.p.m.

Power. *Local distribution lines* serve the municipality of Omeme.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

Served also by—

Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

ORANGEVILLE.

Cataract Electric Company, Ltd. (Hydro Power Plant No. 2HB₁). July, 1918.

Address,—Head Office, Orangeville, Ont. Local Office, Cataract, Ont.

Officials,—J. M. Deagle, Orangeville (Pres.); F. Deagle, Blind River (Vice-Pres.); E. M. Deagle, Orangeville (Sec.-Treas.).

History,—Company incorporated in 1905; plant installed in 1895 and 1899; additional units installed in 1907 and 1916.

Capital,—Authorized, \$50,000. Issued, \$50,000.

Capital invested in Plant and Equipment,—\$50,000.

Cataract Electric Company, Ltd.—Con.

Plant. *Location.*—Plant located at Cataract falls on Credit river 18 miles from Brampton and 7 miles from Inglewood on Canadian Pacific Ry., and Grand Trunk Ry., and adjacent to the Canadian Pacific Ry.

Installation.—Plant operates under an average head of 70 ft.; Turbines—1 Chas. Barber, 24-inch, vert., single runner, 225 h.p., 400 r.p.m., 1 Chas. Barber, 20-inch, hor., single runner, 175 h.p., 600 r.p.m., total 400 h.p.; Generators—1 A.C., 3-phase, 60-cycle, 100 k.w., 600 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 600 r.p.m., total 250 k.w.; Exciters—1 generator, 12.5 k.w., 1,000 r.p.m., 1 generator, 6 k.w., 1,300 r.p.m.

Power. *Transmission Lines.*—15 miles of wooden pole lines serve the municipalities of Orangeville, Cataract, Melville, Erin and Alton.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The designed capacity of the plant is fully installed and the company has had under consideration a development to increase the head of the present plant.

Served also by—

Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ORILLIA.

Municipality of Orillia. (Hydro Power Plant No. 2EC₃). Oct., 1918.

Officials.—R. Curran (Mayor); C. E. Grant (Clerk); C. H. Hale (Chmm. Pwr. and Lt. Comn.).

History.—Original plant removed by the Dominion Government in construction of Trent canal in 1917 and present plant installed in the same year.

Capital invested in Plant and Equipment.—\$571,899.

Plant. *Officials.*—W. K. Greenwood, B.A.Sc., Orillia (Ch. Engr.); G. Page, Hydro Glen (Engr. Pwr. Sta.).

Location.—Plant located at Swift rapids, on Severn river, 2 miles from Ragged Rapids station on Canadian Northern Ry., and accessible by river navigation.

Installation.—Plant operates under an average head of 47 feet. Turbines—3 Boving, 40-inch, hor., double runner, 2,120 h.p. each, 257 r.p.m., total 6,360 h.p.; Generators—3 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,500 k.v.a. each, 257 r.p.m., total 4,500 k.v.a.; Exciters—1 Boving turbine, 16-inch, hor., 125 h.p., 700 r.p.m., 1 Can. Gen. Elect. motor, 3-phase, 2,300 v., 700 r.p.m., 2 Can. Gen. Elect. generators, 83½ k.w. each, 700 r.p.m.; Transformers—3 Can. Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 2,300 v., secondary 23,000 v., 1,500 k.v.a. each.

Power. *Transmission Lines.*—49 miles of wooden pole lines serve municipalities of Orillia, Longford, and Atherley.

Use of Power.—Power is used for lighting, general manufacturing, and operation of electric steel furnaces.

Power is purchased from and sold to the Hydro-Electric Power Commission of Ontario by an agreement for the parallel operation of power plants.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., and Trent Valley Canal navigation.

The municipality expects to have about 2,500 h.p. available for sale when the demand for munition purposes ceases, at the rate of \$20 per horse-power per annum, 24-hour power, and \$15 per horse-power per annum, 10-hour power, less 10 per cent discount.

ORONO.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

OSHAWA.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

ONTARIO.

OTTAWA.

Ottawa Power Company, Ltd. (Hydro Power Plant No. 2LA₃). Nov., 1918.

Address,—Ottawa, Ont.

Directors,—E. H. Bronson, Ottawa; F. E. Bronson, Ottawa.

Officials,—E. H. Bronson, Ottawa (Pres.); H. Greene, Ottawa (Sec.-Treas.).

History,—Plant installed in 1899, with additional units in 1900.

Plant Location,—Plant located in Ottawa on Ottawa river, at Chaudière falls, Victoria island, below Bridge street.

Installation,—Plant operates under an average head of 29½ feet. Turbines—2 Ieffel, 50-inch, hor., Samson, four runner, 2,000 h.p. each, 162 r.p.m., total 4,000 h.p.; Generators—2 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 1,875 k.v.a. each, 162 r.p.m., total 3,750 k.v.a.; Exciters—2 generators, 200 k.w. each, 162 r.p.m., direct connected to main turbines and also used for power.

Power. *Local distribution lines* serve the municipality of Ottawa through the Ottawa Electric Company.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

All power is sold in bulk to The Ottawa Electric Company and Bronson Pulp Mills.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Northern Ry., New York Central Ry., and Ottawa River and Rideau Canal navigation.

The Ottawa Electric Company, controlled by Ottawa Light, Heat and Power Company, Ltd. June, 1918.

Address,—35 Sparke St., Ottawa, Ont.

Directors,—T. Ahern, Hon. E. H. Bronson, Thos. Workman, Warren Y. Soper, Levi Crannell, W. J. Baskerville, A. A. Dion, James Manuel.

Officials,—T. Ahern, Ottawa (Pres.); Hon. E. H. Bronson, Ottawa (Vice-Pres.); A. A. Dion, Ottawa (Gen. Supt.); D. R. Street, Ottawa (Sec.-Treas.).

History,—Plant No. 1 installed in 1901, with an additional unit in 1909. Plant No. 2 installed in 1910, with an additional unit in 1914. Auxiliary Steam plant installed in 1905, with additional units in 1913.

Capital,—Authorized, \$3,000,000. Issued, \$1,500,000.

Bonds,—Issued, \$1,625,000.

Capital invested in Plants and Equipment,—\$3,329,014.

Plant No. 1. (Hydro Power Plant No. 2LA₉).

Location,—Plant located at Chaudière falls, on Ottawa river, below Bridge street in Ottawa.

Installation,—Water is conveyed from intake to power-house through an open wooden flume, 400 square feet cross-sectional area. Plant operates under an average head of 29½ feet. Turbines—3 Stillwell Bierce, Victor, 39-inch, hor., 3 runners, 900 h.p. each, 180 r.p.m., 1 Dayton Globe, 39-inch, hor., 3 runners, 900 h.p. each, 180 r.p.m., total 3,600 h.p.; Generators—4 West., A.C., 2-phase, 60-cycle, 700 k.w. each, 180 r.p.m., total 2,800 k.w.; Exciters—2 turbines, 15-inch, 76 h.p. each, 475 r.p.m., 2 generators, 56.5 k.w. each, 475 r.p.m.

Plant No. 2. (Hydro Power Plant No. 2LA₁₀).

Location,—Plant located at Chaudière falls, on Ottawa river, below Bridge street, Ottawa.

Installation,—Water is conveyed from dam to power-house through old slide channel. Plant operates under an average head of 29½ feet. Turbines—3 S. Morgan Smith, Victor, 48-inch, hor., double runners, 1,700 h.p. each, 180 r.p.m., total 5,100 h.p.; Generators—3 West., A.C., 2-phase, 60-cycle, 1,300 k.w. each, 180 r.p.m., total 3,900 k.w.; Exciters—1 turbine, 20-inch, 150 h.p., 350 r.p.m., 2 motors, 2-phase, 2,200 v., 580 r.p.m., 1 generator, 100 k.w., 380

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Plant No. 2.—Con.

r.p.m., 2 generators, 120 k.w., 580 r.p.m.; Transformers—1 bank of 6 West., single-phase, water-cooled, primary 2,300 v., secondary 10,000 v., 1,500 k.v.a. each.

Plant No. 3. Steam Auxiliary Plant.

Location.—Plant located on Montreal street in Ottawa.

Installation.—Boilers—4 Babcock & Wilcox, 500 h.p. each; 3 Babcock & Wilcox, marine type, 4,000 h.p.; Steam Turbines—1 West., 2,000 h.p., 1 West., 4,375 h.p., total 6,275 h.p.; Generators—1 West., A.C., 2-phase, 60-cycle, 1,500 k.w., 1,200 r.p.m., 1 West., A.C., 2-phase, 60-cycle, 4,000 k.w., 3,600 r.p.m., total 5,500 k.w.

Power. *Local distribution lines* serve the municipality of Ottawa.

Power is purchased from the Ottawa Power Co., Ltd.

Use of Power.—Power is used for lighting, general manufacturing, general power purposes and operation of electric railway.

Power is sold to the Ottawa Electric Railway Company.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Northern Ry., New York Central Ry., and Rideau Canal and Ottawa River navigation.

The company contemplates installing a fourth unit of 1,700 h.p., capacity in Plant No. 2.

Served also by—

Hydro-Elect. Power Comn., Ottawa System; see Toronto, Ont.

Ottawa and Hull Power and Manufacturing Co., Ltd.; see Hull, Que.

OTTERVILLE.

Served by Hydro-Elect. Power Comn., Niagara System: see Toronto, Ont.

OWEN SOUND.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

Municipality of Owen Sound. (Fuel Power Plant No. 2FP₁). Nov., 1918.

The plant, which is used as a standby to power purchased from the Hydro-Electric Power Commission of Ontario, was originally installed in 1893.

Installation.—Five return tubular boilers, total capacity 625 h.p.; two 500 h.p. compound condensing steam engines, total capacity 1,000 h.p.; and two A.C., 3-phase, 60-cycle generators, total capacity 800 k.w.

PAISLEY.**Paisley Electric Light Company.** (Hydro Power Plant No. 2FC₂). Jan., 1918.

Address.—Paisley, Ont.

Officers.—J. A. McNeill, Paisley (Lessee and Mgr.).

History.—First turbine installed in 1898; electrical machinery installed in 1901; and an additional turbine installed in 1902. Plant is leased by J. A. McNeill, Paisley.

Capital invested in Plant and Equipment.—\$12,000.

Plant. *Officials.*—F. McNeill, Paisley (Electn.).

Location.—Plant located at McIntyre dam, near Paisley, on North Branch Saugeen river, in Bruce County, about 2½ miles from Paisley station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 11 feet; Turbines—2 Chas. Barber, 50-inch, vert., single runner, 67 h.p. each, 80 r.p.m., total 134 h.p.; Generator—1 Royal Elect., A.C., single-phase, 133-cycle, 75 k.w., 1,333 r.p.m.

Power. *Transmission Lines.*—2½ miles of wooden pole line serves the municipality of Paisley.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry.

ONTARIO.

PAKENHAM.

Pakenham Electric Light Plant. (Hydro Power Plant No. 2KF₅). July, 1918.

Address,—Pakenham, Ont.

Owner,—W. H. Edwards.

History,—Plant was originally owned by the Pakenham Electric Light Company, Ltd., and was acquired first by the Dowd Milling Company, Ltd., then by the Renfrew Flour Mills, Ltd., and on September 1, 1917, by the present owner.

Capital invested in Plant and Equipment,—\$11,000.

Plant. *Officials*,—Chas. Stevens. Pakenham (Engr. Pwr. Sta.).

Location,—Plant operates on the Mississippi river, one-quarter mile from Pakenham station on the Canadian Pacific Ry.

Installation,—Plant operates under an average head of 14 feet; Turbine—1 Chas. Barber, 60-inch, vert., 100 h.p., 80 r.p.m.; Generator—1 United Electric, A.C., single-phase, 133-cycle, 50 k.w., 660 r.p.m.; Exciter—1 generator at 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Pakenham.

Use of Power,—Power is used for lighting and operation of grist mill.

Power is delivered adjacent to the Canadian Pacific Ry.

Considerable additional power might be obtained with proper development.

PALMERSTON.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

PARIS.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

PARKHILL.

H. C. Baird, Son and Company. Ltd. (Fuel Power Plant No. 2 FF₁). May, 1918.

Address,—Parkhill, Ont.

Officers,—O. Baird, Parkhill, Ont. (Pres. and Mgr.); A. O. Baird, Parkhill, Ont. (Sec. and Treas.).

History,—Plant installed in 1900.

Capital invested in Plant and Equipment,—\$14,200.

Plant. *Location*,—Plant located in Parkhill, Ont.

Installation,—Steam Engine—1 reciprocating, 100 h.p.; Generators—2 Can. Gen. Elect., D.C., 220 v., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Parkhill.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

PARRY SOUND.

Municipality of Parry Sound. (Hydro Power Plant No. 2EA₁). June, 1918.

Official,—J. D. Braughton (Town Clerk and Treas.).

History,—Plant installed in 1896.

Capital invested in Plant and Equipment,—\$90,000.

Plant. *Official*,—G. Groves (Ch. Engr. and Mgr.).

Location,—Plant located on Seguin river in Parry Sound and adjacent to Canadian Northern Ry.

Installation,—Plant operates under an average head of 23 feet; Turbine—1 Jenckes, 35-inch, hor., double runner, 550 h.p., 200 r.p.m.; Generator—1 Bullock, A.C., 3-phase, 60-cycle, 425 k.w., 200 r.p.m.; Exciter—1 turbine, 10-inch, 25 h.p., 600 r.p.m., 1 generator, 16 k.w., 600 r.p.m.

Power. *Local distribution lines* serve the municipality of Parry Sound.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Grand Trunk Ry., Canadian Pacific Ry., Canadian Northern Ry. and Great Lakes navigation.

Municipality of Parry Sound.—Con.**Power.—Con.**

The plant is designed for an ultimate turbine capacity of 1,500 h.p. The municipality contemplates the installation of an additional 700 h.p. unit at the existing plant, and has investigated plans and details for a further development of 100 h.p. about 4 miles from the town.

The municipality has at present about 175 h.p., day and off-peak load, available for sale at the rate of \$7 per horse-power per annum.

PEMBROKE.

Oct., 1918.

The Pembroke Electric Light Company, Ltd. (Hydro Power Plant No. 2KH₁).

Address,—Head Office, Pembroke, Ont. Local Office, Waltham, Que.

Directors,—E. A. Dunlop, Pembroke; Alex. Miller, Pembroke; J. G. Forgie, Pembroke; Peter White, K.C., Toronto; J. F. Munro, Pembroke.

Officials,—E. A. Dunlop, Pembroke (Pres.); Alexander Miller, Pembroke (Vice-Pres.); Finley Watt, Pembroke (Sec. and Treas.); A. Conc, Pembroke (Mgr.).

History,—Plant installed in 1908, with additional units in 1914 and 1918.

Capital,—Authorized, \$250,000. Issued, \$178,500.

Capital invested in Plant and Equipment,—\$315,000.

Plant. *Official*,—J. H. Maxwell, Waltham (Engr. Pwr. Sta.).

Location,—Plant located on Black river, one mile from Waltham on Canadian Pacific Ry.

Installation,—Plant operates under an average head of 128 feet. Turbine—2 Jenckes, 30-inch, hor., single runner, 900 h.p. each, 514 r.p.m., 1 Boving, 38-inch, hor., Francis, single runner, 1,800 h.p., 514 r.p.m., total 3,600 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 500 k.v.a., 514 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 625 k.v.a., 514 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 1,250 k.v.a., 514 r.p.m., total 2,375 k.v.a.; Exciters—2 turbines, 40 h.p. each, 900 r.p.m., 1 generator, 16 k.w., 514 r.p.m.; Transformers—3 West., single-phase, primary 2,500 v., secondary 25,000 v., 750 k.v.a. each. Auxiliary Plant—1 Leonard-Corless, reciprocating steam engine, 360 h.p., 1 generator, 225 k.w.

Power. *Transmission Line*,—14 miles of wooden pole line serves the municipality of Pembroke.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to the Canadian Pacific Ry., Grand Trunk Ry., and Canadian Northern Ry.

The company has at present available for sale from 1,200 to 1,500 h.p.; power rate, \$18 per horse-power per annum (twenty-four-hour power).

Considerable additional power can be developed at this site.

PENETANGUISHENE.

Served by Hydro-Elect. Power Comm., Severn System; see Toronto, Ont.

PERTH.

Municipality of Perth. Jan., 1918.

Officials,—John A. Kerr (Clerk); John Code (Treas.).

History,—Ritchies Rapids plant installed in 1886, with new turbine installed in 1909. Badour plant installed in 1898 and purchased by the municipality in January, 1918, from the Canadian Electric and Water Power Company. Glen Tay plant installed in 1900, and purchased by the municipality in January, 1918. Steam auxiliary plant installed in 1915.

Plants. *Official*,—R. J. Smith (Mgr.).

ONTARIO.

Ritchies Rapids Plant. (Hydro Power Plant No. 2LA₄). For street lighting only.

Capital invested in Plant and Equipment,—\$13,300.

Location,—Plant located at Ritchies rapids, on Tay river.

Installation,—Plant operates under an average head of 11 feet. Turbine—1 Trump, 40-inch, vert., single runner, 45 h.p., 100 r.p.m.; Generators—2 Reliance, D.C., 14 k.w. each, 120 r.p.m., total 28 k.w.

Balour Plant. (Hydro Power Plant No. 2LA₁₇).

Capital invested in Plant and Equipment,—\$38,000.

Location,—Plant located on Tay river, one mile above Glen Tay.

Installation,—Plant operates under an average head of 15 feet. Turbine—1 Leffel, 50-inch, vert., single runner, 250 h.p.; Generator—1 Gen. Elect., A.C., 2-phase, 133-cycle, 216 k.w.

Glen Tay Plant. (Hydro power Plant No. 2LA₁₈).

Capital invested in Plant and Equipment,—\$26,000.

Location,—Plant located on Tay river, 3 miles from Glen Tay.

Installation,—Plant operates under an average head of 10 feet. Turbine—1 New American, 60-inch, vert., single runners, 175 h.p.; Generator—1 Gen. Elect., A.C., 2-phase, 133-cycle, 150 k.w. Steam Auxiliary Plant—1 Goldie & McCullough reciprocating steam engine, 250 h.p., 1 Gen. Elect. generator, 2-phase, 133-cycle, 150 k.w.

Power. The energy is transmitted to the municipality of Perth.

Use of Power,—Power is used for lighting and general power purposes.

Power is purchased in bulk from Hydro-Electric Power Commission of Ontario.

Power is delivered adjacent to Canadian Pacific Ry.

Served also by—

Hydro-Elect. Power Comn., Rideau System; see Toronto, Ont.

PETERBOROUGH.

April, 1918.

Peterborough Hydraulic Power Company, Ltd. (Hydro Power Plant No. 2HJ₁).

Address,—Peterborough, Ont.

Officials,—Robt. Stuart, Chicago, Ill. (Pres.); Robt. Gorman (Sec.); W. H. Denham, Peterborough (Gen. Mgr.).

History,—Original plant installed in 1884. Power was originally supplied to Peterborough Light and Power Co., Ltd., for distribution. Present turbines installed in 1902 and 1904; generators installed in 1904 and 1908.

Capital invested in Plant and Equipment,—\$337,000.

Plant. *Location*,—Plant located on Otonabee river in Peterborough at the foot of London street.

Installation,—Plant operates under an average head of 27 feet; Turbines—1 Wm. Hamilton, 56-inch, Samson, four runner, 2,000 h.p., 150 r.p.m., 1 Leffel, 45-inch, four runner, 1,500 h.p., 180 r.p.m., total 3,500 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 1,500 k.v.a., 150 r.p.m., 1 Can. Gen. Elect., A.C., 60-cycle, 3-phase, 750 k.v.a., 150 r.p.m., total 2,250 k.v.a.; Exciters—2 turbines, 18-inch, 60 h.p. each, 450 r.p.m., 1 motor, 3-phase, 2,200 v., 450 r.p.m., 2 generators, 45 k.w. each, 450 r.p.m.

Power. *Transmission Line*,—Three-tenths of a mile of wooden pole line serves the Quaker Oats Company for power purposes.

Use of Power,—Power is used for lighting, manufacturing, and general power purposes.

Power is sold in bulk to Hydro-Electric Power Commission of Ontario and supplied at plant switchboard.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., and Trent Canal navigation.

The company contemplates installing additional capacity of 1,500 h.p.

Peterborough Hydraulic Power Company, Ltd.—Con.**Power.—Con.**

The plant has not operated to full capacity during 1917 due to the destruction by fire, of the Quaker Oats Company's plant in December, 1916.

Served also by—

Hydro-Elect. Power Comm., Central Ont. System; see Toronto, Ont.

PETROLIA.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

PICTON.

Municipality of Picton. (Fuel Power Plant No. 2HE₁). Jan., 1918.

Officials.—P. C. Macnee (Clerk); J. F. Gillespie (Treas.).

History.—Plant installed in 1890, with additional units in 1900, 1905 and 1918.

Capital invested in Plant and Equipment.—\$60,000.

Plant. *Official.*—Wm. Tait (Supt.).

Location.—Plant located in Picton, Ont.

Installation.—Boilers—Goldie & McCullough, 300 h.p.; Steam Engines—2 reciprocating, 150 h.p. each, 1 reciprocating, 75 h.p., total 375 h.p.; Generators—1 Allis-Chalmers, A.C., 2-phase, 60-cycle, 175 k.w., 720 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 62.5 k.w.a., 450 r.p.m.

Power. *Local distribution lines* serve the municipality of Picton.

Use of Power.—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Northern Ry., and Great Lakes navigation.

PLATTSVILLE.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

POINT EDWARD.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

PORCUPINE.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

PORT ARTHUR.

Municipality of Port Arthur. (Hydro Power Plant No. 2AB₂). Jan., 1918.

Officials.—J. D. Cowan (Mayor); T. F. Milne (Clerk); W. J. Gurney (Treas.); A. E. Widemair (Chmn. Comm.); L. L. Matthews (Comm.); M. C. Campbell (Comm.); Geo. H. Rapsey (Sec. Comm.).

History.—Plant installed in 1891. Present units installed in 1902 and 1906.

Capital invested in Plant and Equipment.—\$677,805.

Plant. *Officials.*—M. M. Ingles (Mgr.); John Hayes (Engr. Pwr. Sta.).

Location.—Plant located at mouth of Current river.

Installation.—Plant operates under an average head of 80 feet; Turbines—1 Jenckes, 30-inch, hor., double runner, 1,200 h.p., 400 r.p.m., 2 Jenckes, 25-inch, hor., single runner, 450 h.p. each, 425 r.p.m. 1 Jenckes, 20-inch, hor., single runner, 250 h.p., 500 r.p.m., total 2,350 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 660 k.v.a., 400 r.p.m., 2 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 250 k.v.a. each, 405 r.p.m., 1 Allis-Chalmers-Bullock, D.C., 185 k.w., 500 r.p.m., total 1,160 k.v.a. and 185 k.w.; Exciters—1 turbine, 25 h.p., 750 r.p.m., 1 generator, 15 k.w., 750 r.p.m., 1 generator, 17.5 k.w., 1,400 r.p.m., 1 generator, 6 k.w., 750 r.p.m.

Power. *Transmission line* serves the municipality of Port Arthur.

All power generated is turned over to the Hydro-Electric Power Commission of Ontario, who control the division of the load carried by their own system and Current River plant.

ONTARIO.

Municipality of Port Arthur.—Con.**Power.—Con.**

Use of Power.—Power is used for lighting, general manufacturing and power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Great Lakes navigation.

Served also by—

Hydro-Elect. Power Comn., Port Arthur System; see Toronto, Ont.

PORT CARLING.

Port Carling Electric Light Plant. (Fuel Power Plant No. 2EB₁). May, 1918.

Address.—Port Carling, Ont.

Owners.—W. A. Hanna, Port Carling, Ont.; Wm. Hanna, Port Carling, Ont.

History.—Plant installed in 1916.

Capital invested in Plant and Equipment.—\$3,050.

Plant. *Location.*—Plant located in Port Carling, Ont.

Installation.—Gasolene Engine—1 at 10 h.p.; Generator—1 Lister, D.C., 6 k.w., 550 r.p.m.

Power. *Local distribution lines* serve the municipality of Port Carling.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Muskoka Lakes navigation.

PORT COLBORNE.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

PORT CREDIT.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

PORT DALHOUSIE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

PORT ELGIN.

Served by Saugeen Electric Light and Power Co., Ltd.; see Southampton, Ont.

PORT HOPE.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

PORT McNICOLL.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

PORT PERRY.

Municipality of Port Perry. (Fuel Power Plant No. 2HG₁). Jan., 1918.

Officials.—W. H. Harris (Clerk); John Ford (Treas.).

History.—Plant installed in 1902.

Capital invested in Plant and Equipment.—\$2,500.

Plant. *Official.*—C. O. Clay (Engr. Pwr. Sta.).

Location.—Plant located on Water Street, Port Perry, Ont.

Installation.—Boiler—1 Stratford, 90 h.p.; Steam Engine—1 Browns, reciprocating, 75 h.p.; Generator—1 West., A.C., single-phase, 133-cycle, 60 k.w., 1,350 r.p.m.

Power. *Local distribution lines* serve the municipality of Port Perry.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

PORT STANLEY.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

POWASSAN.

Served by Hydro-Elect. Power Comn., Nipissing System; see Toronto, Ont.

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ONTARIO.

PRESCOTT.

Served by Hydro-Elect. Power Comn., St. Lawrence System; see Toronto, Ont.

PRESTON.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

PRINCETON.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

RAINY RIVER.

April, 1918.

Rainy River Electric Light and Power Company. (Fuel Power Plant No. 5PC₁).

Address,—Rainy River, Ont.

Owner,—W. H. Green, Rainy River, Ont.

History,—Plant installed in 1908, with additional steam turbine in 1913. Present generator installed in 1915.

Capital invested in Plant and Equipment,—\$23,920.

Plant. Official,—W. H. Green (Supt.).

Location,—Plant located in Rainy River, Ont.

Installation,—Steam Engines—2 reciprocating, 125 h.p. each, total 250 h.p.; Generator—1 C. W. Howe, A.C., 3-phase, 60-cycle, 36 k.w., 1,500 r.p.m.

Power. *Local distribution lines* serve the municipality of Rainy River.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

RENFREW.

Municipality of Renfrew. July, 1918.

Officials,—H. N. Moss (Mayor); J. R. Stewart (Town Engr.); J. A. Devenny (Town Clerk).

History,—Plant No. 1 installed in 1911, with an additional generator installed in 1915. Plant No. 2 installed in 1901, with additional units in 1907. Formerly owned by Renfrew Power Company, Ltd., and acquired by municipality on September 30, 1917.

Capital invested in Plants and Equipment,—Plant No. 1, \$181,500; Plant No. 2, \$100,000.

Plants. Officials,—W. Beal (Electn.); E. Mayhew (Engr. Pwr. Sta.).

Plant No. 1. (Hydro Power Plant No. 2KC₃).

Location,—Plant located on Bridge street in Renfrew, on Bonnechere river, one-quarter mile from Renfrew station on Canadian Pacific Ry. and Grand Trunk Ry.

Installation,—Plant operates under an average head of 37 feet. Turbines—2 S. Morgan Smith, hor., double runner, 400 h.p., 400 r.p.m., 1 S. Morgan Smith, hor., double runner, 130 h.p., 600 r.p.m., total 930 h.p.; Generators—2 Swedish Gen. Elect., A.C., 2-phase, 60-cycle, 250 k.v.a. each, 400 r.p.m., 1 Elect. Mfg., A.C., 2-phase, 60-cycle, 150 k.v.a., 900 r.p.m., total 650 k.v.a.; Exciters—2 generators, 9 k.w. each, 1 generator, 3.9 k.w. Auxiliary Plant—3 Goldie & McCullough boilers, total 300 h.p., 1 Belliss & Morcom reciprocating steam engine, 250 h.p.

Plant No. 2. (Hydro Power Plant No. 2KC₂).

Location,—Plant located on Bonnechere river, one-half mile from Renfrew station on Canadian Pacific Ry. and Grand Trunk Ry.

Installation,—Plant operates under an average head of 35 feet. Turbines—1 Wm. Hamilton, 26-inch, hor., Samson, double runner, 400 h.p., 300 r.p.m., 1 Wm. Hamilton, 30-inch, hor., Samson, double runner, 500 h.p., 300 r.p.m., total 900 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 300 k.w., 300 r.p.m., 1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 400 k.w., 300 r.p.m., total 700 k.w.; Exciters—1 generator, 9 k.w., 1,450 r.p.m., 1 generator, 75 k.w., 1,100 r.p.m., 2 generators, 75 k.w. each, 1,200 r.p.m.

Municipality of Renfrew.—Con.**Plant No. 2.—Con.**

Power. *Local distribution lines* serve the municipality of Renfrew from both plants.
Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry. and Grand Trunk Ry.

The municipality has at present available for sale about 200 h.p., at \$20 per horse-power per annum.

The transmission line of the Calabogie Light and Power Company passes the town of Renfrew, but the right of distribution is reserved by the municipality.

This company is said to have considerable power available for sale.

The municipality is installing 130 h.p. additional turbine capacity for water-works pumping.

RICHMOND HILL.

Served by Toronto and York Radial Railway Co. with power purchased through Toronto Power Co., Ltd., from Electrical Development Company of Ontario, Ltd.; see Niagara Falls, Ont.

RIDGETOWN.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

RIDGEWAY.

Served by Canadian Niagara Power Co., Ltd.; see Niagara Falls, Ont.

ROCKLAND.

W. C. Edwards and Company. (Fuel Power Plant No. 2LB₁₁). Nov., 1918.

History.—Plant installed in 1892.

Capital invested in Plant and Equipment.—\$7,000.

Plant. *Location.*—Plant located in Rockland, Ont.

Installation.—Steam Engine—1 reciprocating, 75 h.p.; Generator—1 at 50 k.w.

Power. *Local distribution lines* serve the municipality of Rockland.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry., Grand Trunk Ry., and Ottawa River navigation.

ROCKWOOD.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

RODNEY.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ST. CATHARINES.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto Ont.; and by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

ST. EUGENE.

Served by the North River Electric Co., Ltd.; see St. Andrews East, Que.

ST. GEORGE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ST. JACOBS.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ST. MARYS.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ONTARIO.

ST. THOMAS.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

SANDWICH.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

Served by Sandwich, Windsor and Amherstburg Ry.; see Windsor, Ont.

SARNIA.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

SAULT STE. MARIE.

The Great Lakes Power Company, Ltd. (Hydro Power Plant No. 2CA₁), controlled by the Lake Superior Power Company and controls the International Transit Company. June, 1918.

Address,—527 Queen St. East, Sault Ste. Marie, Ont.

Directors,—Samuel Insull, Chicago, Ill.; Steadman Buttrick, Boston, Mass.; B. A. Eckhart, Chicago, Ill.; M. J. Insull, Chicago, Ill.; D. R. McLennan, Chicago, Ill.; J. L. Martier, Chicago, Ill.; J. A. McPhail, Sault Ste. Marie, Ont.

Officials,—S. Insull, Chicago, Ill. (Pres.); J. A. McPhail, Sault Ste. Marie, Ont. (Vice-Pres.); A. E. Pickering, Sault Ste. Marie, Ont. (Gen. Mgr.); O. E. McCormick, Chicago, Ill. (Sec.); R. W. Wait, Chicago, Ill. (Treas.); E. W. Hillier (Asst. Sec.); Jos. McPhail (Asst. Treas.).

History,—Former plant installed by the Lake Superior Power Company in 1901 and name of company changed to Algoma Steel Corporation, Ltd., in 1912. The plant destroyed by fire May 2, 1918, and water rights, etc., purchased by Great Lakes Power Company, Ltd., in May, 1918. Construction of new power house commenced immediately; five of old units to be restored to operation for use as auxiliary and twenty-four new units to be installed. Plant expected to be completed in June, 1918.

Capital,—Authorized, \$3,000,000. Issued, \$2,600,000.

Bonds,—Issued, \$2,029,000.

Plant. *Officials*,—R. A. Campbell (Supt.).

Location,—Plant located on St. Marys river (Diversion canal), at Sault Ste. Marie, Ont., and adjacent to Great Lakes navigation.

Installation,—Plant operates under an average head of 18.5 feet. Water is diverted from St. Marys river, from a point immediately above the Canadian ship canal at head of rapids, and carried through canal about 2,000 feet long, as originally built in 1896 to old power station, and to water wheels installed in ground wood mill of the Lake Superior Paper Company, adjacent to the power station. A new canal, parallel to and south of old one has recently been completed and the two canals will unite at the old and new power stations. The combined capacity of the canals is 20,000 second-feet. The water is returned to the river below the ship canal and rapids; Turbines—Old Station (to be restored to operation), 5 S. Morgan Smith, 51-inch, vert., 350 h.p., New Station (to be installed), 24 Allis-Chalmers, 54-inch, vert., 825 h.p.; Generators—Old Station (to be restored to operation), 2 Can. Gen. Elect., D.C., 225 k.w., 200 r.p.m., 3 West., A.C., 3-phase, 60-cycle, 225 k.w., 200 r.p.m., New Station (to be installed), 22 Gen. West., A.C., 3-phase, 25-cycle, 650 k.w., 136 r.p.m., 2 Can. West., A.C., 3-phase, 60-cycle, 650 k.w., 138½ r.p.m.; Exciters—Old Station (to be restored to operation), 1 motor generator set, New Station (to be installed), 1 induction motor, 3-phase, 2,300 v., 660 h.p., 730 r.p.m., 1 generator, D.C., 370 k.w., 1 generator, D.C., 80 k.w.

The Great Lakes Power Company, Ltd.—Con.

Power. *Transmission Line*,—One mile of wooden pole line transmits power to Algoma Steel Corporation. Local distribution lines serve the municipality of Sault Ste. Marie (including district formerly known as Steelton).

Use of Power,—Power is used for lighting, operation of electric railway, operation of pulp and paper mills, operation of steel plant, and general power purposes.

Power is sold in bulk to Algoma Steel Corporation and municipality of Sault Ste. Marie, Ont. (for distribution).

The new power station is designed to be readily extended to replace former installation in old station and plans are being prepared for such extension so that total available power will be developed.

Under normal conditions the company will have available for sale from 2,000 to 3,000 horse-power above existing contracts.

Good industrial sites convenient to rail and water connections are available.

Algoma Power Company, Ltd. (Hydro Power Plant No. 2BD₁). Jan., 1918.

Address,—Head Office, Kitchener, Ont.; Local Office, Michipicoten River.

Directors,—D. B. Detweiler, Kitchener; O. Kenzie, Kitchener; J. E. Klotz, Kitchener; C. K. Hagedorn, Kitchener.

Officials,—D. B. Detweiler, Kitchener (Pres. and Mgr. Dir.); N. B. Detweiler, Kitchener (Sec. Treas.).

History,—First unit installed in 1906; additional unit installed in 1908.

Capital invested in Plant and Equipment,—\$157,378.

Plant. *Location*,—Plant located at High Falls on Michipicoten river.

Installation,—Plant operates under an average head of 125 feet; Turbines—1 Jenckes, 18-inch, hor., 600 h.p., 600 r.p.m., 1 Allis-Chalmers-Bullock, 26-inch, hor., 1,000 h.p., 600 r.p.m., total 1,600 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 450 k.w., 600 r.p.m., 1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 600 k.w., 600 r.p.m., total 1,050 k.w.; Exciters—1 turbine, 8-inch, 110 h.p., 1,400 r.p.m., 1 motor, 120 v., 1,400 r.p.m., 1 generator, 60 k.w., 1,400 r.p.m.

Power. *Transmission Lines*,—10 miles of wooden pole line serves Helen Iron Mines and Magpie Iron Mines (Algoma Steel Corporation, Ltd.).

Use of Power,—Power is used to operate iron mines.

Power is sold in bulk to Algoma Steel Corporation, Ltd.

SCHUMACHER.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

SEAFORTH.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

SELLWOOD.

Moose Mountain, Ltd. (Fuel Power Plant No. 2CF₁). Nov., 1918.

The Company owns a steam plant which is used as an auxiliary to purchased power. The plant is seldom used.

Plant. *Location*,—Plant located in Sellwood, Ont.

Installation,—Steam Turbine Unit,—1 A.C., 3-phase, 60-cycle, 750 k.w.

Power. The plant is used only as an auxiliary to power purchased from Wahnapiitsee Power Company.

SHELBURNE.

Served by Hydro-Elect. Power Comn., Eugenia System; see Toronto, Ont.

SIMCOE.

Served by Hydro-Elect., Power Comn., Niagara System; see Toronto, Ont.

SMITHS FALLS.

Municipality of Smiths Falls. (Hydro Power Plant No. 2LA₁₀). June, 1918.

Officials,—Jas. A. Lewis (Clerk).

History,—Plant installed in 1911 by the Citizens Electric Company, Ltd., and purchased in November, 1917, by the municipality.

Capital invested in Plant and Equipment,—\$62,500.

Plant. *Officials*,—Jas. S. Gould (Mgr.); J. Scroggie (Engr. Pwr. Sta.).

Location,—Plant located at Smiths Falls on Rideau river.

Installation,—Plant operates under an average head of 9 feet; Turbines—3 Wm. Hamilton, 50 h.p. each, 90 r.p.m., total 150 h.p.; Generators—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.v.a., 720 r.p.m.; Auxiliary Plant—1 Goldie & McCullough, boiler, 150 h.p., 1 Goldie & McCullough, reciprocating steam engine, 150 h.p.

Power. *Local distribution lines* serve the municipality of Smiths Falls.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Rideau Canal navigation.

The Smiths Falls Electric Power Company, now owned by the municipality. (Hydro Power Plant No. 2LA₁₅). April, 1918.

History,—Plant installed in 1900, present generator installed in 1914. The plant was acquired by the municipality on January 1, 1918.

Capital invested in Plant and Equipment,—\$60,100.

Plant. *Location*,—Plant located on Rideau river at Slys rapids, one mile below Smiths Falls.

Installation,—Plant operates under an average head of 15 feet; Turbines—2 Chas. Barber, 70-inch, vert., single runner, 290.5 h.p. each, 75 r.p.m., total 581 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 275 k.w., 580 r.p.m.; Auxiliary Plant—2 boilers, total capacity 350 h.p., 1 Goldie & McCullough steam engine, 500 h.p.

Power. *Transmission Line*,—1 mile of wooden pole line serves the municipality of Smiths Falls.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Served also by—

Hydro-Elect. Power Comn., Rideau System; see Toronto, Ont.

SMITHVILLE.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

SOUTHAMPTON.

Feb., 1918.

Saugeen Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2FC₆).

Address,—Walkerton, Ont.

Directors,—John Rowland, Walkerton; D. Robertson, Walkerton; A. Collins, Walkerton; W. M. Shaw, Walkerton.

Officials,—John Rowland, Walkerton (Pres.); D. Robertson, Walkerton (Vice-Pres.); Annie Scanlon, Walkerton (Sec.); Richard Stafford, Walkerton (Mgr.).

ONTARIO.

Saugeen Electric Light and Power Company, Ltd.—Con.

History.—Company commenced supply in 1897. Auxiliary steam plant installed in 1910, with additional unit in 1917.

Capital invested in Plant and Equipment.—\$95,128.

Plant. *Official.*—J. McVittie, Walkerton (Supt. and Ch. Engr.).

Location.—Plant located at Indian rapids on Saugeen river, 3 miles from Southampton station on Grand Trunk Ry., and 6 miles from Port Elgin.

Installation.—Plant operates under an average head of 11 feet; Turbines—1 Wm. Kennedy, vert., New American, single runner, 250 h.p., 50 r.p.m., 1 Wm. Hamilton, 45-inch vert., Leffel, single runner, 150 h.p., 60 r.p.m., total 400 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m.; Exciter—1 generator, 8 k.w., 1,200 r.p.m.; Auxiliary Plant—2 Goldie & McCullough boilers, total 300 h.p., 1 Goldie & McCullough, reciprocating steam engine, 200 h.p.

Power. *Transmission Lines.*—7½ miles of wooden pole lines serve the municipalities of Southampton and Port Elgin.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry.

SOUTH PORCUPINE.

Served by Northern Ontario Light and Power Co., Ltd.; see Cobalt, Ont.

SOUTH RIVER.

South River Electric Company. (Hydro Power Plant No. 2DD₁). July, 1918.

Address.—South River, Ont.

Owners.—Henry Ward, 92 Kippendavie Ave., Toronto; Edward Richard, Ottawa.

History.—Plant installed in 1910-1911.

Capital invested in Plant and Equipment.—\$30,000.

Plant. *Location.*—Plant located on South river about 1 mile from South River station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 64 feet; Turbine—1 Boving, 135 h.p., 1,200 r.p.m.; Generator—1 Lancashire, A.C., 3-phase, 60-cycle, 80 k.w., 1,200 r.p.m.

Power. *Transmission Lines.*—8 miles of wooden pole lines serve the municipalities of South River and Sundbridge.

Use of Power.—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Grand Trunk Ry.

The designed turbine capacity of the plant is 465 h.p. and the company contemplates the installation of an additional 330 h.p. unit.

SPRINGFIELD.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

STAYNER.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

STEELTON.

Served by the Great Lakes Power Co., Ltd.; see Sault Ste. Marie, Ont.

STIRLING.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

STONEY CREEK.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

ONTARIO.

STOUFFVILLE.

Municipality of Stouffville. (Fuel Power Plant No. 2HC₁). May, 1918.

Officials,—J. H. Ratcliff (Reeve); John Urquhart (Clerk).

History,—Plant installed in 1903, present gas engine installed in 1917.

Capital invested in Plant and Equipment,—\$7,000.

Plant. *Official*,—R. O. Ward (Engr.).

Location,—Plant located on Market Street, Stouffville, Ont.

Installation,—Gas Engine—1 at 60 h.p.; Generator—1 West., A.C., single-phase, 60-cycle, 40 k.w., 760 r.p.m.

Power. *Local distribution lines* serve the municipality of Stouffville.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

STRATFORD.

Served by Hydro-Elect. Comn., Niagara System; see Toronto, Ont.

STRATHROY.

Served by Hydro-Elect. Comn., Niagara System; see Toronto, Ont.

STREETSVILLE.

Municipality of Streetsville. (Hydro Power Plant No. 2HB₂). Aug., 1918.

Official,—S. H. Smith, M.D. (Clerk and Treas.).

History,—Plant installed in 1906.

Capital invested in Plant and Equipment,—\$27,000.

Plant. *Location*,—Plant located on Credit river at Streetsville.

Installation,—Plant operates under an average head of 9 feet; Turbine—1 Chas. Barber, 32-inch, hor., single runner, 75 h.p.; Generator—1 Swedish Gen. Elect., 50 k.v.a.

Power. *Transmission Line*,—1½ mile of wooden pole line serves the municipality of Streetsville.

Power is purchased from Hydro-Electric Power Commission of Ontario.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

Served also by—

Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

STURGEON FALLS.

Nov., 1918.

The Spanish River Pulp and Paper Mills, Ltd. (Hydro Power Plant No. 2DC₁).

Address,—Head Office, Sault Ste. Marie, Ont. Local Office, Sturgeon Falls, Ont.

Officials,—George H. Mead, Sault Ste. Marie, Ont. (Pres.); P. B. Wilson, Sault Ste. Marie, Ont. (Vice-Pres.); Robt. B. Wolf, Sault Ste. Marie, Ont. (Gen. Mgr.); A. H. Chitty, Sault Ste. Marie, Ont. (Treas.); T. Gibson, Toronto, Ont. (Sec.); J. G. Gibson, Toronto, Ont. (Asst. Sec.).

History,—The plant was originally installed in 1902 and was extensively improved and an additional unit installed in 1912. The plant is installed for the operation of the company's pulp and paper mills but supplies a block of power to the Northern Ontario Light and Power Company. The company has in addition to this plant, two pulp plants; one at Espanola, Ont., and the other at Sault Ste. Marie, Ont.

Plant. *Location*,—Plant located at Sturgeon Falls on Sturgeon river.

Installation,—Turbines—1 Holyoke, 48-inch, hor., double runner, 1,900 h.p., 180 r.p.m., 1 S. Morgan Smith, 42-inch, hor., double runner, 1,339 h.p., 168 r.p.m., total, 3,239 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 1,375 k.w., 180 r.p.m., 1 West., A.C., 3-phase, 25-cycle, 550 k.w., 168 r.p.m., total 1,925 k.w.

ONTARIO.

The Spanish River Pulp and Paper Mills, Ltd.—Con.

Power. A quantity of power is sold in bulk to Northern Ontario Light and Power Company for distribution at Sturgeon Falls and Cache Bay (see Cobalt, Ont.).

Served also by—

Northern Ontario Light and Power Co., Ltd.; See Cobalt, Ont.

SUDBURY.

The Wahnapiatae Company, Ltd. Nov., 1918.

Address.—Sudbury, Ont.

Directors.—Wm. McVittie, Sudbury; John McVittie, Sudbury; W. C. Cochrane, Sudbury; Hon. F. Cochrane, Ottawa; W. T. Hillary, Montreal.

Officials.—Wm. McVittie, Sudbury (Pres.); A. H. Skene, Sudbury (Mgr. and Sec.).

History.—Plant No. 1 installed in 1905, with additional units in 1907 and 1915. Plant No. 2 installed in 1912.

Capital invested in Plants and Equipment.—\$557,193.

Plant No. 1. (Hydro Power Plant No. 2DB₁).

Officials.—K. McRae (Supt. Distrib.); J. S. Graham (Engr. Pwr. Sta.).

Location.—Plant located on Wahnapiatae river, township of Dryden, about 10 miles from Sudbury and 2 miles from Wahnapiatae.

Installation.—Plant operates under an average head of 53 feet; Turbines—1 Jenckes, hor., double runner, 1,200 h.p., 300 r.p.m., 1 Jenckes, hor., double runner, 1,600 h.p., 300 r.p.m., 1 Allis-Chalmers, hor., double runner, 3,500 h.p., 275 r.p.m., total 6,300 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 800 k.w., 300 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,200 k.w., 300 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 2,500 k.w., 275 r.p.m., total 4,500 k.w.; Exciters—1 turbine, 35 h.p., 900 r.p.m., 1 turbine, 70 h.p., 750 r.p.m., 1 motor, 3-phase, 2,300 v., 750 r.p.m., 1 generator, 25 k.w., 900 r.p.m., 1 generator, 50 k.w., 750 r.p.m., 1 generator, 75 k.w., 750 r.p.m.; Transformers—1 bank of 2 Can. Gen. Elect., single-phase, water-cooled, primary 2,300 v., secondary 22,500 v., 535 k.v.a. each, 1 bank of 2 Can. Gen. Elect., single-phase, water-cooled, primary 2,300 v., secondary 22,500 v., 300 k.v.a. each, 1 bank of 3 Allis-Chalmers-Bullock, single-phase, water-cooled, primary 2,300 v., secondary 33,000 v., 600 k.v.a. each, 1 bank of 3 Allis-Chalmers-Bullock, single-phase, water-cooled, primary 2,300 v., secondary 15,000 v., 800 k.v.a. each.

Plant No. 2. (Hydro Power Plant No. 2DB₂).

Official.—S. McVittie (Engr. Pwr. Sta.).

Location.—Plant located on Wahnapiatae river, township of Secord, about 26 miles from Sudbury and 18 miles from Wahnapiatae.

Installation.—Plant operates under an average head of 38 feet; Turbines—2 Wm. Kennedy, hor., double runner, 1,800 h.p. each, 275 r.p.m., total 3,600 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,250 k.w. each, 275 r.p.m., total 2,500 k.w.; Exciters—1 turbine, 75 h.p., 600 r.p.m., 1 motor, 3-phase, 2,300 v., 1,100 r.p.m., 1 generator, 50 k.w., 600 r.p.m., 1 generator, 55 k.w., 1,100 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., single-phase, water-cooled, primary 2,300 v., secondary 22,500 v., 600 k.v.a. each, 1 bank of 3 Crocker-Wheeler, single-phase, air-cooled, primary 2,300 v., secondary 16,500 v., 200 k.v.a. each.

Power. *Transmission Lines.*—47 miles of wooden pole lines from plant No. 1, serve the municipality of Sudbury and the Mond Nickel Co., and Moose Mountain, Ltd. 31 miles of wooden pole lines from Plant No. 2 serve Canadian Exploration Co., Long Lake Gold Mine and connects up with Plant No. 1.

ONTARIO.

The Wahnapiatae Company, Ltd.—Con.**Plant No. 2.—Con.**

Use of Power.—Power is used for lighting, operation of electric railway, operation of gold, nickel and copper mines, and general power purposes.

Power is sold in bulk to the municipality of Sudbury and the Mond Nickel Company, Moose Mountain, Ltd., Quaker Oats Company, and Canadian Exploration Company.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Algoma Eastern Ry.

SUNDBRIDGE.

Served by South River Electric Co.; see South River, Ont.

SUNDERLAND.

Served by Hydro-Elect. Power Comm., Wasdell's System; see Toronto, Ont.

SUTTON WEST.

Sutton West Electric Light Plant. (Hydro Power Plant No. 2EC₂). June, 1918.

Address.—Sutton West, Ont.

Owner.—A. J. Lowick & Son, Sutton West, Ont.

History.—Water-power developed about 1845, lighting plant installed in 1898, and new turbine installed in 1915.

Capital invested in Plant and Equipment.—About \$5,500.

Plant. *Official.*—F. Lowick, Sutton West (Engr. Pwr. Sta.).

Location.—Plant located on Black river, about one-quarter mile from Sutton West station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 11 feet; Turbine—1 Chas. Barber, 42-inch, vert., single runner, 52 h.p. 102 r.p.m.; Generator—1 Can. Gn. Elect., D.C., 32 k.w., 950 r.p.m.

Power. *Local distribution lines* serve the municipality of Sutton West.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

There is also installed one 52 h.p. turbine, used in connection with grist mill.

TAMWORTH.

A. B. Carscallen and Company. (Hydro Power Plant No. 2HM₁). June, 1918.

Address.—Tamworth, Ont.

Partners.—A. B. Carscallen, Tamworth; Harriet A. Carscallen, Tamworth.

History.—Original plant installed in 1912; present turbine installed in November, 1917.

Capital invested in Plant and Equipment.—\$12,000.

Plant. A. B. Carscallen (Mgr.).

Location.—Plant located at Tamworth on Salmon river, one-quarter mile from Tamworth station on Canadian Northern Ry.

Installation.—Plant operates under an average head of 10 feet; Turbines—1 Chas. Barber, 42-inch, vert., single runner, 35 h.p., 280 r.p.m.; Generator—1 West., D.C., 25 k.w., 1,100 r.p.m.; Auxiliary Plant—1 reciprocating steam engine, 50 h.p.

Power. *Local distribution lines* serve the municipality of Tamworth.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

The company has also installed a 45 h.p. turbine to operate a grist mill which forms part of this development.

TARA.

Served by Hydro-Elect. Power Comm., Eugenia System; see Toronto, Ont.

ONTARIO.

TAVISTOCK.

Served by Hydro-Elect., Power Comn., Niagara System; see Toronto, Ont.

TEESWATER.

Teeswater Electric Light Company. (Hydro Power Plant No. 2FC₃). June, 1918.

Address,—Teeswater, Ont.

Owner,—Walter Rose, Teeswater (Owner and Mgr.).

History,—Hydraulic machinery owned by A. W. Little and installed in 1908 to operate grist mill. By agreement the company installed a generator in 1913, which is connected to one of the grist mill turbines. The auxiliary steam plant was installed in 1904.

Capital invested in Plant and Equipment,—\$7,000.

Plant. *Location*,—Plant located on Teeswater river, 1 mile from Canadian Pacific Ry.

Installation,—Plant operates under an average head of 14 feet; Turbine—1 Chas. Barber, 36-inch, vert., single runner, 45 h.p., 108 r.p.m.; Generator—1 Johnston, A.C., single-phase, 133-cycle, 50 k.w., 1,100 r.p.m.; Auxiliary Plant—1 Goldie & McCullough, reciprocating steam engine, 55 h.p., 1 Royal Elect., generator, 2-phase, 22 k.w.

Power. *Transmission Line*,—1 mile of wooden pole line serves the municipality of Teeswater.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

There is also a 30-horsepower turbine installed in connection with grist mill.

THAMESFORD.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

THAMESVILLE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

THEDFORD.

Geo. Coultis and Son. (Fuel Power Plant No. 2FF₂). Jan., 1918.

Address,—Thedford, Ont.

History,—Plant installed in 1905; present engine installed in 1909.

Capital invested in Plant and Equipment,—\$6,700.

Plant. *Location*,—Plant located in Thedford, Ont.

Installation,—Steam Engine—1 reciprocating, 80 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 133-cycle, 45 k.w., 1,500 r.p.m.

Power. *Local distribution lines* serve the municipality of Thedford.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

THESSALON.

Municipality of Thessalon. (Fuel Power Plant No. 2CA₁). Jan., 1918.

Officials,—J. O. Coulter (Clerk); E. C. Bridge (Treas.); F. Chisholm (Chmn. Comn.).

History,—Plant installed in 1901.

Capital invested in Plant and Equipment,—\$38,630.

Plant. *Official*,—E. E. Thompson (Engr. Pwr. Sta.).

Location,—Plant located on Francis street, in Thessalon, Ont.

Installation,—Boiler—1 Goldie & McCullough, 150 h.p.; Steam Engine—1 Goldie & McCullough, reciprocating, 80 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 125-cycle, 60 k.w., 1,500 r.p.m.

Power. *Local distribution lines* serve the municipality of Thessalon.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Great Lakes navigation.

ONTARIO.

THORNBURY.

Municipality of Thornbury. (Hydro Power Plant No. 2FB₂). June, 1918.

Officials,—Henry Podwell (Mayor); Edw. Rorke (Clerk and Treas.); M. Snet-singer (Chmn. Comm.).

History,—Plant installed in 1912 and later purchased by the municipality.

Capital invested in Plant and Equipment,—\$12,500, not including dam, which cost \$15,000.

Plant. *Official*,—J. E. Miller (Mgr.).

Location,—Plant located on Beaver river, near Thornbury, on the Grand Trunk Ry. Dam used as intake for two mills.

Installation,—Plant operates under an average head of 14 feet. Turbine—1 Chas. Barber, 42-inch, vert., single runner, 50 h.p., 155 r.p.m.; Generator—1 Can. Gen. Elect., A.C., single-phase, 50 k.w., 150 r.p.m.

Power. *Local distribution lines* serve the municipality of Thornbury.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

Additional power can be developed at this site.

THORNDALE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

THORNTON.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

THOROLD.

Municipality of Thorold. (Hydro Power Plant No. 2HA₁). Jan., 1918.

Official,—D. J. C. Munro (Town Clerk and Treas.).

History,—Plant installed in 1900, and an additional turbine installed in 1908.

Capital invested in Plant and Equipment,—\$29,500.

Plant. *Officials*,—L. S. O'Connor (Supt.); T. R. Grenville (Engr. Pwr. Sta.).

Location,—Plant located on Welland canal.

Installation,—Plant operates under an average head of 12 feet. Turbine—1 Trump, 48-inch, vert., single runner, 220 h.p., 1 Trump, 44-inch, hor., single runner, 150 h.p., total 370 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 60-cycle, 120 k.w., 1,000 r.p.m.; Exciter—1 generator, 5 k.w., 1,500 r.p.m.

Power. *Local distribution lines* serve the municipality of Thorold.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry. and Niagara, St. Catharines and Toronto Electric Ry.

Served also by—

Electrical Development Company of Ontario, Ltd.: See Niagara Falls, Ont.

TILBURY.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

TILLSONBURG.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

TIMMINS.

Northern Canada Power Company, Ltd. Dec., 1918.

Address,—Head Office, Excelsior Life Bldg., Toronto, Ont. Local Office, Timmins, Ont.

Directors,—David Fasken, K.C., Toronto; Alex. Fasken, K.C., Toronto; F. O. Blackwell, New York; H. D. Symms; Jas. Aitcheson.

Officials,—David Fasken, Toronto (Pres); F. O. Blackwell, New York (Vice-Pres.); J. H. Black, Toronto (Gen. Mgr.); Alex. Fasken, Toronto (Sec. Treas.); E. S. Noble, Timmins (Gen. Supt.).

ONTARIO.

Northern Canada Power Company, Ltd.—Con.

History.—The company operates two plants on Mattagami river: one at Wawaitin falls and the other at Sandy falls. Sandy Falls plant was installed in 1911, with an additional unit in 1916; Wawaitin Falls plant was installed in 1912 and 1913, with two additional units in 1918.

Capital.—Authorized, \$3,000,000. Issued, \$3,000,000.

Debenture Stock.—Authorized, \$2,000,000. Outstanding, \$1,570,000.

Capital invested in Plants and Equipment.—Sandy Falls plant, \$1,237,373. Wawaitin Falls plant, \$3,762,627.

Plants.**Sandy Falls Plant.** (Hydro Power Plant No. 4LA₂).

Official.—J. J. McGee (Supt.).

Location.—Plant located at Sandy falls, on Mattagami river, 7 miles from Timmins, on Porcupine branch of Temiskaming and Northern Ontario Ry.

Installation.—Plant operates under an average head of 72 feet. Water is conveyed from intake to surge tank at the power-house, through three penstocks: one 8-foot steel, one 8-foot wood stave, and one 11½-foot wood stave; all 100 feet in length. Turbines—2 S. Morgan-Smith, hor., Francis, double runner, 1,200 h.p. each, 214 r.p.m.; 1 I. P. Morris, vert., Francis, single runner, 2,500 h.p., 163½ r.p.m., total 4,900 h.p.; Generators—2 West., A.C., 3-phase, 60-cycle, 950 k.v.a. each, 214 r.p.m., 1 Can. Gen. Elect. A.C. 3-phase, 60-cycle, 1,875 k.v.a., 163½ r.p.m., total 3,775 k.v.a.; Exciters—1 A.C., 3-phase, 550 v., 720 r.p.m., 2 generators, 40 k.w. each, 214 r.p.m., 1 generator, 100 k.w., 720 r.p.m.

Wawaitin Falls Plant. (Hydro Power Plant No. 4LA₁).

Official.—J. Crouse (Supt.).

Location.—Plant located at Wawaitin falls, on Mattagami river, 16 miles from Timmins on Porcupine branch of Temiskaming and Northern Ontario Ry.

Installation.—Plant operates under an average head of 125 feet. Water is conveyed from the dam to the gate house through a canal 1,200 feet long; from the gate house two 9-foot wood stave pipes, 1,400 feet long, lead to a surge tank from which two 8-foot steel penstocks, 1,200 feet long, convey the water to the first two units. Before entering the first surge tank water is diverted from one of the pipes through a 9-foot wood stave branch pipe 900 feet long to a second surge tank, from which two 7-foot steel penstocks 500 feet long convey the water to the other two units. Turbines—2 S. Morgan Smith, hor., Francis, double runner, 3,450 h.p. each, 375 r.p.m., 2 S. Morgan Smith, vert., Francis, single runner, 4,000 h.p. each, 375 r.p.m., total 14,900 h.p.; Generators—2 Can. West., A.C., 3-phase, 25-cycle, 2,500 k.v.a. each, 375 r.p.m., 2 Can. West., A.C., 3-phase, 25-cycle, 3,750 k.v.a. each, 375 r.p.m., total 12,500 k.v.a.; Exciters—2 turbines, 150 h.p., 600 r.p.m., 1 motor, 3-phase, 2,200 v., 750 r.p.m., 1 generator, 150 k.w., 750 r.p.m.

Power. *Transmission Lines.*—27 miles of wooden pole main lines and 15 miles of wooden pole branch lines serve the municipalities of Timmins, South Porcupine and Schumacher through the Northern Ontario Power Company, of Cobalt, Ont., and also serve mines in the district.

Use of Power.—Power is used for lighting, operation of gold mines and general power purposes.

Power is sold in bulk to Northern Ontario Power Company.

Power is delivered adjacent to Temiskaming and Northern Ontario Ry.

Both plants are installed to their full designed capacity. When mines are working to capacity the total output of the plants is required. Power rate, \$50 per h.p. year on three-minute peak basis.

TORONTO.

Jan., 1919.

Hydro-Electric Power Commission of Ontario. Created by Act of Legislature of the Province of Ontario.

Address.—Administration Bldg., 190 University Ave., Toronto, Ont.

Commissioners.—Sir Adam Beck, K.B., LL.D., London, Ont. (Chmn.); Hon. I. B. Lucas, M.P.P., Markdale, Ont.; W. K. McNaught, C.M.G., Toronto, Ont.

Officers.—F. A. Gaby (Ch. Engr.); W. W. Pope (Sec.).

History of Commission.—The Ontario Power Commission was created under the terms of the Municipal Power Works Act of 1903 and its duty was broadly to report upon the feasibility of the co-operative development and transmission of Niagara power by and for a group of seven cities and towns in western Ontario.

On July 5, 1905, a commission was appointed by Order in Council under the provisions of "The Act Respecting Inquiries Concerning Public Matters," to investigate and report regarding hydraulic and electric power within the legislative jurisdiction of the province of Ontario. This commission carried on extensive investigations throughout the province, which investigations were subsequently published in five reports issued by the Hydro-Electric Power Commission in 1906.

The Hydro-Electric Power Commission of Ontario was formally created by Statute in May, 1906. The powers vested in the Commission under "The Power Commission Act" were enlarged and amplified in 1907, and it is under the terms of this Act and subsequent amendments that the Commission is now operating.

History of Work.—One of the first undertakings of the Commission was the completion of the investigations carried on by the former commission. The results of this work were published in five reports covering different districts of the province and include information as to demand for power, sources of power, transmission and distribution of power, and cost of power generated from fuel.

Surveys of the proposed routes of the various high-tension transmission lines from Niagara to the municipalities to be served were commenced in June, 1907, and actual construction of these lines was started in July, 1909. At the same time construction was commenced on transformer stations to be built in eleven municipalities in the Niagara district.

Under agreement dated August 12, 1907, and amended March 19, 1908, the Commission contracted with the Ontario Power Company for a supply of 100,000 horse-power.

The first actual operation of the Niagara system occurred on May 18, 1910, when tests were carried on. Energy was first delivered to the Niagara step-up transformer station by the Ontario Power Company on August 25, 1910, and, while the line from Niagara to Kitchener by way of Dundas, Guelph and Preston was operated for the first time on September 14, 1910, energy was not officially delivered to Kitchener until October 11, 1910.

Up to October, 1914, the Commission purchased all power used by the different systems. With the completion of the plant at Wasdells falls on Severn river the Commission became producers of power for the first time.

The Commission has carried on systematic stream measurements throughout the province since 1912, and has also investigated and reported on a large number of possible power sites.

The rapid expansion of the Commission's work and the development of the various systems is detailed in the ten annual reports issued by the Commission to date.

Hydro-Electric Power Commission of Ontario.—*Con.***Niagara System.**

Ontario Power Company's Plant. (Hydro Power Plant No. 2HA_g). Acquired and operated by Hydro-Electric Power Commission.

History.—The original company was organized under the name of Canadian Power Company in 1887 and was granted Dominion Charter on June 23, 1887. Charter was acquired by the Ontario Power Company of Niagara Falls on April 9, 1900. Construction of present plant commenced in July, 1902. The first three units were placed in operation July 1, 1905. Power was delivered commercially in Lockport, N.Y., on November 6, 1905, to Syracuse, N.Y., on July 7, 1906, and to Welland, Ont., on November 6, 1906. Fourth unit was placed in operation November 5, 1906, and fifth and sixth units on January 18, 1908. Three additional units were installed in 1909, three in 1911, two in 1913, and two additional units have recently been installed and will be placed in operation about June, 1919. The company commenced supplying power to the Commission for distribution on October 11, 1910, when the municipality of Kitchener was first served with Niagara power through the Commission. Under agreement dated April 12, 1917, the Commission acquired the property of the Ontario Power Company and assumed the obligations of contracts previously entered into with allied companies, including the Ontario Transmission Company and the Niagara, Lockport and Ontario Power Company. On August 1, 1917, the operation of the generating plant, transformer stations, transmission lines and substations of the Ontario Power Company was placed under the supervision of the Commission.

Location.—Plant located at Niagara Falls, on Canadian side of Niagara river, in Queen Victoria Niagara Falls Park, Niagara Falls, Ont., and adjacent to Montrose Junction, Michigan Central Ry., Grand Trunk Ry., and New York Central and Hudson River Ry.

Installation.—Plant operates under an average head of 175 feet. The intake is situated at the first cascade of the upper rapids and the generating station is located one mile below, at the base of the cliff below Horseshoe falls. The water is conveyed from the headworks to a point immediately above the power-house through two 18-foot steel and concrete conduits laid under ground, and from these main conduits to the turbines through 9-foot steel penstocks, about 300 feet in length, tunnelled through solid rock. With all turbines in operation the drop in the head through the conduits and water passages reduces the capacity of the units considerably. The guaranteed total capacity with each unit operating under 180-foot head is 205,700 h.p. The actual capacity of each unit operating alone under 180-foot head is much greater, giving a total capacity 238,500 h.p. The actual total capacity under full-load conditions of the fourteen units now in operation is about 170,000 h.p. Turbines—7 J. M. Voith, 78½-inch, hor., Francis, double-runner, 11,700 h.p. each, 187.5 r.p.m., 5 J. M. Voith, 78½-inch, hor., Francis, double-runner, 13,400 h.p. each, 187.5 r.p.m., 2 Wellman-Seaver-Morgan, 88-inch, hor., Francis, double-runner, 13,400 h.p. each, 187.5 r.p.m., 2 (at present being installed; to be in operation about June, 1919), 15,000 h.p. each, total 205,700 h.p. (guaranteed capacity at 180-foot head); Generators—3 West., A.C., 3-phase, 25-cycle, 7,500 k.w. each, 1,875 r.p.m., 4 West., A.C., 3-phase, 25-cycle, 8,770 k.w. each, 1,875 r.p.m., 7 Gen. Elect., A.C., 3-phase, 25-cycle, 8,776 k.w. each, 1,875 r.p.m., 2 West., D.C., 375 k.w. each, 300 r.p.m., total 119,762 k.w.; Exciters—2 turbines, 1,600 h.p. each, 375 r.p.m., 14 motors, 3-phase, 2,300 v., 750 r.p.m., 4 generators, 40 k.w. each, 750 r.p.m., 10 generators, 60 k.w. each, 750 r.p.m.; Transformers—1 bank of 12 Can. West., single-phase, oil-insulated, primary 12,000 v., secondary 61,400 v., 8,750 k.v.a. each, 1 bank of 6 Can. West., single-phase, oil-insulated, primary 12,000 v., secondary 30,700 v., 8,750 k.v.a. each.

Hydro-Electric Power Commission of Ontario.—Con.

Erindale Plant. (Hydro-Power Plant No. 2HB₅). Formerly owned by Erindale Power Company.

History.—Plant installed in August, 1910, by Erindale Power Company. Auxiliary power was obtained from the combined steam and hydraulic plant of the Interurban Electric Company, near Lambton, Ont. To remedy this unsatisfactory arrangement, the company applied to the Commission in 1911 for a supply of power. On January 11, 1917, the Commission purchased and took over the properties of the Erindale Power Company and the Interurban Power Company, and a number of changes have since been made in the method of serving the former customers of the companies. Power from this plant is supplied to the Niagara system.

Location.—Plant located on Credit river, near Erindale.

Installation.—Plant formerly operated under an average head of 56 feet, which is at present reduced due to destruction of top of dam. Turbines—2 Chas. Barber, 50-inch, single runner, 840 h.p. each, 200 r.p.m., total 1,680 h.p.; Generators—2 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 600 k.w. each, 200 r.p.m., total 1,200 k.w.; Exciter—Belted to main turbine shaft.

Power. *Transmission Lines.*—The Commission operates a total of 470 miles of high tension (110,000 v.), steel tower lines, as follows: Niagara Falls to Dundas, 51 miles; Dundas to Toronto, 39.1 miles; Dundas to Paris, 22.6 miles; Paris to Woodstock, 21.8 miles; Woodstock to London, 25.4 miles; Dundas to Guelph, 25.3 miles; Guelph to Kitchener, 19.1 miles; Kitchener to Stratford, 25.1 miles; Stratford to St. Marys, 13.5 miles; St. Marys to London, 23.6 miles; London to St. Thomas, 13.4 miles; Windsor Extension, St. Thomas to Walkerville Jct., 102.8 miles; Niagara Duplication, Niagara Falls to Dundas, 50.0 miles; Dundas to Hamilton, 2.8 miles; and the new Dundas to Toronto line, 35 miles, completed October 29, 1917.

The Commission operates also 983.54 miles of low-tension (varying from 46,000 v. to 2,200 v.) wooden pole lines, which serve the municipalities included in the system.

Power is sold in bulk to the following municipalities:—

Municipality.	Date connected.	Power delivered adjacent to.
Acton.....	Dec. 11, 1912.....	G. T. Ry.
Ailsa Craig.....	Dec. 15, 1915.....	G. T. Ry.
Ayr.....	Dec. 5, 1914.....	C. P. Ry.
Baden.....	Dec. 29, 1911.....	G. T. Ry.
Beachville.....	June 25, 1912.....	G. T. Ry., C. P. Ry.
Blenheim.....	Oct. 20, 1915.....	Pere Marquette Ry.
Bolton.....	Jan. 26, 1915.....	C. P. Ry.
Bothwell.....	Aug. 17, 1915.....	G. T. Ry., C. P. Ry., Wabash Ry.
Brampton.....	Oct. 16, 1911.....	G. T. Ry., C. P. Ry.
Brantford.....	Jan. 17, 1914.....	G. T. Ry., T. H. & B. Ry.
Breslau.....		G. T. Ry.
Brigden.....	Dec. 6, 1917.....	M. C. Ry.
Burlford.....	May 6, 1915.....	G. T. Ry.
Burgesville.....	Oct. 26, 1916.....	G. T. Ry.
Caledonia.....	Sept. 23, 1912.....	G. T. Ry.
Chatham.....	Jan. 15, 1915.....	G. T. Ry., C. P. Ry., Pere Marquette Ry., Wabash Ry., Great Lakes Navigation.
Clinton.....	Feb. 15, 1914.....	G. T. Ry.
Comber.....	April 20, 1915.....	M. C. Ry.
Dashwood.....	Aug. 24, 1917.....	
Delaware.....	Mar. 1, 1915.....	
Dorchester.....	Mar. 31, 1915.....	G. T. Ry.
Dresden.....	Mar. 30, 1915.....	Pere Marquette Ry.
Drumbo.....	Dec. 1, 1914.....	G. T. Ry., C. P. Ry.
Dublin.....	Sept. 25, 1917.....	G. T. Ry.
Dundas.....	Jan. 2, 1911.....	G. T. Ry.
Dutton.....	Aug. 27, 1915.....	M. C. Ry., Pere Marquette Ry.

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Hydro-Electric Power Commission of Ontario.—*Con.*

Municipality.	Date connected.	Power delivered adjacent to.
Eschira.....	Oct. 25, 1913.....	G. T. Ry., C. P. Ry.
Eora.....	Oct. 22, 1914.....	G. T. Ry., C. P. Ry.
Eubro.....	Dec. 22, 1914.....	C. P. Ry.
Ester.....	May 4, 1916.....	G. T. Ry.
Fergus.....	Oct. 22, 1914.....	G. T. Ry., C. P. Ry.
Forest.....	Feb. 7, 1917.....	G. T. Ry.
Galt.....	Mar. 15, 1911.....	G. T. Ry., C. P. Ry.
Georgetown.....	July 31, 1913.....	G. T. Ry.
Goderich.....	Dec. 28, 1913.....	G. T. Ry., C. P. Ry., Great Lakes Navigation.
Granton.....	June 29, 1916.....	G. T. Ry.
Guelph.....	Nov. 13, 1910.....	G. T. Ry., C. P. Ry.
Hagersville.....	Aug. 15, 1913.....	G. T. Ry., M. C. Ry.
Hamilton.....	Dec. 20, 1910.....	G. T. Ry., C. P. Ry., T. H. & B. Ry., Great Lakes Navigation.
Harriston.....	June 30, 1916.....	G. T. Ry., C. P. Ry.
Hensall.....	Dec. 21, 1916.....	G. T. Ry.
Hespeler.....	Jan. 5, 1911.....	G. T. Ry.
Highbate.....	Nov. 6, 1916.....	M. C. Ry., Pere Marquette Ry.
Ingersoll.....	April 1, 1911.....	G. T. Ry., C. P. Ry.
Kitchener.....	Sept. 29, 1910.....	G. T. Ry.
Lambeth.....	Mar. 12, 1915.....	
Listowel.....	May 27, 1916.....	G. T. Ry., C. P. Ry.
London.....	Dec. 2, 1910.....	C. P. Ry., G. T. Ry., M. C. Ry., L. & Pt. S. Ry.
Lucan.....	Jan. 21, 1915.....	G. T. Ry.
Lynden.....	Oct. 22, 1915.....	G. T. Ry.
Milton.....	Dec. 11, 1912.....	G. T. Ry.
Milverton.....	May 18, 1916.....	G. T. Ry., C. P. Ry.
Mimico.....	Mar. 21, 1912.....	G. T. Ry., C. P. Ry.
Mitchell.....	Sept. 11, 1911.....	G. T. Ry.
Mt. Brydges.....	Feb. 1, 1915.....	G. T. Ry., C. P. Ry.
New Hamburg.....	Feb. 3, 1911.....	G. T. Ry.
New Toronto.....	Jan. 30, 1914.....	G. T. Ry., C. P. Ry.
Niagara Falls.....	Dec. 19, 1915.....	M. C. Ry.
Norwich.....	April 3, 1912.....	G. T. Ry.
Oil Springs.....	Jan. 9, 1918.....	M. C. Ry.
Otterville.....	Jan. 15, 1916.....	G. T. Ry.
Palmerston.....	June 6, 1916.....	G. T. Ry.
Paris.....	Jan. 4, 1914.....	G. T. Ry.
Petrolia.....	April 23, 1916.....	G. T. Ry., M. C. Ry.
Plattsville.....	Dec. 1, 1914.....	
Point Edward.....	Nov. 10, 1916.....	G. T. Ry.
Port Credit.....	July 5, 1912.....	G. T. Ry., C. P. Ry.
Port Dalhousie.....		G. T. Ry., Great Lakes Navigation.
Port Stanley.....	Mar. 9, 1912.....	L. & Pt. S. Ry.
Preston.....	Nov. 29, 1910.....	G. T. Ry.
Princeton.....	Dec. 18, 1914.....	G. T. Ry.
Ridgetown.....	Nov. 25, 1915.....	M. C. Ry., Pere Marquette Ry.
Rockwood.....	July 31, 1913.....	G. T. Ry.
Rodney.....	Jan. 15, 1917.....	M. C. Ry., Pere Marquette Ry.
St. Catharines.....	April 1, 1914.....	G. T. Ry.
St. George.....	Aug. 17, 1915.....	G. T. Ry.
St. Jacobs.....	Aug. 28, 1917.....	G. T. Ry.
St. Marys.....	April 21, 1911.....	G. T. Ry., C. P. Ry.
St. Thomas.....	Feb. 22, 1911.....	G. T. Ry., C. P. Ry., M. C. Ry., L. & Pt. S. Ry., Pere Marquette Ry., Wabash Ry.
Sandwich.....	Oct. 30, 1916.....	Essex Term. Ry.
Sarnia.....	Nov. 10, 1916.....	G. T. Ry., Pere Marquette Ry., Great Lakes Navigation.
Seaforth.....	Dec. 1, 1911.....	G. T. Ry.
Simcoe.....	Mar. 9, 1915.....	G. T. Ry., Wabash Ry.
Springfield.....	July 7, 1917.....	M. C. Ry.
Stratford.....	Dec. 25, 1910.....	G. T. Ry.
Strathroy.....	Nov. 30, 1914.....	G. T. Ry.
Streetsville.....	Oct. 11, 1913.....	C. P. Ry.
Tavistock.....	Oct. 26, 1916.....	G. T. Ry.
Thamesford.....	Jan. 27, 1914.....	C. P. Ry.
Thamesville.....	Jan. 14, 1915.....	G. T. Ry., C. P. Ry., Wabash Ry.
Thorndale.....	Jan. 27, 1914.....	G. T. Ry.
Tilbury.....	Mar. 3, 1915.....	C. P. Ry., M. C. Ry.
Tilsonburg.....	July 1, 1911.....	G. T. Ry., C. P. Ry., M. C. Ry., Wabash Ry.
Toronto.....	Mar. 24, 1911.....	G. T. Ry., C. P. Ry., C. N. Ry., Great Lakes Navigation.

Hydro-Electric Power Commission of Ontario.—*Con.*

Municipality.	Date connected.	Power delivered adjacent to.
Walkerville.....	Oct. 28, 1914.....	G. T. Ry., Wabash Ry., Pere Marquette Ry., Great Lakes Navigation.
Wallaceburg.....	Feb. 3, 1915.....	Pere Marquette Ry.
Waterdown.....	Nov. 1, 1911.....	G. T. Ry., C. P. Ry.
Waterford.....	Mar. 10, 1915.....	M. C. Ry., T. H. & B. Ry.
Waterloo.....	Nov. 13, 1910.....	G. T. Ry.
Watford.....	Aug. 11, 1917.....	G. T. Ry.
Welland.....	1913.....	G. T. Ry., M. C. Ry., T. H. & B. Ry., Wabash Ry., Great Lakes Navigation.
Wellesley.....	Oct. 23, 1916.....	M. C. Ry., Pere Marquette Ry.
West Lorne.....	Dec. 22, 1916.....	G. T. Ry., C. P. Ry.
Weston.....	Aug. 4, 1911.....	G. T. Ry., C. P. Ry., M. C. Ry., Wabash Ry., Pere Marquette Ry., Great Lakes Navigation.
Windsor.....	Aug. 20, 1914.....	C. P. Ry.
Woodbridge.....	Dec. 2, 1914.....	G. T. Ry., C. P. Ry.
Woodstock.....	Nov. 13, 1910.....	G. T. Ry.
Wyoming.....	Oct. 4, 1916.....	
Zurich.....	Aug. 24, 1917.....	

Power is sold in bulk to townships of Toronto, Stamford, Etobicoke, Grantham, Vaughan and Waterloo.

Power is also served to Ontario Agricultural College, Military Hospitals Commission, London Asylum, Mimico Asylum, and Central Prison Farm.

Power is purchased in bulk from Canadian Niagara Power Company, and Electrical Development Company, of Niagara Falls, Ont.

Use of Power.—Power is used for light, operation of street railways, operation of electro-chemical and electro-metallurgical industries, general manufacturing and general power purposes.

The system is served with power at 60 cycles.

Power is exported to United States at Niagara through the Niagara, Lockport and Ontario Power Company.

The Commission has at present under construction a plant at Niagara Falls, known as the Chippawa-Queenston development, with a proposed initial capacity of 100,000 horse-power and an ultimate capacity of 300,000 horse-power. The intake is to be at Chippawa and the water will be conveyed through a canal about 12 miles in length to the forebay at the crest of the escarpment a short distance above Queenston. The plant will operate under an effective head of about 305 feet. Preliminary surveys were commenced in 1914 and the construction is at present well advanced.

The Commission has recently acquired the distribution system of the Essex Light and Power Company, described below under the Essex County System. The municipalities included in this system will be eventually supplied with Niagara power under the Niagara System.

Essex County System.

History.—While this report was being prepared the Commission commenced the operation of the Essex County System, which includes the municipalities of Amherstburg, Canard River, Cottam, Essex, Harrow, Kingsville and Leamington. On June 1, 1918, the Commission took over the distribution system owned by the Essex Light and Power Company, which company is a subsidiary of the Detroit Edison Company, and supplied power to the above municipalities. Arrangements have been made for a supply of power from the Canadian Salt Company's steam plant at Sandwich until the end of the year, when it is expected power will be supplied from the Commission's high tension station at Essex, on the Niagara System.

Hydro-Electric Power Commission of Ontario.—Con. Severn System.

Big Chute Plant. (Hydro Power Plant No. 2EC₄).

History.—This system was originally known as Simcoe System and was supplied with power from the Simcoe Railway and Power Company's plant at Big Chute, on Severn river. The plant was installed in 1909. In 1914 arrangements were made by the Commission to purchase the company's property and on July 1, 1914, the system was placed under the supervision of the Commission. The power-house is at present being enlarged and a fourth unit installed. It is expected that the new unit will be in operation early in 1919.

Location.—Plant located at Big Chute, on Severn river, about 4 miles below Severn Falls station on the Canadian Pacific Ry., and about 9 miles above the mouth of the river.

Installation.—Plant operates under an average head of 56 feet. Water is conveyed to the forebay by a canal 500 feet long and from the forebay to the power-house through two steel penstocks 9 feet in diameter and 170 feet long. Turbines—3 Wm. Hamilton, 32-inch, hor., Samson, double runner, 1,300 h.p. each, 300 r.p.m., total 3,900 h.p.; Generators—3 Can. West., A.C., 3-phase, 60-cycle, 900 k.v.a. each, 300 r.p.m., total 2,700 k.v.a.; Exciters—2 turbines, 20-inch, 150 h.p. each, 580 r.p.m., 2 generators, 100 k.w. each, 580 r.p.m.; Transformers—2 banks of 3 Can. West., single-phase, water-cooled, primary 2,200 v., secondary 22,000 v. 600 k.v.a. each.

Power. *Transmission Lines.*—181.55 miles of wooden pole lines serve the municipalities included in the system; 173.88 miles of these lines consist of 22,000 v. circuits, and the balance, 7.67 miles, consist of 4,000 volt circuits.

Power is sold in bulk to the following municipalities:—

Municipality.	Date connected.	Power delivered adjacent to.
Alliston.....	May 16, 1918.....	G. T. Ry.
Barry	April 10, 1913.....	G. T. Ry.
Beeton.....	July 26, 1918.....	G. T. Ry., C. P. Ry.
Bradford.....	Sept. 16, 1918.....	G. T. Ry.
Coldwater.....	Feb. 24, 1913.....	G. T. Ry., C. P. Ry.
Collingwood.....	Feb. 24, 1913.....	G. T. Ry., Great Lakes Navigation.
Elmvale.....	May 27, 1913.....	G. T. Ry.
Penetanguishene.....	Nov. 27, 1911.....	G. T. Ry., Great Lakes Navigation.
Port McNicoll.....	Dec. 3, 1915.....	C. P. Ry., Great Lakes Navigation.
Stayner.....	Sept. 25, 1913.....	G. T. Ry.
Thornton.....	Oct. 16, 1918.....	G. T. Ry.
Tottenham.....	Sept. 9, 1918.....	G. T. Ry., C. P. Ry.
Victoria Harbour.....	July 1, 1914.....	G. T. Ry.
Waubesaushene.....	Nov. 13, 1915.....	G. T. Ry.

Power was sold in bulk to the municipality of Orillia to augment the supply from their former plant at Ragged rapids on Severn river. This supply has been discontinued since the operation of the new municipal plant at Swift rapids in November, 1917, and it is expected that the Commission will purchase power from the Swift Rapids plant. This plant is now connected with both the Severn and Wasdell's systems.

Power is also sold to Camp Borden (connected June 29, 1916), and the Canadian Pacific Railway elevator and railway terminal at Port McNicoll (connected July 25, 1916).

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

This system is served with power at 60 cycles.

Hydro-Electric Power Commission of Ontario.—*Con.* Severn System.—*Con.*

The Commission is at present enlarging the Big Chute plant and installing a fourth unit. The new unit will consist of one Wellman-Seaver-Morgan, double-runner turbine at 2,300 h.p., 300 r.p.m., direct connected to one Can. Gen. Elect., A.C., 3-phase generator at 1,600 k.v.a. An additional 9-foot steel penstock 170 feet in length will also be installed. It is expected that the new unit will be in operation in 1919.

This plant operates in parallel with the plants of the Eugenia and Wasdell's systems, and power is received from Eugenia system at Collingwood and Wasdell's system at Longford. The Orillia Municipal plant also operates in parallel with the plants of these systems.

Plans are being prepared by the Commission to connect the Severn and Muskoka systems by means of a 22,000 volt transmission line, approximately 16 miles in length, on the completion of which five generating stations will be operated in parallel, all delivering energy to one network of transmission lines, thus insuring a maximum of efficiency and continuity of service.

Wasdell's System.

Wasdell's Falls Plant. (Hydro Power Plant No. 2EC₄).

History.—The development of Wasdell's falls on Severn river was the first step taken by the Commission towards the production of power and was the result of the application of various municipalities in the county of Ontario for a supply of power. The purchase of the site and development of power was authorized by Order in Council dated April 21, 1913, and work was commenced immediately. Work was completed September, 1914, and the plant placed in operation October 5, 1914. On July 24, 1916, the 7-mile tie line between Wasdell's Falls plant and the Orillia substation at Longford was placed in operation, thereby making possible the parallel operation of the Wasdell's and Severn systems. As a result of this arrangement the Wasdell's Falls plant supplies the Severn system with all of its surplus power, over and above the demand of the towns in Ontario county, which enables this plant to operate at high-load factor.

Location.—Plant located at Wasdell's falls, on Severn river, 3 miles below the outlet of Couchiching lake, and about 2½ miles from Severn station on Grand Trunk Ry., and 3 miles from Washago station on Grand Trunk Ry. and Canadian Northern Ry.

Installation.—Plant operates under an average head of 12 feet. The power-house is adjacent to the dam and the water enters the wheelpit directly from the forebay. Turbines—2 Boving, 80-inch, vert., double runner, 600 h.p. each, 90 r.p.m., total 1,200 h.p.; Generators—2 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 400 k.v.a. each, 90 r.p.m., total 800 k.v.a.; Exciters—1 Boving, 38-inch, vert., single runner turbine, 55 h.p., 190 r.p.m., 1 motor, 3-phase, 220 v., 1,200 r.p.m., 1 Swedish Gen. Elect., D.C. generator, 20 k.w., 190 r.p.m., 1 generator, 30 k.w., 1,200 r.p.m.; Transformers—2 banks of 3 Can. West., single-phase, self-cooled, primary 2,200 v., secondary 22,000 v., 150 k.v.a. each, 1 Can. West., single-phase, self-cooled, primary 2,200 v., secondary 22,000 v., 150 k.v.a. (spare unit).

Power. Transmission Lines.—55.55 miles of wooden pole lines serve the municipalities included in the system, 12 miles of which carry 22,000 volt circuit and 12.55 miles carry a 4,000 volt circuit.

Hydro-Electric Power Commission of Ontario.—Con.**Wasdell's System.—Con.**

Power is sold in bulk to the following municipalities:—

Municipality.	Date connected.	Power delivered adjacent to
Barvorton.....	Oct. 6, 1914.....	G. T. Ry., C. N. Ry.
Brechin.....	Dec. 19, 1914.....	G. T. Ry., C. N. Ry., C. P. Ry.
Cannington.....	Oct. 6, 1914.....	G. T. Ry.
Sunderland.....	Oct. 16, 1914.....	G. T. Ry.
Woodville.....	Oct. 19, 1914.....	G. T. Ry.

Power is also served to rural districts along the transmission lines.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

The system is served with power at 60 cycles.

This plant operates in parallel with the Big Chute plant of the Severn System, to which power is delivered over the transmission lines of the Orillia Municipal System, connection being made at the Longford substation. By this means parallel operation is secured with the Orillia Municipal plant at Swift Rapids and with the Commission's plants at Big Chute, of the Severn System, and Eugenia Falls, of the Eugenia Falls System. These three developments, together with the Orillia plant at Swift Rapids, will eventually be tied in with the Commission's development at South Falls, of the Muskoka System, and with future developments at other locations in adjacent districts, as soon as these developments are completed and placed in operation by the Commission.

Eugenia Falls System.**Eugenia Falls Plant.** (Hydro Power Plant No. 2FB₄).

History.—Originally the Flesher-ton Electric Light plant utilized part of the head at this site. The Commission purchased the power rights from Georgian Bay Power Company in 1914 and immediately commenced the construction of the present plant. The plant was completed and placed in operation on November 18, 1915. This is the second generating plant constructed by the Commission. On June 13, 1916, a part of the Pine River System was acquired by the Commission and was connected to the Eugenia System by means of a 13-mile tie line between Dundalk and Shelburne. On October 6, 1916, the 24-mile tie line between Eugenia Falls plant and Collingwood distribution station was completed, thereby making possible the parallel operation of the Eugenia and Severn systems. The plant was originally designed for four units of 2,250 h.p. each, but is at present being enlarged and the new design is for two units of 2,250 h.p. each, already installed, and two units of 4,000 h.p. each, one of which is now being installed.

Location.—Plant located at Eugenia falls, on Beaver river, 7½ miles from Flesher-ton, Ont., on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 549 feet. The water is conveyed from the main storage basin to the gate-house through a canal and from there to the power-house through a pipe line made up of 3,350 feet of 46-inch wood stave pipe connected to 1,557 feet of 52-inch riveted steel penstock. Provision is made for a second pipe line. Turbines—2 Escher-Wyss, 33-inch, hor., Francis, single runner, 2,250 h.p. each, 900 r.p.m., total 4,500 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle, 1,410 k.v.a. each, 900 r.p.m., total 2,820 k.v.a.; Exciters—2 generators, 30 k.w., 900 r.p.m.; Transformers—1 bank of 3 Can. West., single-phase, water-cooled, primary 2,200 v., secondary 22,000 v., 900 k.v.a. each.

Hydro-Electric Power Commission of Ontario.—*Con.*Eugenia Falls System.—*Con.*

Power. *Transmission Lines*.—203.47 miles of wooden pole lines serve the municipalities included in the system; 170.66 miles carrying 22,000 volt circuits, and 32.81 miles carrying 4,000 volt circuits.

Power is sold in bulk to the following municipalities:—

Municipality.	Date connected.	Power delivered adjacent to.
Alton.....	Nov. 27, 1916.....	C. P. Ry.
Arthur.....	Dec. 1, 1916.....	C. P. Ry.
Carlsruhe.....	Nov. 15, 1917.....	G. T. Ry.
Chatsworth.....	Dec. 17, 1915.....	C. P. Ry.
Chesley.....	June 18, 1916.....	G. T. Ry.
Dundalk.....	Nov. 18, 1915.....	C. P. Ry.
Durham.....	Nov. 18, 1915.....	C. P. Ry., G. T. Ry.
Elmwood.....	Mar. 1, 1918.....	G. T. Ry.
Flesherton.....	Nov. 18, 1915.....	C. P. Ry.
Grand Valley.....	Dec. 1, 1916.....	C. P. Ry.
Hanover.....	Nov. 15, 1917.....	C. P. Ry., G. T. Ry.
Holstein.....	April 3, 1916.....	G. T. Ry.
Horning's Mills.....	June 13, 1916.....	
Markdale.....	Nov. 18, 1915.....	C. P. Ry.
Mount Forest.....	Nov. 18, 1915.....	C. P. Ry., G. T. Ry.
Neustadt.....	Nov. 15, 1917.....	G. T. Ry.
Orangeville.....	June 13, 1916.....	C. P. Ry.
Owen Sound.....	Nov. 18, 1915.....	C. P. Ry.; G. T. Ry.; Great Lakes Navigation.
Shelburne.....	June 13, 1916.....	C. P. Ry.
Tara.....	Jan. 3, 1918.....	G. T. Ry.

Power is also sold to the township of Artemesia.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

The system is served with power at 60 cycles.

This plant operates in parallel with the Big Chutes plant of the Severn System, and power is delivered to the Severn System at Collingwood.

The Commission are at present installing a third unit, consisting of an A.C. 3-phase, 2,810 k.v.a., 720 r.p.m., generator, direct connected to a 4,000 h.p. turbine.

Muskoka System.**South Falls Plant.** (Hydro Power Plant No. 2EB₂).

History.—The plant was formerly owned by the municipality of Gravenhurst, but was acquired by the Commission on November 1, 1915. In September, 1915, the work of remodelling and enlarging the power-house was commenced. This included improving the forebay and installing a wood stave pipe, a steel penstock and the present 1,000-h.p. unit. The new unit was placed in operation on August 25, 1916.

Location.—Plant located at South falls, on the south branch of Muskoka river, at the village of Muskoka and about 3 miles from Bracebridge.

Installation.—Plant operates under an average head of 107 feet. Water is conveyed from intake dam to power-house through two pipe lines 1,010 feet in total length; one all-steel and one made up of 946 feet of 60-inch wood stave pipe connected to 64 feet of 60-inch steel penstock. Turbines—1 Jenekes, 20-inch, hor., double runner, 750 h.p., 600 r.p.m., 1 Wm. Hamilton, 23-inch, hor., single runner, 1,000 h.p., 720 r.p.m., total 1,750 h.p.; Generators—1 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 450 k.v.a., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 750 k.v.a., 720 r.p.m., total 1,200 k.v.a.:

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Hydro-Electric Power Commission of Ontario.—Con.**Muskoka System.—Con.**

Exciters—1 turbine, 10-inch, 20 h.p., 750 r.p.m., 1 motor, 3-phase, 220 v., 1 generator, 15 k.w., 1 generator, 25 k.w.; Transformers—1 bank of 3 Can. Gen. Elec., single-phase, self-cooled, primary 6,600 v., secondary 22,000 v., 400 k.v.a. each.

Power. *Transmission Lines*.—26.3 miles of wooden pole lines owned by the Commission and 7 miles owned by municipality of Gravenhurst serve the following municipalities in bulk:—

Municipality.	Date connected.	Power delivered adjacent to.
Gravenhurst.....	Nov. 1, 1915.....	G.T. Ry., and Lake Nav.
Muskoka Falls.....	Nov. 1, 1915.....	
Huntsville.....	Aug. 25, 1916.....	G.T.Ry.

Use of Power.—Power is used for lighting and general power purposes.

The development at South falls is capable of being enlarged and extended to an ultimate capacity of 5,000 h.p.

Plans are being prepared to connect the Muskoka System with the Wasdell's and Severn Systems by means of a 16-mile transmission line.

Proposed Parallel Operation of Plants of the Severn, Wasdell's, Eugenia, and Muskoka Systems.

As soon as the demand for power exceeds the capacity available at the Big Chute, Wasdell's, South Falls and Eugenia generating stations, additional developments will be constructed, as required at various locations adjacent to the districts served by the above-mentioned plants, making it possible to increase the present output by approximately 15,000 h.p.

The sites of these future developments are located as follows:—

Saugeen development, near Port Elgin on the Saugeen river, capable of developing 10,000 h.p.

Port Severn, on the Severn river, immediately below the present Big Chute plant, capable of developing 1,000 h.p.

Cataract Falls, on the Credit river, near Alton, capable of developing 3,000 h.p.

Hayards Falls, on the Saugeen river, near Markdale, capable of developing 1,000 h.p.

At the present time four plants are being operated in parallel, viz., Eugenia, Big Chute, Wasdell's plant, and the Orillia Municipal plant at Swift Rapids, and plans are being prepared to connect these four with the South Falls development of the Muskoka System.

When the demand for power is such that the four new developments are required, nine generating stations will be interconnected by means of one network of transmission lines, by which means power can be transmitted and delivered for industrial purposes at maximum economy, with a minimum possibility of interruption to service. Such an arrangement will enable the water of the various streams to be so conserved as to utilize maximum stream flow for power purposes.

Port Arthur System.

History.—The city of Port Arthur owns and operates a plant on Current river, but the capacity of the plant was not sufficient to meet the demand for power and on December 21, 1910, power was first supplied by the Commission. This power is purchased from Kaministiquia Power Company under agreement

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Hydro-Electric Power Commission of Ontario.—Con.**Port Arthur System.—Con.**

dated September 9, 1909. In 1915 the division of the load carried by the Current River plant and the Commission's substation was placed in the hands of the Commission, so that at present, power generated at the municipal plant is delivered to the Commission.

Power. Transmission Lines.—4 miles of wooden pole line connects Kaministiquia Power Company's lines with the Commission's substation.

Power is purchased in bulk from Kaministiquia Power Company and the Port Arthur Municipal plant.

Power is sold in bulk to municipality of Port Arthur.

Use of Power.—Power is used for lighting, operation of electric railway, general manufacturing and general power purposes, including the operation of grain elevators, coal docks and municipal pumping station.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Great Lakes navigation.

The Commission has under consideration the supplying of power to the municipality of Fort William.

Plans are now being prepared for a development by the Commission on the Nipigon river near Cameron's Pool, the installation of which will probably be 50,000 h.p. It is proposed to deliver this power to the municipalities of Port Arthur and Fort William over a 76-mile, 110,000-volt transmission line. The ultimate capacity of possible developments on the Nipigon river is approximately 150,000 h.p., all of which is available for use at Port Arthur, Fort William and the adjacent district, as soon as a demand is created for such. Should the power developments on the Nipigon river be insufficient to supply the needs of this district an additional 30,000 h.p. is available at Silver Falls on Kaministiquia river near Dog lake, located about 21 miles northwest of Fort William.

Nipissing System.**Nipissing Plant. (Hydro Power Plant No. 2DD₂).**

History.—The plant was formerly owned by the Nipissing Power Company, controlled by Electric Power Company, Ltd., and was taken over by the Commission on March 10, 1916, when the latter company and all its subsidiaries were acquired by the Ontario Government. This plant originally served the municipality of North Bay through the North Bay Light, Heat and Power Company.

Location.—Plant located on South river, two miles from Nipissing village. Steam plant located in North Bay.

Installation.—Plant operates under an average head of 88 feet. Water is taken from South river through an open canal 900 feet long, then through a wood stave pipe 6 feet in diameter, 2,300 feet long, to a differential surge tank 72.5 feet high, close to the power-house, thence through a steel penstock to the turbines. Turbines—2 Jönckes, 27-inch, hor., single runner, 1,100 h.p., 450 r.p.m., total 2,200 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle, 450 k.w. each, 450 r.p.m., total 900 k.w.; Exciters—1 motor, 3-phase, 2,200 v., 850 r.p.m., 1 generator, 37.5 k.w., 850 r.p.m., 2 generators, 12.5 k.w. each, 450 r.p.m.; Transformers—1 bank of 3 Can. West., water-cooled, primary 2,200 v., secondary 22,000 v., 300 k.w. each. Auxiliary Plant—1 Goldie & McCullough Ideal, reciprocating steam engine, 300 h.p., 1 Starns reciprocating steam engine, 325 h.p., total 625 h.p.

Hydro-Electric Power Commission of Ontario.—Con.**Nipissing System.—Con.**

Power. *Transmission Lines.*—26 miles of wooden pole lines serve the following municipalities, in which power is distributed directly by the Commission:—

Municipality.	Power delivered adjacent to.
Nipissing.....	G.T.Ry.
Callander.....	G.T.Ry., C.N.Ry.
Powassan.....	G.T.Ry.
North Bay.....	G.T.Ry., C.N.Ry., C.P.Ry., T. & N.O.Ry.

Use of Power.—Power is used for lighting and general power purposes.

Provision was made for the extension of the power-house, and by additional storage works it is possible to increase the capacity to about 2,500 horse-power.

Ottawa System.

History.—The distribution plant and system were acquired by the municipality of Ottawa from Consumers' Electric Company in 1905. Under an agreement dated July 31, 1907, the Commission contracted to supply power in bulk to the municipality.

Power is purchased in bulk from the Ottawa and Hull Power and Manufacturing Company, whose plant is located in Hull, Que., at Chaudiere falls on Ottawa river.

Power is sold in bulk to the municipality of Ottawa.

Power is used for lighting, general power purposes, and operation of municipal pumping plant.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Northern Ry., New York Central Ry., and Rideau Canal and Ottawa River navigation.

Central Ontario System.

History of System.—The system supplies power to that section of Ontario from Whitby as far east as Kingston and as far north as Fenelon Falls. All power is generated in six hydraulic plants located on the Trent river or its tributaries. The system includes not only the generation and distribution of electric power, but also the operation of one street railway, two water-works systems, four gas plants, and one pulp mill. Under an agreement dated March 10, 1916, under the provisions of the Central Ontario Power Act of 1916, the interests and properties of the Electric Power Company, Ltd., and its subsidiary companies were taken over by the Hydro-Electric Power Commission of Ontario. The companies included in this agreement were: Auburn Power Company, Ltd.; Central Ontario Power Company, Ltd.; City Gas Company of Oshawa, Ltd.; Cobourg Utilities Corporation, Ltd.; Cobourg Gas, Light and Water Company; Eastern Power Company, Ltd.; Light, Heat and Power Company of Lindsay; Napanee Gas Company, Ltd.; Napanee Water and Electric Company; Nipissing Power Company, Ltd.; Northumberland Pulp Company, Ltd.; Oshawa Electric Light Company; Otonabee Power Company, Ltd.; North Bay Light, Heat and Power Company, Ltd.; Peterborough Light and Power Company, Ltd.; Peterborough Radial Railway Company; Port Hope Electric Light and Power Company; Seymour Power and Electric Company, Ltd.; Sydney Electric Power Company, Ltd.; Trenton Electric and Water Company, Ltd.; Tweed Electric Light and Power Company, Ltd.

Hydro-Electric Power Commission of Ontario.—Con.**Central Ontario System.—Con.****Sidney No. 2 Plant.** (Hydro Power Plant No. 2HK₁₀).

History.—Plant installed in 1911 by Sidney Electric Power Company, Ltd., and taken over by the Commission on March 1, 1916.

Location.—Plant located at Dam No. 2, on Trent river, near Trenton, Ont.

Installation.—Plant operates under an average head of 18.6 feet. The power-house forms part of the dam and water is conveyed directly to the turbines. Turbines—4 Boving, 73-inch, vert., Francis, double runner, 1,400 h.p. each, 120 r.p.m., total 5,600 h.p.; Generators—4 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 937.5 k.v.a. each, 120 r.p.m., total 3,750 k.v.a.; Exciters—1 turbine, 110 h.p., 240 r.p.m., 1 motor, 3-phase, 220 v., 690 r.p.m., 1 generator, 75 k.w., 240 r.p.m., 1 generator, 75 k.w., 690 r.p.m.; Transformers—1 bank of 3 Can. West., 3-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 44,000 v., 3,000 k.v.a. each. (In separate building and receives power also from Sidney No. 5 plant.)

Sidney No. 5 Plant. (Hydro Power Plant No. 2HK₉).

History.—Plant installed in January, 1913, by Sidney Electric Power Company, Ltd., and taken over by the Commission on March 1, 1916.

Location.—Plant located at Dam No. 5, on Trent river, near Frankford, Ont.

Installation.—Plant operates under an average head of 17 feet. Turbines—4 Boving, 73-inch, vert., Francis, double runner, 1,200 h.p. each, 112½ r.p.m., total 4,800 h.p.; Generators—4 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 812.5 k.v.a. each, 112½ r.p.m., total 3,250 k.v.a.; Exciters—1 turbine, 225 r.p.m., 1 motor, 3-phase, 2,400 v., 860 r.p.m., 1 generator, 75 k.w., 225 r.p.m., 1 generator, 75 k.w., 860 r.p.m.

Campbellford Plant. (Hydro Power Plant No. 2HK₈).

History.—Plant installed in 1910 by the Seymour Power and Electric Company, Ltd., which supplied power to Campbellford, Deloro, Madoc and Belleville through the Trenton Electric and Water Company. Plant purchased by Commission in 1916.

Location.—Plant located at Dam No. 11, Stephens rapids, on Trent river, at Campbellford.

Installation.—Plant operates under an average head of 22.5 feet. Turbines—5 Wm. Kennedy, vert., Francis, double runner, 1,100 h.p. each, 150 r.p.m., total 5,500 h.p.; Generators—5 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 750 k.v.a. each, 150 r.p.m., total 3,750 k.v.a.; Exciters—1 turbine, 110 h.p., 300 r.p.m., 1 motor, 3-phase, 2,400 v., 1,200 r.p.m., 1 generator, 75 h.p., 300 r.p.m., 1 generator, 50 h.p., 1,200 r.p.m.; Transformers—1 bank of 4 Can. West., 3-phase, water-cooled, oil-insulated, primary 2,400 v., secondary 44,000 v., 1,125 k.v.a. each.

Healey Falls Plant. (Hydro Power Plant No. 2HK₇).

History.—Plant installed in 1913 and 1914 by Eastern Power Company, Ltd., and purchased in 1916 by the Commission. The plant was designed for a final installation of four units, two of which were installed. The Commission is at present installing a third unit, consisting of one Wellman-Seaver-Morgan double runner turbine at 5,600 h.p., 240 r.p.m., direct connected to one Swedish Gen. Elect., A.C., 3-phase generator at 3,750 k.v.a., which is expected to be in operation early in 1919. This unit will require the installation of a third penstock similar to the first two.

Location.—Plant located at Dam No. 14, Healey falls, on Trent river, about 5 miles from Campbellford.

Installation.—Plant operates under an average head of 74 feet. Water is conveyed to the power-house through two 12-foot steel penstocks about 460 feet

Hydro-Electric Power Commission of Ontario.—Con.**Central Ontario System.—Con.**

in length. Turbines—2 Escher Wyss, hor., Francis, double runner, 5,600 h.p. each, 240 r.p.m., total 11,200 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 3,750 k.v.a. each, 240 r.p.m., total 7,500 k.v.a.; Exciters—1 turbine, 300 h.p., 500 r.p.m., 1 motor, 3-phase, 550 v., 900 r.p.m., 1 generator, 160 k.w., 500 r.p.m., 1 generator, 160 k.w., 900 r.p.m.; Transformers—1 bank of 3 Can. West., 3-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 44,000 v., 3,750 k.v.a. each.

Auburn Plant. (Hydro Power Plant No. 2HJ₃).

History.—Plant installed in 1911 by Auburn Power Company, Ltd., and purchased by the Commission in 1916.

Location.—Plant located at Dam No. 18, on Otonabee river, in the town of Peterborough.

Installation.—Plant operates under an average head of 17.5 feet. Turbines—3 Wm. Hamilton, 45-inch, hor., Samson, 4 runner, 950 h.p. each, 150 r.p.m., total 2,850 h.p.; Generators—3 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 625 k.v.a. each, 150 r.p.m., total 1,875 k.v.a.; Exciters—1 turbine, 170 h.p., 275 r.p.m., 1 motor, 3-phase, 2,400 v., 860 r.p.m., 1 generator, 90 k.w., 275 r.p.m., 1 generator, 90 k.w., 860 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., single-phase, self-cooled, oil-insulated, primary 2,400 v., secondary 6,600 v., 200 k.v.a. each, 1 bank of 2 Can. Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 44,000 v., 1,875 k.v.a. each.

Fenelon Falls Plant. (Hydro Power Plant No. 2HH₄).

History.—Plant installed in 1899 by the Light, Heat and Power Company of Lindsay, Ltd., and purchased by the Commission in 1916. The Commission has at present under consideration the installation of an additional unit.

Location.—Plant located at Fenelon falls, Dam No. 30, on Sturgeon river of the Upper Trent System.

Installation.—Plant operates under an average head of 22.5 feet. Turbines—2 Wm. Hamilton, 40-inch, hor., Samson, double runner, 500 h.p. each, 200 r.p.m., total 1,000 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 400 k.v.a. each, 200 r.p.m., total 800 k.v.a.; Transformers—1 bank of 7 Can. Gen. Elect., single-phase, air-blast, primary 550 v., secondary 11,620 v., 135 k.w. each.

Oshawa Auxiliary Plant.

This plant was installed in 1913 to be used only in case of line trouble, but was sold and dismantled in November, 1917. Installation consisted of one Diesel oil engine of 500 k.w. capacity.

Power. Transmission Lines.—315 miles of wooden pole lines serve the municipalities included in the system.

Power is purchased in bulk from municipality of Campbellford, Peterborough Hydraulic Power Company, and municipality of Fenelon Falls.

Hydro-Electric Power Commission of Ontario.—*Con.***Central Ontario System.—*Con.***

Power is distributed directly by the Commission in the following municipalities:—

Municipality.	Power delivered adjacent to.
Belleville.....	G.T.Ry.; C.N.Ry.; C.P.Ry.; Great Lakes Navigation.
Bowmanville.....	G.T.Ry.; C.P.Ry.
Brighton.....	G.T.Ry.; C.P.Ry.; C.N.Ry.
Camden East.....	C.N.Ry.
Cobourg.....	G.T.Ry.; C.N.Ry.; C.P.Ry.
Deseronto.....	C.N.Ry.
Lindsay.....	C.P.Ry.; G.T.Ry.
Millbrook.....	G.T.Ry.
Napanee.....	G.T.Ry.; C.N.Ry.
Newburgh.....	C.N.Ry.
Newcastle.....	C.N.Ry.; C.P.Ry.
Orono.....	C.N.Ry.
Oshawa.....	C.N.Ry.; G.T.Ry.; C.P.Ry.
Port Hope.....	G.T.Ry.; C.P.Ry.; C.N.Ry.
Trenton.....	C.N.Ry.; G.T.Ry.; C.P.Ry.; Great Lakes Navigation.
Tweed.....	C.N.Ry.; C.P.Ry.

Power is sold in bulk by the Commission to the following municipalities for distribution:—

Municipality.	Power delivered adjacent to.
Kingston.....	C.P.Ry.; C.N.Ry.; G.T.Ry.; Great Lakes Navigation.
Madoc.....	G.T.Ry.
Omenee.....	G.T.Ry.
Peterborough.....	C.P.Ry.; G.T.Ry.
Stirling.....	G.T.Ry.
Whitby.....	C.P.Ry.; G.T.Ry.

Power is sold in bulk to G. M. Peebles for distribution in the municipality of Colborne.

The plants in this system operate in parallel.

Use of Power.—Power is used for lighting, operation of electric railways, operation of pulp-mill, general manufacturing and general power purposes.

The Commission is at present installing an additional 5,600 h.p. turbine at Healey Falls plant and has under consideration a further installation at Fenelon Falls plant.

A number of power sites are available along the Trent Valley canal at which existing dams of the canal system might be utilized.

St. Lawrence System.

History.—Power was originally supplied from the Rapid Power Company's plant on the canal at Morrisburg. Prescott was the first municipality to receive power through the Commission in this system. In April, 1915, the system power supply was transferred from Morrisburg to Iroquois, where power was secured from Beach Power Company. The municipality of Brockville operates an auxiliary steam plant, consisting of two Swedish Gen. Elect., A.C., 3-phase generators at 375 k.v.a. each, direct connected to Belliss and Morcom compound steam engines at 450 h.p. Provision is made for synchronizing between these generators and the transformers of the Commission's station.

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Hydro-Electric Power Commission of Ontario.—Con.**St. Lawrence System.—Con.**

Power. Transmission Lines.—66.3 miles of wooden pole lines serve the municipalities included in the system.

Power is purchased in bulk from the Beach Power Company's plant at Iroquois.

Power is sold in bulk to the following municipalities:—

Municipality.	Date connected.	Power delivered adjacent to.
Prescott.....		G.T.Ry., C.P.Ry., Great Lakes Nav.
Winchester.....	Dec. 18, 1913.....	C.P.Ry.
Coasterville.....	Feb. 7, 1914.....	C.P.Ry.
Williamsburg.....	April 3, 1915.....	
Brockville.....	April 24, 1915.....	C.N.Ry.; C.P.Ry.; G.T.Ry.; Gt. Lakes Nav.

Power is used for lighting, general manufacturing and general power purposes. The Commission has arranged for a supply of 10,000 h.p. from the Cedars Rapids Transmission Company to be delivered at 100,000 volts to the Commission's substation which is being erected in the vicinity of Cornwall. A 44,000 volt wood pole transmission line has been constructed from Cornwall to connect with the present system at Morrisburg. This system will be in operation very shortly and surplus power will be available for new loads.

Arrangements are being made which include a transmission line and substation for the supply of power to the Toronto Paper Co. at Cornwall.

Rideau System.

History.—The Commission is at present constructing a transmission system with a view to supplying power to the municipalities in this system, including Carleton Place, Kemptville, Lanark, Merrickville, Perth and Smiths Falls.

The Commission has also commenced work on the erection of a 3,000 h.p. hydro-electric generating station at High Falls on Mississippi river, and a 22-mile, 26,000 volt transmission line is being built to connect with the Rideau system at Perth. Surplus power will be available for industries locating in this district.

Arrangements have been completed for the purchase of a supply of power from Rideau Power Company at Merrickville. This power will be delivered to Smiths Falls, Perth and the surrounding district. The municipalities of Perth and Smiths Falls took over the plants formerly supplying power to them and will operate these plants until the Commission's lines and generating station are completed.

Toronto Electric Light Company, Ltd. (Fuel Power Plant No. 2HC₂), Controlled by the Toronto Power Company, Ltd., which is controlled by the Toronto Railway Company. Feb., 1918.

Address.—Head Office, 12 Adelaide St. East, Toronto, Ont.

Officials.—Brig. Gen. Sir H. M. Pellatt, Toronto (Pres.); D. B. Hanna, Toronto H. H. Macrae, Toronto; Sir Wm. Mackenzie, Toronto; R. J. Fleming, Toronto; E. R. Wood, Toronto; G. A. Morrow, Toronto; R. C. Brown, Toronto; Z. A. Lash, K.C., Toronto; Hon. Frederic Nicholls, Toronto.

Officials.—Brig. Gen. Sir H. M. Pellatt, Toronto (Pres.); D. B. Hanna, Toronto (1st Vice-Pres.); H. H. Macrae, Toronto (2nd Vice-Pres.); R. J. Fleming, Toronto (Gen. Mgr.); D. H. McDougall, Toronto (Asst. to Gen. Mgr.); J. C. Grace, Toronto (Sec.); M. Pellatt, Toronto (Treas.); H. H. Beasley, Toronto (Pur. Agt.).

Toronto Electric Light Company, Ltd.—Con.

History.—Original plant commenced operations in 1883. Present units installed in 1912, 1913, and 1916. The common stock of the original company was purchased by the Toronto Power Company on April 8, 1911.

Capital.—Authorized, \$4,000,000. Issued, \$4,000,000.

Bonds.—Authorized, \$1,000,000. Issued, \$1,000,000.

Capital invested in Plant and Equipment.—\$8,974,694.

Plant. *Official*.—F. G. Clark, Toronto (Ch. Eng.).

Location.—Plant located on Scott street and Terauley street, Toronto.

Installation.—Boilers—21 Heine and 4 Babcock & Wilcox, total 8,200 h.p.; Steam Turbines—2 at 3,000 h.p. each, 1 at 10,000 h.p., 1 at 8,500 h.p., total 24,500 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 25-cycle, 2,000 k.v.a. each, 1,500 r.p.m., 1 Gen. Elect., A.C., 3-phase, 25-cycle, 7,500 k.v.a., 1,500 r.p.m., 1 Gen. Elect., A.C., 3-phase, 25-cycle, 6,250 k.v.a., 1,500 r.p.m., total 17,750 k.v.a.

Power. *Local distribution lines* serve the municipality of Toronto.

Power is purchased in bulk through the Toronto Power Company, Ltd., from Electrical Development Company of Ontario.

Use of Power.—Power is used for lighting, general manufacturing and for general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Northern Ry., and Great Lakes navigation.

Served also by—

Electrical Development Company of Ontario; see Niagara Falls, Ont.

TOTTENHAM.

Municipality of Tottenham. (Fuel Power Plant No. 2ED₂). April, 1918.

Officials.—John McCabe (Clerk); George Gordon (Treas.).

History.—Plant installed in 1901.

Capital invested in Plant and Equipment.—\$7,600.

Plant. *Official*.—R. H. Linton (Supt.).

Location.—Plant located on Mill Street West, Tottenham.

Installation.—Boiler—1 Goldie & McCullough, 90 h.p.; Steam Engine—1 Goldie & McCullough, reciprocating, 60 h.p.; Generators—1 West., D.C., 17 k.w., 1,126 r.p.m., 1 West., D.C., 30 k.w., 850 r.p.m., total 47 k.w.

Power. *Local distribution lines* serve the municipality of Tottenham.

Use of Power.—Power is used for lighting and pumping water.

Power is delivered adjacent to Grand Trunk Ry. and Canadian Pacific Ry.

Served also by—

Electrical Development Company of Ontario; see Niagara Falls, Ont.

TRENTON.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

TWEED.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

UXBRIDGE.

Uxbridge Electric Light Plant. (Hydro Power Plant No. 2EC₁). June, 1918.

Address.—Uxbridge, Ont.

Owner.—J. W. Gould, Uxbridge, Ont.

History.—Original development in 1830; present turbine installed in 1840; generator installed in 1898; steam auxiliary plant installed in 1898.

Capital invested in Plant and Equipment.—\$10,000.

Plant. *Official*.—John McPhail, Uxbridge, Ont. (Ch. Eng.).

Location.—Plant located on Black creek, one-half mile from Uxbridge station on Grand Trunk Ry. Steam auxiliary equipment in a building adjoining hydraulic plant.

ONTARIO.

Uxbridge Electric Light Plant—Con.

Installation,—Plant operates under an average head of 28 feet. Turbine—1 J. C. Wilson, hor., Little Giant, single runner, 33 h.p., 450 r.p.m.; Generator—1 Can. Gen. Elect., A.C., single-phase, 125-cycle, 20 k.v.a., 1,600 r.p.m.; Exciter—1 Can. Gen. Elect. generator, 10 k.w., 1,600 r.p.m. Auxiliary Plant—1 Gaskie & McCullough reciprocating steam engine, 65 h.p.

Power. *Local distribution lines* serve the municipality of Uxbridge.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

VANKLEEK HILL.

Served by Vankleek Hill Electric Power Co., with power purchased from Hawkesbury Electric Light and Power Co., Ltd.; see Hawkesbury, Ont.

VICTORIA HARBOUR.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

VICTORIA ROAD.

Dec., 1918.

The Kirkfield Portland Cement Company, Ltd. (Hydro Power Plant No. 2HF.).

Address,—Care E. R. C. Clarkson & Sons, 15 Wellington St. W., Toronto, Ont.

Official,—W. K. B. Clark (Mgr.).

History,—Plant installed in 1903. The company has not operated the cement works since 1914, but has operated the power plant to supply power for distribution in Victoria Road. The company went into liquidation in April, 1915.

Plant. *Location*,—Plant located on Gull river, at Elliott falls, Victoria county.

Installation,—Plant operates under an average head of 18 feet. Turbines—2 Jenckes, 25-inch, hor., 400 h.p. each, 250 r.p.m., total 800 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 25-cycle, 250 k.w. each, 250 r.p.m., total 500 k.w.; Exciters—1 turbine, 16-inch, 600 r.p.m., 1 generator, 550 v., 600 r.p.m.; Transformers—1 bank of 3 Can. Gen. Elect., 3-phase, water-cooled, primary 15,000 v., secondary 550 v. Auxiliary Plant—1 McEwen steam turbine, 500 h.p.

Power. *Transmission Line*,—14 miles of wooden pole line connects the plant with the company's cement works at Raven Lake, in Bexley township, Victoria county.

Power is sold in bulk to W. J. Neal for distribution in the municipality of Victoria Road.

Use of Power,—Power was formerly used to operate the company's cement works, and at present is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry.

WALES.

Served by St. Lawrence Power Co., Ltd.; see Cornwall, Ont.

WALKERTON.

Walkerton Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2FC.). Feb., 1918.

Address,—Walkerton, Ont.

Officials,—David Robertson, Walkerton (Pres); John Rowland, Walkerton (Vice-Pres.); Miss M. Scanlan, Walkerton (Sec.-Treas.).

History,—Present units installed in 1912 and 1913.

Capital,—Authorized, \$30,000. Issued, \$30,000.

Capital invested in Plant and Equipment,—\$129,970.

Plant. *Officials*,—J. T. Potter, Walkerton (Ch. Engr.); E. Zarn, Walkerton (Engr. & Electr. Sta.).

Location,—Plant located on Saugeen river, near Walkerton.

58553—11

ONTARIO.

Walkerton Electric Light and Power Company, Ltd.—Con.

Installation.—Plant operates under an average head of 11 feet. Turbines—1 Wm. Kennedy, vert., single runner, 300 h.p., 120 r.p.m., 1 Wm. Kennedy, vert., single runner, 130 h.p., total 430 h.p.; Generators—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 120 r.p.m., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., total 225 k.w.; Exciter—1 turbine, 320 r.p.m., 1 generator, 12 k.w., 320 r.p.m.

Power. *Transmission Lines.*—10 miles of wooden pole lines serve the municipalities of Walkerton, Mildmay, and Formosa.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is sold in bulk to Mildmay Electric Light and Power Company and Formosa Electric Light and Power Company.

Power is delivered adjacent to Canadian Pacific Ry. and Grand Trunk Ry.

The plant is designed for an additional turbine capacity of 300 h.p.

WALKERVILLE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WALLACEBURG.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WARKWORTH.

Warkworth Electric Plant. (Hydro Power Plant No. 2HK₂). Jan., 1918.

Address.—Warkworth, Ont.

Owner.—J. H. Goodrich, Warkworth, Ont.

History.—Plant installed in 1911.

Capital invested in Plant and Equipment.—\$6,000.

Plant. *Location.*—Plant located on Mill creek (local name, Burnley or Warkworth creek), about 8 miles from Hastings station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 20 feet. Turbine—1 Leffel, 40-inch, vert., single runner, 80 h.p., 125 r.p.m.; Generator—1 United Elect., A.C., 2-phase, 72 k.v.a., 1,000 r.p.m.

Power. *Transmission Line.*—2 miles of wooden pole line serves the municipality of Warkworth.

Use of Power.—Power is used for lighting only.

WATERDOWN.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WATERLOO.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WATFORD.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WAUBAUSHENE.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

WELLAND.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

Served by Electrical Development Company of Ontario, Ltd.; see Niagara Falls, Ont.

WELLESLEY.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

ONTARIO.

WELLINGTON.

W. P. Niles, Ltd. (Fuel Power Plant No. 2HE₂). Aug., 1918.

Address,—Wellington, Ont.

Officials,—Jas McDonald, Wellington (Pres.); J. N. Sword, Wellington (Sec.-Treas.); H. B. Wilson, Wellington (Mgr.).

History,—Plant installed in 1906.

Capital invested in Plant and Equipment,—\$16,823.

Plant. *Location*,—Plant located on Wharf street in Wellington, Ont.

Installation,—Gas Engine—1 Producer gas, 65 h.p.; Generator—1 West., D.C., 45 k.w., 975 r.p.m.

Power. *Local distribution lines* serve the municipality of Wellington.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

WEST HAMILTON.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

WEST HAWKESBURY.

Served by Hawkesbury Electric Light and Power Co., Ltd.; see Hawkesbury, Ont.

WEST LORNE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WESTON.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WESTPORT.

Westport Electric Light Company. (Hydro Power Plant No. 2LA₂). Jan., 1918.

Address,—Westport, Ont.

Officials,—J. H. Stonness, Westport (Pres.); C. A. Stonness, Westport (Sec.-Treas.).

Capital,—Issued, \$19,075.

Capital invested in Plant and Equipment,—\$25,000.

Plant. *Location*,—Plant located at Westport at outlet of Sand lake, on Rideau river.

Installation,—Plant operates under an average head of about 20 feet. Turbine—1 J. C. Wilson, 33-inch, vert., double runner, 265 h.p.; Generator—1 Gen. Elect., A.C., 3-phase, 250 k.w., 600 r.p.m.

Power. *Local distribution lines* serve the municipality of Westport.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

WEST TORONTO.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

Served by Toronto Suburban Railway Co., with power purchased from Toronto Power Co.

WHEATLEY.

Wheatley Electric Light Plant. (Fuel Power Plant No. 2GH₂). Jan., 1918.

Address,—Wheatley, Ont.

Owner,—Marven White, Wheatley, Ont.

History,—Plant installed in 1912, with additional generator in 1913.

Capital invested in Plant and Equipment,—\$9,500.

Plant. *Location*,—Plant located in Wheatley, Ont.

Installation,—Gas Engines—1 Keeghly, 35 h.p., 1 Keeghly, 15 h.p., total 50 h.p.;

Generators—1 Lancashire, D.C., 18 k.w., 1,000 r.p.m., 1 Lancashire, D.C.,

7½ k.w., 1,000 r.p.m., total 25½ k.w.

Wheatley Electric Light Plant.—Con.

Power. *Local distribution lines* serve the municipality of Wheatley.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Pere Marquette Ry.

WHITBY.

Served by Hydro-Elect. Power Comn., Central Ont. System; see Toronto, Ont.

WIARTON.

Sauble Falls Light and Power Company. (Hydro Power Plant No. 3FA₁). June, 1915.

Address.—Head Office, Wiarton, Ont. Local Office, Sauble, Ont.

History.—Part of plant purchased from Canada Furniture Manufacturers, Ltd. Plant installed in 1907.

Capital invested in Plant and Equipment.—\$20,000.

Plant. *Official.*—R. J. Millar, Wiarton (Mgr.).

Location.—Plant located at Sauble falls, on Ausable river, near village of Sauble Falls and about 7 miles from Wiarton station on Grand Trunk Ry., and adjacent to river navigation.

Installation.—Plant operates under an average head of 20 feet. Turbine—1 Wm. Hamilton, 36-inch, vert., single runner, 220 h.p., 200 r.p.m.; Generator—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 200 r.p.m.

Power. *Transmission Line.*—7 miles of wooden pole line serves the municipality of Wiarton.

Use of Power.—Power is used for lighting and operation of machine shop and municipal water-works pumping plant.

Power is delivered adjacent to Grand Trunk Ry. and Great Lakes navigation.

The company has at present 50 h.p. available for sale at the rate of \$12 per h.p. per annum.

The plant has an ultimate designed turbine capacity of 600 h.p. and the company is contemplating the additional installation of 380 h.p.

WILLIAMSBURG.

Served by Hydro-Elect. Power Comn., St. Lawrence System; see Toronto, Ont.

WINCHESTER.

Served by Hydro-Elect. Power Comn., St. Lawrence System; see Toronto, Ont.

WINDSOR.

Sandwich, Windsor and Amherstburg Railway. (Fuel Power Plant No. 2GH₁).

Controlled by Detroit United Railway, Detroit, Mich. Jan., 1918.

Address.—Windsor, Ont.

Officials.—J. C. Hutchins, Detroit, Mich. (Pres.); F. W. Brooks, Detroit, Mich. (Vice-Pres.); A. E. Peters, Detroit, Mich. (Sec.); J. Bampton, Detroit, Mich. (Treas.); Jas. Anderson, Windsor, Ont. (Gen. Mgr.).

History.—First unit was installed in 1907; additional units were installed in 1911, 1913 and 1917.

Capital invested in Plant and Equipment.—\$200,000.

Plant. *Officials.*—E. Jennings, Windsor (Supt. Distrbn.); N. Maitland, Windsor (Engr. Pwr. Sta.).

Location.—Plant located in Windsor, Ont.

Installation.—Steam Engines—1 reciprocating, 500 h.p., 2 reciprocating, 750 h.p. each, 1 reciprocating, 1,250 h.p., total 3,250 h.p.; Steam Turbine—1 at 650 h.p., total prime power 3,900 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 550 k.w., 120 r.p.m., 1 Swedish Elect., A.C., 3-phase, 60-cycle, 500 k.w., 3,600 r.p.m., 1 Allis-Chalmers-Bullock, D.C., 400 k.w., 125 r.p.m., 1 Allis-Chalmers-Bullock, D.C., 850 k.w., 100 r.p.m., total 2,850 k.w.

ONTARIO.

Sandwich, Windsor and Amherstburg Railway.—Con.

Power. *Transmission lines* serve the municipalities of Windsor, Sandwich and Cjibway, and municipality of township of Sandwich West.

Use of Power.—Power is used for lighting, general manufacturing, and operation of electric railway.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Michigan Central Ry., Wabash Ry., Pere Marquette Ry., Essex Terminal Ry., and Great Lakes navigation.

The company purchases steam for the operation of the power plant from Canadian Salt Company, Sandwich, Ont.

Served also by—

Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WINGHAM.

Municipality of Wingham. (Hydro Power Plant No. 2FE₂). May, 1918.

Officials.—John F. Groves (Town Clerk); Jas. G. Stewart (Treas.).

History.—Plant installed in 1907.

Capital invested in Plant and Equipment.—\$50,854.

Plant. *Officials.*—Alex. McCreight (Engr. Pwr. Sta.); John Radford (Engr. Pwr. Sta.).

Location.—Plant located on Maitland river.

Installation.—Plant operates under an average head of 17 feet; Turbines—2 Chas. Barber, 72-inch, 100 h.p. each, 72 r.p.m., total 200 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 600 r.p.m.; Exciter—1 generator, 5½ k.w., 1,800 r.p.m. Auxiliary Plant—1 Goldie & McCullough steam engine, 200 h.p. (standby), 1 Wheelock steam turbine, 100 h.p. (auxiliary).

Power. *Transmission Line.*—5½ miles of wooden pole line serves the municipality of Wingham.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry. and Grand Trunk Ry.

WINONA.

Served by Dominion Power and Transmission Co., Ltd.; see Hamilton, Ont.

WOODBIDGE.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

WOODSTOCK.

Served by Hydro-Elect. Power Comn., Niagara System; see Toronto, Ont.

Municipality of Woodstock. (Fuel Power Plant No. 2GD₄). Nov., 1918.

The municipality owns a steam power plant, used only as a standby.

Installation.—1 Leonard reciprocating steam engine, 200 h.p.; 1 A.C., 3-phase, 60-cycle generator, 200 k.w.

WOODVILLE.

Served by Hydro-Elect. Power Comn., Severn System; see Toronto, Ont.

WORTHINGTON.

Served by the Lorne Power Co., Ltd.; see Coniston, Ont.

WROXETER.

Municipality of Wroxeter. (Hydro Power Plant No. 2FE₁). Feb., 1918.

Officials.—J. Brethauer (Clerk); W. M. Robinson (Treas.).

Capital invested in Plant and Equipment.—\$8,500.

Plant. *Official.*—A. H. Moffatt (Engr.).

The plant consists of a combined hydraulic and steam installation.

Location.—Plant located on North branch of Maitland river.

Municipality of Wroxeter.—Con.**Plant.—Con.**

Installation.—Plant operates under an average head of 10 feet. Turbine—1 at 50 h.p.; Generator—1 Can. Gen. Elect., A.C., single-phase, 50 k.w., 1,260 r.p.m. Auxiliary Plant—1 Leonard & Ball reciprocating steam engine, 50 h.p.

Power. *Local distribution lines* serve the municipality of Wroxeter.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

WYOMING.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

YARKER.

Benjamin Wheel Company, Ltd. (Hydro Power Plant No. 2HM₂). Feb., 1918.

Address.—Yarker, Ont.

Officials.—A. W. Benjamin, Yarker (Pres.); G. W. McLaughlin, Oshawa (Vice-Pres.); J. P. Gardiner, Yarker (Sec.-Treas.).

History.—Plant installed about 1899.

Capital invested in Plant and Equipment.—\$1,000.

Plant. *Officials.*—C. J. Shultz, Yarker (Gen. Supt.); F. E. Benjamin, Yarker (Ch. Engr.).

Location.—Plant located on Napanee river.

Installation.—Plant operates under an average head of 20 feet. Turbine—1 J. C. Wilson, Little Giant, 40 h.p.; Generator—1 Can. West, D.C., 12.5 k.w., 1,100 r.p.m.

Power. *Local distribution lines* serve the municipality of Yarker.

Use of Power.—Power is used for lighting and operation of wheel factory.

Power is delivered adjacent to Canadian Northern Ry., Grand Trunk Ry., and Napanee river and Bay of Quinte navigation.

ZURICH.

Served by Hydro-Elect. Power Comm., Niagara System; see Toronto, Ont.

PRINCE EDWARD ISLAND.**ALBERTON.**

Leard Electric Light and Power Plant. (Hydro Power Plant No. 1CA₁). Jan., 1918.

Address.—Alberton, P.E.I.

Owner.—P. W. Leard.

History.—Present plant installed in 1915.

Capital invested in Plant and Equipment.—\$5,000.

Plant. *Location.*—Plant located on Huntly river, 2½ miles north of Alberton station on Canadian Government Rys. (P.E.I. lines).

Installation.—Plant operates under an average head of 13½ feet. Water Wheel—1 Fitz, 12-foot, overshot, 39 h.p., 9 r.p.m.; Generator—1 A.C., 3-phase, 60-cycle, 30 k.v.a., 1,200 r.p.m.; Exciter—1 motor, 3-phase, 220 v., 1,800 r.p.m., 1 generator, 30 k.w., 1,200 r.p.m.

Power. *Transmission Lines.*—4 miles of wooden pole lines serve the municipalities of Alberton and Alberton South.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys. (P.E.I. lines).

ALBERTON SOUTH.

Served by Leard Electric Light and Power Plant; see Alberton, P.E.I.

PRINCE EDWARD ISLAND.

CHARLOTTETOWN.

Charlottetown Light and Power Company, Ltd. (Fuel Power Plant No. 1CC₁).

Recently taken over by Maritime Electric Company, Ltd. July, 1918.

Address,—Head Office, Fredericton, N.B. Local Office, 69 Grafton St., Charlottetown, P.E.I.

Directors,—Hon. Geo. E. Faulkner, B. G. Burrill, E. J. Murphy, E. K. Spinney.

Officials,—Hon. Geo. E. Faulkner, Halifax, N.S. (Pres.); E. J. Murphy, Halifax, N.S. (Vice-Pres.); B. G. Burrill, Halifax, N.S. (Gen. Mgr.).

History,—On April 30, 1918, while this report was being prepared, the Charlottetown Light, Heat and Power Company, Ltd., was taken over by the Maritime Electric Co., Ltd. This new company also operates the Fredericton and St. Stephen-Calais plants in New Brunswick, having amalgamated the three companies and discontinued the holding companies in each case. The Charlottetown Light and Power Company was formerly controlled by the Charlottetown Electric Co. The plant was installed in 1901, with additional units in 1911 and 1913.

Plant. *Officials*,—J. T. McKee (Supt. and Mech. Engr.); J. H. Williams (Branch Mgr.).

Location,—Plant located on Sydney St., Charlottetown, P.E.I.

Installation,—Gas Engines—1 Crosby, 312 h.p., 1 Premier, 175 h.p., total 487 h.p.; Generators—1 Bruce Peebles, A.C., 3-phase, 60-cycle, 250 k.v.a., 720 r.p.m., 1 Bruce Peebles, A.C., 3-phase, 60-cycle, 125 k.v.a., 720 r.p.m., total 375 k.v.a. Stand-by Equipment—1 Babcock & Wilcox water tube boiler, 250 h.p., 1 Leonard, Peerless steam engine, 275 h.p., 1 Bruce Peebles, A.C., 3-phase, 60-cycle generator, 250 k.v.a.

Power. *Local distribution lines* serve the municipality of Charlottetown.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys. (P.E.I. lines), and coastal navigation.

The company has at present power available for sale; power rates, 7 cents per k.w. hr., with special rate of 5 cents per k.w. hr. for large consumers.

The company is installing a 500-h.p. bituminous coal, down-draft, gas producer.

CRAPAUD.

Leard and Son. (Hydro Power Plant No. 1CB₃). Nov., 1918.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$2,000.

Plant. *Location*,—Plant located on Crapaud river.

Installation,—Plant operates under an average head of 11 feet. Water is conveyed from intake dam to power-house through a wooden flume, 25 feet in length. Turbine—1 at 40 h.p.; Generator—1 A.C., 2-phase, 60-cycle, 25 k.w.

Power. *Local distribution lines* serve the municipality of Crapaud.

Use of Power,—Power is used for lighting.

GEORGETOWN.

Served by the Montague Electric Company; see Montague, P.E.I.

KENSINGTON.

Kensington Electric Company, Ltd. (Hydro Power Plant No. 1CB₂). Jan., 1918.

Address,—Kensington, P.E.I.

Officials,—F. Simmons, Kensington (Pres.); R. McMurdo, Kensington (Vice-Pres.); A. Murphy, Kensington (Mng. Dir.); B. W. Santon, Kensington (Sec.).

History,—Plant installed in June, 1916.

Capital invested in Plant and Equipment,—\$11,900.

PRINCE EDWARD ISLAND.

Kensington Electric Company, Ltd.—Con.

Plant. *Location*,—Plant located on Mill Valley stream.

Installation,—Plant operates under an average head of 12 feet; Turbines—1 Leffel, 26-inch, hor., single runner, 16.5 h.p., 175 r.p.m., 1 Leffel, 32-inch, hor., single runner, 21.5 h.p., 154 r.p.m., total 38 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 93 k.v.a., 1,200 r.p.m.

Power. Local distribution lines serve the municipality of Kensington.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys.

MONTAGUE.

The Montague Electric Company. (Hydro Power Plant No. 1CE₁). Aug., 1918.

Address,—Montague, P.E.I.

Directors,—W. L. Poole, Montague; D. F. MacDonald, Montague; Dr. A. E. Smith, Montague; Daniel McGregor, Montague; Hon. A. C. Macdonald, Charlottetown; Wm. Millan, Albany; John W. McPhee, Georgetown.

Officials,—W. L. Poole, Montague (Pres. and Gen. Mgr.); D. F. McDonald Montague (Sec.-Treas.).

History,—Original plant installed in 1899 and operated until new plant was placed in operation on December 1, 1917. Present plant installed at the same site and adjacent to the original plant. Company reorganization under its present name on June 20, 1917.

Capital,—Authorized, \$25,000. Issued, \$25,000.

Bonds,—Authorized, \$10,000. Issued, \$4,100.

Capital invested in Plant and Equipment,—\$30,634.

Plant. *Official*,—Michael Rice (Engr. Pwr. Sta.).

Location,—Plant located on Montague river, 1½ mile from Montague station on Canadian Government Rys. (P.E.I. lines).

Installation,—Plant operates under an average head of 19 feet; Water Wheel—1 Friz, 16½-foot, overshot, 80 h.p., 7 r.p.m.; Generator—1 West., A.C., 3-phase, 60-cycle, 62.5 k.v.a., 1,200 r.p.m.; Exciter—1 generator, 2½ k.v.a.

Power. *Transmission Lines*,—6½ miles of wooden pole lines serve the municipalities of Montague and Georgetown.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys. (P.E.I. lines).

The company is contemplating building a transmission line to the municipality of Cardigan.

Power rate: 6 cents per k.w. hr.

NORTH TRYON.

North Tryon Electric Light Plant. (Hydro Power Plant No. 1CB₁). Jan., 1918.

Address,—North Tryon, P.E.I.

Owner,—C. W. Ives.

History,—Plant installed in 1912 and is operated in connection with the owner's grist mill. A new plant is to be installed in 1918, when the operation of the present plant will be discontinued.

Plant. *Location*,—Plant located on Tryon river at North Tryon.

Installation,—Plant operates under an average head of 12 feet. Turbine—1 Madisson Williams, 23-inch, vert., Leffel, single runner, 13 h.p., 208 r.p.m.; Generator—1 Can. Gen. Elect., D.C., 8 k.w.

Power. *Local distribution lines* serve the municipality of North Tryon.

Use of Power,—Power is used for lighting.

The owner expects to construct a 30-h.p. plant on Tryon river, three-quarters of a mile below the present plant.

PRINCE EDWARD ISLAND.

SUMMERSIDE.

San Electric Company, Ltd. (Fuel Power Plant No. 1CB₁). Feb., 1918.

Address,—Summerside, P.E.I.

Officials,—J. E. Wyatt, Summerside (Pres.); J. E. Grady, Summerside (Sec. Treas.).

History,—Plant installed with one steam engine in 1906 and a gas engine added in 1913. Present generators installed in 1914.

Capital invested in Plant and Equipment,—\$17,000.

Plant. Official,—W. A. Cunningham (Ch. Engr.).

Location,—Plant located in Summerside, P.E.I.

Installation,—Steam Engine—1 reciprocating, 150 h.p.; Gas Engine—1 at 144 h.p., total prime power, 294 h.p.; Generators—1 Royal, A.C., 2-phase, 133-cycle, 150 k.w., 1,000 r.p.m., 1 Stanley, A.C., 2-phase, 133-cycle, 150 k.w., 1,000 r.p.m., total 300 k.w.

Power. Local distribution lines serve the municipality of Summerside.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys. (P.E.I. lines) and coastal navigation.

QUEBEC.

ACTON VALE.

Acton Vale Electric Light Plant. (Hydro Power Plant No. 20G₃). March, 1918.

Address,—Acton Vale, Que.

Owner,—Mrs. Pierre Guertin.

Capital invested in Plant and Equipment,—\$10,000.

Plant. Official,—L. A. Guertin (Mgr.).

Location,—Plant located on Blanche river.

Installation,—Plant operates under an average head of 7 feet. Turbines—1 60-inch, and 1 30-inch, total 80 h.p.; Generator—1 Can. Gen. Elect., A.C., about 30 k.v.a., 1,500 r.p.m.

Power. Local distribution lines serve the municipality of Acton Vale.

Use of Power,—Power is used for lighting only.

Served also by—

Southern Canada Power Co., Ltd.; see Montreal, Que.

AMQUI.

The Amqui Electric Company. (Hydro Power Plant No. 1BD₁). Sept., 1918.

Address,—Amqui, Que.

Officials,—D. N. Dubé, Amqui (Pres.); J. A. Brillant, Amqui (Gen. Mgr. and Sec.).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$95,665.

Plant. Location,—Plant located on Matapedia river, one-half mile from Amqui station on Canadian Government Rys.

Installation,—Turbine—1 Samson, 45-inch, vert., 287 h.p.; Generator—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 150 k.w., 277 r.p.m.; Transformers—3, primary 2,200 v., secondary 10,000 v., 25 k.v.a. each.

Power. Transmission Lines,—30 miles of wooden pole lines serve the municipalities of Amqui, Val Brilliant, Sayabec and Lac au Saumon.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Government Rys.

The company intends installing an additional unit of 300 k.w. capacity, and will have available for sale 300 k.w. at \$30 per kilowatt per annum.

ARTHABASKA.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ASBESTOS.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ASCOT.

Served by the municipality of Sherbrooke; see Sherbrooke, Que.

AYER'S CLIFF.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

AYLMER.

Served by Hull Electric Co.; see Hull, Que.

BAGOTVILLE.

Served by La Société d'Eclairage et d'Energie Electrique du Saguenay; see Chicoutimi, Que.

BAIE ST. PAUL.

Baie St. Paul Electric Company. (Hydro Power Plant No. 2PE₂). Sept., 1918.

Address,—Baie St. Paul, Que.

Owners,—Les Petites Sœurs Franciscaines de Marie.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$40,000.

Plant. *Officials*,—Euloge Tremblay (Mgr.); Oscar Boivin (Engr. Pwr. Sta.)

Location,—Plant located on Grand Bras river, one mile from Baie St. Paul.

Installation,—Plant operates under an average head of 105 feet; Turbine—1 J.

C. Wilson, 18-inch, vert., Little Giant, single runner, 290 h.p., 500 r.p.m.;

Generator—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 336 k.v.a., 500 r.p.m.;

Exciter—1 generator, 7.6 k.w., 1,800 r.p.m.

Power. *Local distribution lines* serve the municipality of Baie St. Paul.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to St. Lawrence river navigation

BEACONSFIELD.

Served by municipality of Pointe Claire with power purchased from Montreal Light, Heat and Power Consolidated; see Montreal, Que.

BEAUCE JCT.

Served by St. Francis Water Power Co.; see Thetford Mines, Que.

BEAUCEVILLE.

Served by Beauce Electric and Power Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

BEAUHARNOIS.

Served by Beauharnois Electric Co., Ltd., with power purchased from Canadian Light and Power Co.; see Montreal, Que.

BEAUPORT.

Served by Quebec Railway, Light, Heat and Power Co., Ltd.; see Quebec, Que.

BEDFORD.

Bedford Light Company, Ltd. (Hydro Power Plant No. 2OH₁). Jan., 1918.

Address,—Bedford, Que.

Officials,—B. R. Stevens (Pres.); A. F. Percy (Mgr.); E. A. Percy (Sec.).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$18,500.

QUEBEC.

Bedford Light Company, Ltd.—Con.

Plant. *Official*,—E. A. Proctor (Engr. Pwr. Sta.).

Location,—Plant located on Pike river near Bedford.

Installation,—Plant operates under an average head of 13 feet; Turbine—1

Williams, 30-inch, hor., double runner, 100 h.p., 200 r.p.m.; Generator—1

United Elect., A.C., single-phase, 50 k.w., 1,580 r.p.m.; Auxiliary Plant,—1

Leonard boiler, 100 h.p.; 1 Lawrie, reciprocating steam engine, 100 h.p.

Power. *Local distribution lines* serve the municipality of Bedford.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

BEEBE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

BELOEIL.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

BERTHIER.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

BERTHIERVILLE.

Served by St. Maurice Light and Power Co.; see Shawinigan Falls, Que.

BIENVILLE.

Served by Canadian Electric Light Co.; see Levis, Que.

BISHOPS CROSSING.

Served by municipality of Sherbrooke; see Sherbrooke, Que.

BLACK LAKE.

Served by La Compagnie Electrique de Thetford Mines; see Thetford Mines, Que.

BROMPTONVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

BROWNSBURG.

Served by Ayers, Limited; see Lachute, Que.

BUCKINGHAM.

Buckingham Electric Light Plant. (Hydro Power Plant No. 2LF₁). Aug., 1918.

Address,—Buckingham, Que.

Owner,—Albert MacLaren.

History,—Plant installed in 1904, with a new turbine in 1914

Capital invested in Plant and Equipment,—\$37,700.

Plant. *Official*,—D. J. Halliday, Buckingham (Mgr.).

Location,—Plant located on Lievre river.

Installation,—Plant operates under an average head of 52 feet; Turbine—1 Wm.

Kennedy, 29-inch hor., double runner, 550 h.p., 300 r.p.m.; Generator—1

West., A.C., 2-phase, 60-cycle, 300 k.w., 300 r.p.m.; Exciter—1 generator,

9.5 k.w., 975 r.p.m.

Power. *Transmission Lines*,—13 miles of wooden pole lines serve the municipalities of Buckingham, Buckingham Jct., and Masson.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Ottawa River navigation.

BUCKINGHAM JCT.

Served by Buckingham Electric Light Plant; see Buckingham, Que.

QUEBEC.

CACOUNA.

Served by municipality of Fraserville; see Fraserville, Que.

CALUMET.

Calumet Electric Light Plant. (Hydro Power Plant No. 2LC₁). Sept., 1918.

Address,—Calumet, Que.

Owner,—G. E. Higginson, Calumet, Que.

History,—Plant installed in 1906; a new turbine installed in 1915.

Capital invested in Plant and Equipment,—\$17,000.

Plant. *Location*,—Plant located at Calumet, on Calumet river, at junction with Ottawa river.

Installation,—Plant operates under an average head of 120 feet. Turbine—1 Chas. Barber, 8-inch, hor., single runner, 55 h.p., 1,600 r.p.m.; Generator—1 Thomson, A.C., 2-phase, 125-cycle, 39 k.w., 1,600 r.p.m.; Exciter—1 generator, 3 k.w., 1,600 r.p.m.

Power. *Local distribution lines* serve the municipality of Calumet.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Ottawa River navigation.

The company has a separate unit of 90 h.p. to operate saw, grist and planing mills.

CAMPBELLS BAY.

Campbells Bay Electric Company. (Hydro Power Plant No. 2KC₁). Jan., 1918.

Address,—Campbells Bay, Que.

Owner,—Jas Wilson.

History,—Plant installed in 1915.

Capital invested in Plant and Equipment,—\$12,000.

Plant. *Location*,—Plant located on Ottawa river, near Campbells Bay.

Installation,—Plant operates under an average head of 95 feet. Turbine—1 J. C. Wilson, 10-inch, hor., Little Giant, double runner, 90 h.p., 720 r.p.m.; Generator—1 F.E., A.C., 3-phase, 60 k.v.a., 720 r.p.m.

Power. *Transmission Lines*,—4 miles of wooden pole line serves the municipality of Campbells Bay.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

CAP A L'AIGLE.

Served by Nairn Falls Power and Pulp Co., Ltd.; see Murray Bay, Que.

CAPLETON.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

CARILLON.

Served by North River Electric Co., Ltd.; see St. Andrews East, Que.

CHAMBLY.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

CHAMBLY CANTON.

Served by Bennett, Ltd., with power purchased from Montreal Light, Heat and Power Consolidated; see Montreal, Que.

CHAMPLAIN.

Served by North Shore Water and Power Co.; see Three Rivers, Que.

CHANDLER.

St. Lawrence Pulp and Lumber Corporation. (Fuel Power Plant No. 1BH₁). Controlled by the North American Pulp and Paper Companies. Nov., 1918.

Address,—Chandler, Quebec.

History,—Plant installed in 1913 and operated in connection with the company's mill.

QUEBEC.

St. Lawrence Pulp and Lumber Corporation.—Con.

Plant. *Location.*—Plant located in Chandler, Que.

Installation.—Boilers—6 water-tube boilers, 500 h.p. each, total 3,000 h.p.; Steam turbines—2 at 1,340 h.p. each, total 2,680 h.p.; Generators—2 A.C., 3-phase, 60-cycle, 1,000 k.w. each, total 2,000 k.w.

Power. *Local distribution lines* serve the municipality of Chandler.

Use of Power.—Power is used for lighting and operation of the company's mill.

Power is delivered adjacent to Atlantic, Quebec and Western Ry.

CHARETTE.

Served by La Compagnie d'Eclairage de Yamachiche, with power purchased from Shawinigan Water Power Co.; see Shawinigan Falls, Que.

CHARLEMAGNE.

Served by North Shore Water and Power Co.; see Three Rivers, Que.

CHATEAUGUAY.

Served by Beauharnois Electric Co., Ltd., with power purchased from Canadian Electric Light Co.; see Levis, Que.

CHATEAU RICHER.

Served by Quebec Railway, Light, Heat and Power Co., Ltd.; see Quebec, Que.

CHAUDIERE.

Served by Canadian Electric Light Co.; see Levis, Que.

CHICOUTIMI.

La Société d'Eclairage et d'Energie Electrique du Saguenay. Sept., 1918.

Address.—Chicoutimi, Que.

Directors.—J. E. A. Dubuc, J. E. Cloutier, F. X. Gosselin, George St. Pierre, Raymond Belleau.

Officials.—J. E. A. Dubuc (Pres. and Gen. Mgr.); R. Belleau (Sec.); E. L. Maltais (Treas.).

History.—The company operates two plants; one at Chicoutimi and one at St. Alexis du Saguenay.

Capital.—Authorized, \$1,500,000. Issued, \$1,500,000.

Capital invested in Plant and Equipment.—\$1,450,316.

Chicoutimi River Plant. (Hydro Power Plant No. 2RH₂).

Officials.—X. Ouellet (Supt.); R. E. Jeron (Ch. Engr.); B. Lessard (Engr. Pwr. Sta.).

History.—Plant installed in 1913.

Location.—Plant located on Chicoutimi river, at Chicoutimi, Que.

Installation.—Plant operates under an average head of 51 feet; Turbine—1 S. Morgan Smith, 45-inch, hor., Francis, 2,200 h.p., 277 r.p.m.; Generator—1 West., A.C., 3-phase, 60-cycle, 1,875 k.w., 277 r.p.m.; Exciters—1 turbine, 15-inch, 175 h.p., 525 r.p.m., 1 generator, 125 k.w., 522 r.p.m.

Ha Ha River Plant. (Hydro Power Plant No. 2RH₁).

History.—Plant installed in December, 1916.

Location.—Plant located on Ha Ha river at St. Alexis du Saguenay.

Installation.—Plant operates under an average head of 75 feet; Turbine—1 Jenckes, 20-inch, hor., double runner, 450 h.p., 500 r.p.m.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.w., 900 r.p.m., total 300 k.w.

QUEBEC.

Ha Ha River Plant.—Con.

Power. *Transmission Lines*,—4 miles of wooden pole lines from Chicoutimi River plant serve the municipalities of Chicoutimi, Riviere du Moulin, and St. Anne (Chicoutimi county); 2 miles of wooden pole lines from Ha Ha River plant serve the municipalities of Bagotville, Port Alfred, and St. Alexis.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry., Roberval-Saguenay Ry., and Saguenay River and St. Lawrence River navigation.

COATICOOK.

Municipality of Coaticook. Aug., 1918.

Officials,—P. L. Baldwin (Mayor); M. R. Chartier (Town Clerk).

History,—Plant No. 1 installed in 1910, and Plant No. 2 installed in 1913.

Capital invested in Plants and Equipment,—\$80,017.

Plant No. 1. (Hydro Power Plant No. 2OE₁).

Officials,—Elwin E. Ackhurst (Supt.); W. J. Perkins (Ch. Engr. Pwr. Sta.).

Location,—Plant located on Coaticook river, one-half mile from Coaticook station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 40 feet. Water is conveyed from intake dam to power-house through steel flume; Turbine—1 Jenckes, 17-inch, hor., double runner, 330 h.p., 600 r.p.m.; Generator—1 Bullock, A.C., 3-phase, 250 k.v.a., 600 r.p.m.; Exciter—1 turbine, 12 h.p., 900 r.p.m.; 1 generator, 10 k.w., 900 r.p.m.

Plant No. 2. (Hydro Power Plant No. 2OE₁₄).

Location,—Plant located on Coaticook river, three-quarter mile from Coaticook station on Grand Trunk Ry.

Installation,—Plant operates under an average of 30 feet. Water is conveyed from intake dam to power-house through wooden flume; Turbine—1 S. Morgan Smith, 21-inch, hor., double runner, 320 h.p., 400 r.p.m.; Generator—1 West., A.C., 3-phase, 250 k.v.a., 400 r.p.m.; Exciter—1 generator, 10 k.w., 1,400 r.p.m.

Power. *Transmission Lines*,—20 miles of wooden pole lines serve the municipalities of Coaticook and North Coaticook and part of the township of Barford.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Grand Trunk Ry.

The municipality has at present available for sale 100 h.p., at rates ranging from \$20 per horse-power per annum, and expect to have additional power available for sale when the manufacturing of munitions ceases.

An undeveloped power site immediately below plant No. 1 has recently been purchased by the municipality and will be developed when demand requires.

This site would give an additional 500 horse-power.

Good factory sites are available on railway sidings.

COLERAINE.

Served by St. Francis Water Power Co.; see Thetford Mines, Que.

COMPTON.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

COOKSHIRE.

Aug., 1918.

Westbury Electric Light and Power Company. (Hydro Power Plant No. 2OE₃).

Address,—Cookshire, Que.

Officials,—H. A. Worby, Cookshire, Que. (Pres. and Mgr.); C. M. MacRae, Cookshire, Que. (Vice-Pres.); G. W. Allard, Cookshire, Que. (Sec.-Treas.);

Louise Worby, Cookshire, Que. (Asst. Sec.).

History,—Plant installed in 1905, with an additional unit in 1911.

Capital invested in Plant and Equipment,—\$77,900.

QUEBEC.

Westbury Electric Light and Power Company.—Con.

Plant. *Official*.—Elmer Williams, East Angus (Engr. Pwr. Sta.).

Location.—Plant located on the Eaton river, $1\frac{1}{2}$ mile from East Angus station on Quebec Central Ry.

Installation.—Plant operates under an average head of 26 feet. Turbines—2 Jenckes, 21-inch, hor., single runner, 125 h.p. each, 240 r.p.m., total 250 h.p.; Generators—1 Muralt, A.C., 3-phase, 75 k.v.a., 1,200 r.p.m., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.v.a., 900 r.p.m., total 175 k.v.a.

Power. *Transmission Lines*.—19 miles of wooden pole lines serve the municipalities of Cookshire, East Angus and Robinson.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Quebec Central Ry. and Maine Central Ry.

The company contemplates installing 300 h.p. additional turbine capacity.

COWANSVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

DANVILLE.

July, 1918

Shipton Electric Light and Power Company. (Hydro Power Plant No. 20D₁).

Address.—Danville, Que.

Owner.—M. Henry Richey, Danville, Que.

History.—Plant installed in 1897.

Capital invested in Plant and Equipment.—\$20,000.

Plant. *Officials*.—Gerald S. Richey (Mgr.); E. H. Shaw (Engr. Pwr. Sta.).

Location.—Plant located on Nutting brook, one mile from Danville station on Grand Trunk Ry.

Installation.—Plant operates under an average head of 20 feet. Turbine—1 Jenckes, 36-inch, hor., 150 h.p., 85 r.p.m.; Generator—1 Can. Gen. Elect., A.C., single-phase, 60-cycle, 150 k.w., 600 r.p.m. Auxiliary Plant—2 boilers, 90 h.p. each, 1 Leonard reciprocating steam engine, 150 h.p.

Power. *Local distribution lines* serve the municipality of Danville.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Ry.

DESCHAMBAULT.

Aug., 1918.

The Hydraulic Company of Portneuf, Ltd. (Hydro Power Plant No. 2PB₂).

Address.—Deschambault, Que.

Directors.—Antoni Lesage, Quebec; De Gaspé Beaubien, Montreal; Eug. G. Audet, Quebec; J. B. L. Morand, Quebec; Roméo Bélanger, Quebec.

Officials.—Antoni Lesage, Quebec (Pres.); De Gaspé Beaubien, Montreal (Vice-Pres.); Henri Paré, Deschambault (Sec.-Treas. and Gen. Mgr.).

History.—Plant installed in 1916.

Capital.—Authorized, \$145,000. Issued, \$25,000.

Bonds.—Authorized, \$125,000. Issued, \$125,000.

Capital invested in Plant and Equipment.—\$110,000.

Plant. *Officials*.—Arsène Gauthier, St. Alban (Supt.); Alfred Perron, St. Alban (Elect. Engr.).

Location.—Plant located at Les Cascades at St. Alban, on St. Ann river, 3 miles from St. Marie station on Canadian Northern Ry. and National Transcontinental Ry. (Can. Govt. Rys.); 12 miles from Deschambault station on Canadian Government Rys., and 13 miles from St. Lawrence river navigation at Deschambault.

Installation.—Plant operates under an average head of 40 feet. Turbine—1 Wm. Hamilton, 72-inch, vert., single runner, 1,000 h.p., 300 r.p.m.; Generator—1 Elect. Machinery, A.C., 3-phase, 60-cycle, 500 k.v.a., 300 r.p.m.; Exciters—2 generators, 22 k.w. each, 975 r.p.m.

QUEBEC.

The Hydraulic Company of Portneuf, Ltd.—Con.

Power. *Transmission Lines*,—15 miles of wooden pole lines serve the municipalities of Deschambault, St. Marc des Carrières, and St. Alban.

Use of Power,—Power is used for lighting and general power purposes.

The company sells its entire output to North Shore Power Company, a subsidiary company of Shawinigan Water and Power Company, of Shawinigan Falls, Que.

Power is delivered adjacent to Canadian Government Rys., Canadian Northern Ry., Canadian Pacific Ry., St. Lawrence river and Great Lakes navigation.

The company contemplates installing 2,000 h.p. additional turbine capacity.

The district served with power by this company is noted for its limestone quarries.

Served also by—

North Shore Power Co.; see Three Rivers, Que.

D'ISRAELI.

La Compagnie Champoux. (Hydro Power Plant No. 20E₅). Jan., 1918.

Address,—D'Israeli, Que.

Officials,—Calixte Champoux, Que. (Pres.); J. A. Champoux, Campbellford, N.B. (Vice-Pres.); D. Champoux, D'Israeli, Que. (Sec.-Treas.).

History,—Plant installed in 1890; prior to 1910 the plant was used to operate a saw-mill.

Capital invested in Plant and Equipment,—\$8,000.

Plant. *Officials*,—D. G. Rheault (Mgr.); Ed. Gagnon (Engr. Pwr. Sta.).

Location,—Plant located on St. Francis river at D'Israeli on Quebec Central Ry.

Installation,—Plant operates under an average head of 20 feet. Turbine—1 Jenckes, 48-inch, hor., double runner, 75 h.p., 325 r.p.m.; Generator—1 Can. Gen. Elect., 75 k.w., 1,700 r.p.m.

Power. *Local distribution lines* serve the municipality of D'Israeli.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Quebec Central Ry.

The company contemplates the development of the maximum power at the site of the present plant, which will provide about 1,500 horse-power.

Served also by—

St. Francis Water Power Co.; see Thetford Mines, Que.

DIXVILLE.

Dixville Electric Light Company. (Hydro Power Plant No. 20E₂). July, 1918.

Address,—Dixville, Que.

Owner,—J. B. Barker.

History,—Plant installed in 1916.

Capital invested in Plant and Equipment,—\$6,000.

Plant. *Official*,—L. Ham (Ch. Eng.).

Location,—Plant located on Coaticook river, one-quarter mile from Dixville station on Grand Trunk Ry.

Installation,—Plant operates under an average head of 16 feet; Turbine—1 Lamb, 42-inch, vert., single runner, 40 h.p., 240 r.p.m.; Generator—1 Can. Gen. Elect., D.C., 25 k.w., 1,100 r.p.m.

Power. *Local distribution lines* serve the municipality of Dixville.

Use of Power,—Power is used for lighting.

The dam at this site serves a saw and a grist mill as well as the power plant.

Power is delivered adjacent to Grand Trunk Ry.

DONNACONA.

The Donnacona Paper Company, Ltd. (Hydro Power Plant No. 2PC₂), controls the Baie St. Paul Lumber Company, Ltd., and the Donnacona Improvement Company, Ltd. Aug., 1918.

Address,—Donnacona, Que.

QUEBEC.

The Donnacona Paper Company, Ltd.—Con.

Directors,—G. H. P. Gould, Lyons Falls, N.Y.; Chas. B. Rogers, Utica, N.Y.; D. C. Murray, Utica, N.Y.; C. W. Pratt, Carthage, N.Y.; Crouse Klock, Syracuse, N.Y.; F. K. Kernan, Utica, N.Y.; W. N. Kernan, New York, N.Y., and Geo. McKee, Donnacona, Que.

Officials,—G. H. P. Gould, Lyons Falls, N.Y. (Pres.); D. C. Murray, Utica, N.Y. (Vice-Pres.); Geo. M. McKee, Donnacona, Que. (Mng. Dir.); Chas. R. Rogers, Utica, N.Y. (Sec. and Treas.).

History,—Plant installed in 1913. The company operates a large plant for the manufacture of newspaper, sulphite and mechanical pulp, and 90 per cent of the electrical power developed is used in the plant.

Capital,—Preferred, authorized, \$1,550,000. Issued, \$1,500,000. Common, authorized, \$1,500,000. Issued, \$1,500,000.

Capital invested in Power Plant and Equipment,—\$119,061.

Plant. *Officials*,—Geo. M. McKee (Mng. Dir.); Cone Barlow (Asst. Mgr.).

Location,—Plant located on Jacques Cartier river at Donnacona adjacent to Canadian Northern Ry., and 30 miles from the city of Quebec.

Installation,—Plant operates under an average of 60 feet; Turbine—1 McCormick, 27-inch, hor., double runner, 1,200 h.p., 450 r.p.m.; Generator—1 West., A.C., 3-phase, 60-cycle, 1,100 k.v.a., 450 r.p.m.; Exciter—1 generator direct connected to main unit.

Power. *Local distribution lines* serve the municipality of Donnacona.

Power is purchased in bulk from Shawinigan Water and Power Company.

Use of Power,—Power is used for lighting and to operate 100-ton newsprint plant, 125-ton ground wood plant, and 50-ton sulphite mill.

Power is delivered adjacent to Canadian Northern Ry., and St. Lawrence River navigation.

Power plant has an ultimate turbine capacity of 6,000 h.p.

Served also by—

Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

DORVAL.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

DRUMMONDVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

EAST ANGUS.

Served by Westbury Electric Light and Power Co.; see Cookshire, Que.

EAST BROUGHTON.

Served by St. Francis Water Power Co.; see Thetford Mines, Que.

EASTMAN.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

EUSTIS.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

Eustis Mining Company. (Hydro Power Plant No. 20E₉₉).

The company owns an hydro-electric plant situated on Coaticook river, 2½ miles from Eustis. Installation consists of 1 Jenckes, 18-inch hor., turbine at 500 h.p., and 1 Can. Gen. Elect., A.C. 3-phase, 60-cycle generator at 375 k.v.a.

Power is used principally for mining and a small amount for lighting.

FARM POINT.

Farm Point Electric Light Plant. (Hydro Power Plant No. 2LH₁). Nov., 1918.

Owner,—F. T. Cross, Farm Point, Que.

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$30,000.

Farm Point Electric Light Plant.—Con.

Plant. *Location.*—Plant located on Meach creek.

Installation.—Plant operates under a head of 75 feet. Water is conveyed from dam to power-house through a 30-inch steel conduit, 500 feet long; Turbine—1 at 200 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 150 k.w.

Power. *Local distribution lines* serve the municipalities of Farm Point, North Wakefield, Wakefield and Cascades.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

FARNHAM.

Municipality of Farnham. (Hydro Power Plant No. 2OG₃). Aug., 1918.

Officials.—A. E. D'Artois (Mayor); J. E. Lefebvre (Sec.-Treas.).

History.—Plant installed in 1911.

Capital invested in Plant and Equipment.—\$211,735.

Plant. *Official.*—F. W. Girard (Mgr.).

Location.—Plant located on Yamaska river, one-quarter mile from Farnham station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 27 feet; Turbines—2 Can. Boving, 45-inch, hor., double runner, twin, 565 h.p. each, 277 r.p.m., total 1,130 h.p.; Generators—2 Lancashire, A.C., 3-phase, 60-cycle, 300 k.w. each, 277 r.p.m., total 600 k.w.; Exciters—2 generators 17 k.w. each, 820 r.p.m., belted to main units; Auxiliary Plant—Goldie & McCullough boilers, 200 h.p., Belliss and Morcom reciprocating steam engine, 540 h.p.

Power. *Transmission Lines.*—4 miles of wooden pole lines serve the municipality of Farnham.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Central Vermont Ry.

The municipality has at present available for sale 530 horse-power at \$20 per horse-power per annum.

FOSTER.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

FRASERVILLE.

Municipality of Fraserville. (Hydro Power Plant No. 2PG₁). Sept., 1918.

Officials.—Joseph Viel (Mayor); E. Talbot (Sec.-Treas.).

History.—Plant installed in 1904.

Capital invested in Plant and Equipment.—\$205,000.

Plant. *Official.*—Wm. Hodgson (Ch. Electn.).

Location.—Plant located on Rivière du Loup, one-half mile from Rivière du Loup station on Canadian Government Rys.

Installation.—Plant operates under an average head of 95 feet. Turbine—1 Jenekes, 18-inch, hor., single runner, 275 h.p., 800 r.p.m.; Generator—1 S.K.C., A.C., 2-phase, 200 k.w., 660 r.p.m.

Power. *Local distribution lines* serve the municipalities of Fraserville and Cacouna.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Government Rys. and St. Lawrence river navigation.

The municipality contemplates an additional installation of 1,200 to 1,500 h.p.

QUEBEC.

FRELIGHSBURG.

Frelighsburg Feed and Light Company. (Hydro Power Plant No. 2OH₅). Jan., 1918.

Address,—Frelighsburg, Quebec.

Owner,—Fred. A. Ayer, Frelighsburg, Quebec.

History,—Plant installed in 1899.

Capital invested in Plant and Equipment,—\$5,000.

Plant. *Location*,—Plant located in Frelighsburg, on the Pike river.

Installation,—Turbine—1 S. Morgan Smith, 21-inch vert., double runner 106 h.p., 372 r.p.m.; Generator—1 Bullock, D.C., 25 k.w., 1,075 r.p.m. Steam Auxiliary—1 boiler at 60 h.p., 1 reciprocating steam engine, 40 h.p. (belted to main generator).

Power. *Local distribution lines* serve the municipality of Frelighsburg.

Use of Power,—Power is used for lighting.

The turbine is also used as direct power to operate grist mill. The company has also a 25 h.p. Little Giant turbine used only in connection with the mill.

Power is delivered adjacent to Central Vermont Ry.

GASPÉ.

Gaspé Electric Light Plant. (Fuel Power Plant No. 1BH₂).

Owner,—K. J. Carter.

Capital invested in Plant and Equipment,—\$2,800.

Plant. *Location*,—Plant located in Gaspé, Que.

Installation—Gasolene Engine—1 at 5 h.p.; Generator—1 D.C., 3 k.w.

Power. *Local distribution lines* serve the municipality of Gaspé.

Power is used for lighting.

GIFFORD.

Served by Quebec Railway, Light, Heat and Power Co.; see Quebec, Que.

GRANBY.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

GRAND MÈRE.

Laurentide Power Company, Ltd. (Hydro Power Plant No. 2NG₃). Plant operated by Shawinigan Water and Power Company. Sept., 1918.

Address,—Canada Life Bldg., Montreal, Que.

Directors,—J. E. Aldred, F. A. Sabbaton, Julian C. Smith, Edwin Hanson, George Cahoon, Jr., Howard Murray, Chas. R. Hosmer, A. A. Tilney, and Capt. J. H. A. Acer.

Officials,—J. E. Aldred, New York, N.Y. (Pres.); F. A. Sabbaton, Grand Mère (Vice-Pres. and Gen. Mgr.); W. F. Robinson, Montreal, Que. (Sec.).

History,—Company incorporated October, 1915, to take over the property of Laurentide Company, Ltd. Plant was installed in 1915.

Capital,—Authorized, \$10,500,000. Issued, \$10,500,000.

Funded Debt,—\$7,500,000.

Capital invested in Plant and Equipment,—\$18,165,034.

Plant. *Official*,—J. S. Riddele (Mgr.).

Location,—Plant located at Grand Mère falls on the St. Maurice river, one mile from Grand Mère station on the Canadian Northern Ry. and Canadian Pacific Ry.

Installation,—Plant operates under an average head of 76 feet. Turbines—6 I. P. Morris, 150-inch, vert., Francis, single runner, 20,000 h.p. each, 120 r.p.m., total 120,000 h.p.; Generators—6 West., A.C., 3-phase, 60-cycle, 14,700 k.v.a. each, 120 r.p.m., total 88,200 k.v.a.; Exciters—6 West., generators, 150 k.w. each, 120 r.p.m., 2 West., generators, 200 k.w. each, 900 r.p.m. (reserve), 2 West., motors, 3-phase, 6,600 v., 900 r.p.m. (reserve).

Laurentide Power Company, Ltd.—Con.

Power. Power is sold in bulk to Laurentide Company, Ltd., to operate paper mills at Grand Mère.

Balance of power sold to Shawinigan Water and Power Company and transmitted over their lines for distribution.

For distribution of power see Shawinigan Water and Power Company, Shawinigan Falls, Que.

The ultimate designed turbine capacity of the plant is 180,000 h.p. providing for an additional installation of 60,000 h.p.

Municipality of Grand Mère. (Hydro Power Plant No. 2NG₁). Aug., 1913.

Officials.—Dr. Arthur Ferron (Mayor); Louis Bérubé (Sec.-Treas.).

History.—Plant installed in October, 1913, with an additional unit added in 1917.

Capital invested in Plant and Equipment.—\$124,000.

Plant. *Official.*—C. E. Gélinas (Mgr. and Engr.).

Location.—Plant located on the Shawinigan river at Shawinigan Falls, 2 miles from Shawinigan Falls station on Canadian Pacific Ry., and Canadian Northern Ry.

Installation.—Plant operates under an average head of 108 feet. Water is conveyed from intake to power-house through 4-foot wood stave penstock, 1,000 feet in length; Turbines—1 Allis-Chalmers-Bullock, 26-inch, hor., single runner, 500 h.p., 600 r.p.m.; 1 Can. Allis-Chalmers, 26-inch, hor., single runner, 500 h.p., 600 r.p.m., total 1,000 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 300 k.w., 600 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 300 k.w., 600 r.p.m., total 600 k.w.; Exciters—Separate exciter for each unit, installed at end of generator shaft, 125 volt., 90 amp. each; Transformers—2 banks of 3 Can. Gen. Elect., 3-phase, oil-insulated, primary 2,200 v., secondary 11,000 v., 100 k.v.a. each.

Power. *Transmission Lines.*—7 miles of wooden pole line serves the municipality of Grand Mère.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Northern Ry. The municipality has at present a quantity of power available for sale.

GREENFIELD PARK.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

GRENVILLE.

Served by Hawkesbury Electric Light and Power Co., Ltd.; see Hawkesbury, Ont.

HATLEY.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

HEBERTVILLE.

La Cie Centrale d'Electricité. (Hydro Power Plant No. 2RH₂). April, 1918.

Address.—Hebertville, Que.

Officials.—J. H. Brussard, Jonquière (Pres.); J. R. Desbreus, Hébertville (Mgr.).

History.—Plant installed in 1901.

Capital invested in Plant and Equipment.—\$20,000.

Plant. *Location.*—Plant located on Belle river.

Installation.—Plant operates under an average head of 22 feet; Turbine—1 hor., single runner, 125 h.p., 361 r.p.m.; Generator—1 Royal Elect., A.C., 2-phase, 40 k.w., 1,333 r.p.m.

Power. *Transmission Lines.*—12 miles of wooden pole lines serve the municipalities of Hébertville and St. Bruno.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

QUEBEC.

HIGHWATER.

Served by Mansonville Electric Light Plant; see Mansonville, Que.

HOWICK.

Served by St. Etienne de Beauharnois Electric Light Plant; see St. Etienne de Beauharnois, Que.

HULL.

Municipality of Hull. (Hydro Power Plant No. 2LA₇). Jan., 1919.

Officials,—Dr. J. U. Archambault (Mayor); Honore Boulay (City Clerk); Joseph Raymond (City Treas.); Eugene St. Jean (Asst. Commr.).

History,—Original plant installed in 1886. Hydraulic pumps and motor generator installed in 1905. Plant enlarged and generating equipment installed in 1917.

Capital invested in Plant and Equipment,—Original installation, \$688,000. Enlargement, \$40,025.

Plant. *Officials*,—Adolphe Berthiaume (Supt.); Ferdinand Trudel (Electn.).

Location,—Plant located in Hull, on Brewery creek, and adjacent to Canadian Pacific Ry. Water is diverted from Ottawa river, above Chaudiere falls, to Brewery Creek which flows through Hull and empties into the Gatineau river.

Installation,—Plant operates under an average head of 18½ feet; Turbine—1 Allis-Chalmers, 120-inch, vert., 1,000 h.p., 100 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 750 k.v.a., 100 r.p.m.

Power. Power is used only for operation of the municipal pumping station and lighting public buildings and streets.

The municipality has also installed a number of turbines geared to pumps.

The plant is designed for the additional turbines which would double the present capacity. The development of this additional power is possible under the proposed canalization of Brewery creek.

Hull Electric Company. (Hydro Power Plant No. 2KF₄). July, 1918.

Address,—117 Main St., Hull, Que.

Officials,—A. D. MacTier, Montreal (Pres.); G. Gordon Gale, Ottawa (Vice-Pres. and Gen. Mgr.; W. L. Wright, Montreal (Sec. and Treas.).

Plant. *Officials*,—A. V. Gale, Hull (Supt.); N. E. Beaudry, Hull (Engr. Pwr. Sta.).

Location,—Plant located on Ottawa river at Deschenes rapids on the Quebec side, about 6 miles from Hull, Que.

Installation,—Plant operates under an average head of 9 feet; Turbines—6 Wm. Kennedy, 60-inch, vert., single runner, 114 to 209 h.p., 60 r.p.m., 11 Trump, 61-inch, vert., single runner, 92.5 to 149 h.p., 60 r.p.m., total 1,807 to 3,195 h.p.; Generators—2 Can. Gen. Elect., D.C., 300 k.w. each, 400 r.p.m., 2 Can. Gen. Elect., A.C., single-phase, 60-cycle, 150 k.w. each, 600 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 800 k.w. each, 180 r.p.m., total 2,500 k.w.; Exciters—2 generators, 17.5 k.w. each, 1 generator, 15 k.w.; Transformers—1 bank of 2 oil-insulated, 3-phase, primary 2,200 v., secondary 10,000 v., 800 k.v.a. each.

Power. *Transmission Lines*,—8 miles of wooden pole line serves the municipalities of Hull and Aylmer.

Power is purchased in bulk from Ottawa and Hull Power and Manufacturing Company.

Use of Power,—Power is used for lighting, general manufacturing and operation of electric railway.

Hull Electric Company.—Con.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Northern Ry., New York Central Ry., and Ottawa River and Rideau Canal navigation.

The company expects to have available for sale 1,200 horse-power in May, 1920. Rates at present for large blocks of power range from \$15 to \$20 per horse-power per annum.

The Ottawa and Hull Power and Manufacturing Co. (Hydro Power Plant No. 2LA₂). July, 1918.

Address,—134 Wellington St., Ottawa, Ont.

Officials,—Hon. W. C. Edwards, Ottawa (Pres.); J. B. Fraser, Ottawa (Vice-Pres.); R. Blackburn, Ottawa (Mng. Dir. and Treas.).

History,—Plant installed in 1902, with additional units in 1909 and 1914. New power-house under construction, with initial installation of 15,000 h.p.

Capital,—Authorized, \$5,000,000.

Capital invested in Plant and Equipment,—\$1,058,200.

Plant. Official,—D. P. Burke (Supt.).

Location,—Plant located at Chaudiere falls, on Ottawa river, on Philemon island above Bridge street, Hull, Que.

Installation,—Plant operates under an average head of 30 feet. Turbines—3 Dayton Globe, 51-inch, hor., four runner, 2,500 h.p. each, 138 r.p.m., 2 Wm. Kennedy, 51-inch, hor., four runner, 3,800 h.p. each, 163 r.p.m., total 15,100 h.p.; Generators—3 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 1,500 k.w. each, 138 r.p.m., 2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 2,000 k.w. each, 163 r.p.m., total 8,500 k.w.; Exciters—2 turbines, 22-inch, 200 h.p. each, 320 r.p.m., 1 motor, 2-phase, 2,200 v., 720 r.p.m., 2 generators, 112½ k.w. each, 320 r.p.m., 1 generator, 150 k.w., 720 r.p.m.; Transformers—1 bank of 4, single-phase, air-cooled, primary 2,300 v., secondary 11,000 v., 1,100 k.v.a. each.

Power. Transmission Line,—3 miles of wooden pole line transmits power to various users in Ottawa and Hull.

Use of Power,—Power is used for lighting, operation of electric railway and operation of general manufacturing plants, including foundry, smelting and cement works.

Power is sold in bulk to Hydro-Electric Power Commission of Ontario and Hull Electric Company.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Northern Ry., New York Central Ry., and Rideau Canal and Ottawa River navigation.

The company has under construction a new power-house at Chaudiere falls, on Ottawa river, with an initial installation of one J. M. Voith, and one Boving, 51-inch, hor., four-runner, turbine, at 7,500 h.p. each, and two Can. Gen. Elect., 3-phase generators at 6,750 k.w. each.

The company will have 10,000 horse-power available for sale in 1918; power rate about \$15 per horse-power per annum according to use.

The company contemplates further development and will have more power available for sale.

HUNTINGDON.**Huntingdon Electric Light Plant. (Hydro Power Plant No. 20A₂). Feb., 1918.**

Address,—Huntingdon, Que.

Owner,—Jas. Gordon Dunn.

History,—Plant installed in 1915.

Capital invested in Plant and Equipment,—\$40,000.

QUEBEC.

Huntingdon Electric Light Plant.—Con.

Plant. *Location*,—Plant located near Powercourt, on Chateauguay river.

Installation,—Plant operates under an average head of 26 feet. Turbine—1 Wm. Hamilton, 20-inch, vert., double runner, 200 h.p., 400 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 130 k.w., 600 r.p.m.

Power. *Transmission Line*,—7 miles of wooden pole line serves the municipality of Huntingdon.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry. and New York Central Ry.

HUNTINGVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

IBERVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ISLE BIZARD.

Served by Pierrefonds Electric Co., Ltd., with power purchased from Montreal Light Heat and Power Consolidated; see Montreal, Que.

ISLE VERTE.

Isle Verte Electric Light Plant. (Hydro Power Plant No. 2PG₂). April, 1918.

Address,—Isle Verte, Que.

Owner,—Eugene Côté.

History,—Plant installed during 1917 and placed in operation in March, 1918.

Plant. *Location*,—Plant located on Verte river.

Installation,—Plant operates under an average head of 16.5 feet. Turbine—1 Leffel, 23-inch, hor., double runner, 68 h.p., 600 r.p.m.; Generator—1 Fairbanks-Morse, A.C., 3-phase, 30 k.v.a., 1,200 r.p.m.

Power. Commenced supplying power on March 6, 1918.

JOLIETTE.

Municipality of Joliette. (Hydro Power Plant No. 2OB₂). Feb., 1918.

Officials,—J. A. Guibault (Mayor); A. L. Marsolais (Clerk).

History,—Plant installed in 1898.

Capital invested in Plant and Equipment,—\$134,564.

Plant. *Officials*,—H. A. Chalin (Mgr.); Arthur Norman (Electn.).

Location,—Plant located on L'Assomption river, 1½ mile from Joliette station on Canadian Pacific Ry.

Installation,—Plant operates under an average head of 20 feet. Turbines—1 McCormick, 36-inch, hor., single runner, 216 h.p., 190 r.p.m., 1 McCormick, 24-inch, hor., single runner, 100 h.p., 200 r.p.m., total 316 h.p.; Generators—1 S.K.C., A.C., 2-phase, 60-cycle, 120 k.w., 1,000 r.p.m., 1 Royal Elect., D.C., 50 k.w., 900 r.p.m., total 170 k.w.; Exciter—1 generator, 3 k.w., 1,500 r.p.m.

Power. *Local distribution lines* serve the municipality of Joliette. Power is purchased in bulk from Shawinigan Water and Power Company (through the Laval Electric Company).

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry.

The Laval Electric Co., Ltd.

Serves the municipality with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

JONQUIÈRE.

Municipality of Jonquiere. (Hydro Power Plant No. 2RH₁). Jan., 1918.

Official,—J. E. Côté (Municipal Treas.).

History,—Plant installed in 1906, with an additional generator in 1913.

Capital invested in Plant and Equipment,—\$100,000.

Plant. *Location*,—Plant located on Rivière au Sable.

Installation,—Plant operates under an average head of 45 feet. Turbine—1 Jenckes, 30-inch, single runner, 700 h.p., 360 r.p.m.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 425 k.w., 360 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 275 k.w., 900 r.p.m., total 700 k.w.

Power. *Local distribution lines* serve the municipality of Jonquiere.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

The municipality contemplates installing an additional unit of 350 to 400 h.p. capacity.

KENOGAMI.

Served by Price Brothers and Co.; see Shipshaw, Que.

KINGSBURY.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

KNOWLTON.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

LA BAIE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

LAC À LA TORTUE.

Served by L. J. Dostaler with power purchased from Laurentide Power Co., Ltd.; see Grand Mère, Que.

LAC AU SAUMON.

Served by Amqui Electric Co.; see Amqui, Que.

LACHENAIE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

L'ACHIGAN.

Served by La Cie Electrique des Laurentides; see Rawdon, Que.

LACHINE.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

LACHUTE.

Sept., 1918.

Ayers Limited. (Lachute Electric Light System.) (Hydro Power Plant No. 2LC₆).

Address,—Lachute Mills, Que.

Directors,—J. T. Ayers, Lachute; W. H. Ayers, Lachute; E. F. Ayers, Lachute.

Officials,—J. T. Ayers, Lachute (Pres.). W. H. Ayers, Lachute (Vice-Pres.); C. Tremblay, Lachute Mills (Sec.-Treas.).

History,—Plant installed in 1897.

Capital invested in Plant and Equipment,—\$281,602.

Plant. *Officials*,—P. Chabot (Supt.); J. A. R. Bélanger (Electn.); S. Desjardins (Engr. Pwr. Sta.).

Location,—Plant located in North river, 2 miles from Lachute station on Canadian Pacific Ry. and Canadian Northern Ry.

QUEBEC.

Ayer's Limited.—Con.**Plant.—Con.**

Installation,—Plant operates under an average head of 23 feet. Turbines—2 Rowe and Graham, 27-inch, hor., double runner, 200 h.p. each, 200 r.p.m., total 400 h.p.; Generator—1 Royal Elect., A.C., 2-phase, 120 k.w., 1,000 r.p.m.; Exciter—1 generator, 5 k.w., 1,450 r.p.m.

Power. *Transmission Lines*,—19 miles of wooden pole lines serve the municipalities of Lachute, Brownsburg, Staynerville, St. Phillipe, and Lachute Mills.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry. The plant is designed for an ultimate development of 3,000 h.p., which the company expect to have installed in 1919. This additional power will then be available for sale.

LACHUTE MILLS.

Served by Ayers Limited; see Lachute, Que.

LAKE EDWARD.

Turner Lumber and Pulpwood Company. (Fuel Power Plant No. 2PA₁). Nov., 1918.

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$4,500.

Plant. *Location*,—Plant located at Lake Edward, Que.

Installation,—Boilers—2 return tubular, 60 h.p. each; Steam Engine—1 at 35 h.p.; Generators—2 D.C., 9 k.w. each, total 18 k.w.

Power. *Local distribution lines* serve the municipality of Lake Edward.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

L'ANGE GARDIEN.

Served by Quebec Railway, Light, Heat and Power Co., Ltd.; see Quebec, Que.

LANORAIE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

LA PROVIDENCE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

L'ASSOMPTION.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

LA TUQUE.

Brown Corporation. (Hydro Power Plant No. 2NE₁). Aug., 1918.

Address,—Head Office, Portland, Maine, U.S.A. Local Office, La Tuque, Que.

Directors,—H. J. Brown, F. P. Carpenter, O. B. Brown, W. R. Brown, D. P. Brown.

Officials,—H. J. Brown (Pres.); F. P. Carpenter (Vice-Pres.); O. E. Brown (Treas.).

History,—The company is a manufacturing concern, and electricity is furnished in the municipality of La Tuque out of the company's supply.

Plant. *Location*,—Plant located on St. Maurice river, at La Tuque.

Equipment,—Consists of 2 turbines of 4,400 h.p. total capacity, and 2 generators of 4,000 k.w. total capacity, and an auxiliary plant of 250 k.v.a. capacity.

Power. The company develops power primarily for use in its own mills, in the manufacture of sulphate fibre, lumber and pulpwood, and furnishes a small quantity of power for lighting purposes in the municipality of La Tuque.

LAUZON.

Served by Canadian Electric Light Co.; see Levis, Que.

LENNOXVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

L'ÉPIPHANIE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

Served by St. Roch de L'Achigan Elect. Light Plant; see St. Roch de L'Achigan, Que.

LEVIS.

Canadian Electric Light Company. (Hydro Power Plant No. 2PJ₁). Controlled by Quebec Railway, Light, Heat and Power Co., Ltd. Nov., 1918.

Address,—Head Office, Quebec Ry. Bldg., Quebec. Local Office, Levis, Que.

Officials,—Rodolphe Forget, Quebec (Pres.); W. J. Lynch, Quebec (Vice-Pres. and Gen. Mgr.); A. Lemoine, Quebec (Sec.); H. G. Possé, Quebec (Compt.); L. Burran, Quebec (Ch. Eng.); J. B. Dorais, Levis (Gen. Supt.).

History,—Plant installed in 1900, with an additional unit in 1903.

Capital,—Issued, \$331,500.

Bonds,—Issued, \$310,000.

Capital invested in Plant and Equipment,—\$710,683.

Plant. *Official*,—Wm. Langford (Engr. Pwr. Sta.).

Location,—Plant located on Chaudiere river, 8 miles from Levis, Que., and one-half mile below Joffre, Que.

Installation,—Plant operates under an average head of 114 feet. Turbines—2 S. Morgan-Smith, 33-inch, 1,400 h.p. each, 400 r.p.m., 1 S. Morgan-Smith, 33-inch, 2,000 h.p., 400 r.p.m., total 4,800 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 66-cycle, 750 k.v.a. each, 400 r.p.m., 1 Bullock, A.C., 3-phase, 66-cycle, 1,000 k.v.a., 400 r.p.m., total 2,500 k.v.a.; Exciters—2 turbines, 12-inch, 50 h.p. each, 1,000 r.p.m., 1 turbine, 15-inch, 100 h.p., 1,000 r.p.m., 1 motor, 3-phase, 2,200 v., 1,000 r.p.m., 2 generators, 30 k.w. each, 1,000 r.p.m., 1 generator, 60 k.w., 900 r.p.m.

Power. *Transmission Lines*,—9 miles of wooden pole lines serve the municipalities of Levis, Chaudiere, St. Romuald, St. David, Bienville, and Lauzon.

Use of Power,—Power is used for lighting, operation of electric railways, general manufacturing and general power purposes.

Power is sold in bulk to Quebec Railway, Light, Heat and Power Company, Ltd.

Power is delivered adjacent to Grand Trunk Ry., Canadian Government Rys., Canadian Pacific Ry., Quebec Central Ry., and St. Lawrence River, Great Lakes, and Ocean navigation.

LONGUEUIL.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

LORETTEVILLE.

Served by Quebec Railway Light, Heat and Power Co., Ltd.; see Quebec, Que.

LOUISVILLE.

The Louisville Electric Company, Ltd. (Hydro Power Plant No. 2OC₁). Jan., 1918.

Address,—Louisville, Que.

Directors,—Clovis Caron, R. Tourville, M.P.P.; E. M. Chapdelains, M.P.; Dr. Jos. Comtois, W. B. Capiere.

Officials,—Clovis Caron (Pres.); R. Tourville, M.P.P. (Vice-Pres.); J. A. Coutie (Sec.-Treas.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$78,500.

Plant. *Location*,—Plant located on Maskinonge river.

Installation,—Plant operates under an average head of 18 feet; Turbines—1 Allis-Chalmers, 48-inch, hor., double runner, 175 h.p., 257 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 100 k.w., 257 r.p.m.

QUEBEC.

The Louisville Electric Company, Ltd.—Con.

Power. *Transmission Lines*,—17 miles of wooden pole lines serve the municipalities of Louisville, Ste. Ursule, St. Justin and St. Barthélemi.

Use of Power,—Power is used for lighting and for general power purposes.

The company contemplates installing an additional unit of 175 h.p., turbine capacity.

MAGOG.

Municipality of Magog. (Hydro Power Plant No. 2OE₉). April, 1918.

Officials,—Alfred Auger, Magog (Pres. Bd.); Alf. Tourigny, Magog (Sec.).

History,—Plant installed in 1911.

Plant. *Officials*,—Jos. Verville, Magog (Supt.); Ovila Trepanier (Engr. Pwr. Sta.).

Location,—Plant located on Magog river.

Installation,—Plant operates under an average head of 20.5 feet; Turbines—2 Escher Wyss, hor., single runner, 800 h.p. each, 150 r.p.m., total 1,600 h.p.; Generators—2 Swedish Gen. Elect., A.C., 2-phase, 60-cycle, 625 k.v.a. each, 150 r.p.m., total 1,250 k.v.a.

Power. *Local distribution lines* serve the municipality of Magog.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

MAISONNEUVE.

Served by the Montreal Light, Heat and Power Consolidated; see Montreal, Que.

Served by Montreal Public Service Corporation; see Montreal, Que.

MALBAIE.

Served by Nairn Falls Power and Pulp Co., Ltd.; see Murray Bay, Que.

MANIWAKI.

Maniwaki Electric Company. (Hydro Power Plant No. 2LH₁). Sept., 1918.

Address,—Maniwaki, Que.

Officials,—T. Bonhomme, Papineauville (Pres.); J. H. Romberg, Maniwaki (Mgr. and Sec.).

History,—Plant installed in 1905, with an additional unit in 1910.

Capital,—Authorized, \$49,000. Issued, \$45,500.

Bonds,—Issued, \$37,000.

Capital invested in Plant and Equipment,—\$27,906.

Plant. *Official*,—Joseph Martin (Engr. Pwr. Sta.).

Location,—Plant located at Corbeau rapids, on the Gatineau river.

Installation,—Plant operates under an average head of 12 feet. Turbines—1 Wm. Hamilton, 56-inch, vert., Samson, single runner, 265 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 600 r.p.m.; Exciters—1 motor, 3-phase, 125 v., 1 generator, 7 k.w., 1,425 r.p.m.

Power. *Transmission Line*,—6 miles of wooden pole line serves the municipality of Maniwaki.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

MANSONVILLE.

Mansonville Electric Light Plant. (Hydro Power Plant No. 2OH₃). Feb., 1918.

Address,—Mansonville, Que.

Owner,—C. G. Brouillette.

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$9,060.

Mansonville Electric Light Plant.—Con.

Plant. *Location.*—Plant located on Missisquoi river.

Installation.—Plant operates under an average head of 13 feet. Turbine—1 Vulcan, 44-inch, vert., single runner, 50 h.p., 100 r.p.m.; Generator—1 Gen. Elect., A.C., single-phase, 125-cycle, 30 k.w., 1,500 r.p.m.

Power. *Transmission Lines.*—4 miles of wooden pole lines serve the municipalities of Mansonville and Highwater.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

MAPLE GROVE.

Served by Beauharnois Electric Co., Ltd., with power purchased from Canadian Light and Power Co.; see Montreal, Que.

MARBLETON.

Served by municipality of Sherbrooke; see Sherbrooke, Que.

MARIEVILLE.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

MASCOUCHE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

MASKINONGE.

Maskinongé Electric Light Plant. (Hydro Power Plant No. 20C₂). May, 1918.

Address.—Maskinongé, Que.

Owner.—Adelard Lemire.

History.—The plant is operated in connection with a saw-mill, of which it forms part. The generator was installed in 1916.

Plant. *Location.*—Plant located on Maskinongé river at Maskinongé on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 7 feet. Turbine—1 36-inch, hor., 25 h.p., 300 r.p.m.; Generator—1 West., D.C., 5 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Maskinongé.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

MASSAWIPPI.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

MASSON.

Served by Buckingham Electric Light Plant; see Buckingham, Que.

MEGANTIC.

Megantic Electric Light Company. (Fuel Power Plant No. 2PJ₁). March, 1918.

Address.—Megantic, Que.

Officials.—G. K. St. Pierre, Megantic, Que. (Pres.); Rev. J. E. Choquette, Megantic, Que. (Mgr.); R. K. Marceau, Megantic, Que. (Sec.).

History.—Plant installed in 1916.

Capital invested in Plant and Equipment.—\$22,500.

Plant. *Location.*—Plant located in Megantic, Que.

Installation.—Gas Engine—1 Hornsby-Stockport, 140 h.p.; Generator—1 Bullock, A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Megantic.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry. and Quebec Central Ry.

MELBOURNE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

QUEBEC.

MONTCALM MILLS.

Served by La Cie Electrique des Laurentides; see Rawdon, Que.

MONTEBELLO.

Served by Papineauville Electric Co.; see Papineauville, Que.

MONT JOLI.

Rouleau Ltd. (Fuel Power Plant No. 2QA₂). April, 1918.

Address,—Mont Joli, Que.

Officials,—J. O. Rouleau, Mont Joli, Que. (Pres., Mgr. and Treas.); Onésime Tremblay, Mont Joli, Que. (Sec.).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$18,105.

Plant. Location,—Plant located in Mont Joli, Que.

Installation,—Gas Engine—1 at 66 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 50 k.w., 1,200 r.p.m.

Power. Local distribution lines serve the municipality of Mont Joli.

Use of Power,—Power used for lighting.

Power is delivered adjacent to Canadian Government Rys. and Canada and Gulf Terminal Ry.

MONT LAURIER.

Nov., 1918.

Laurentian Water and Power Company. (Hydro Power Plant No. 2LE₃).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$105,000.

Plant. Location,—Plant located on Lievre river, at Mount Laurier, Que.

Installation,—Plant operates under a head of 19 feet. Turbine—1 at 150 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 125 k.v.a.

Power. Local distribution lines serve the municipality of Mont Laurier.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

Power rates range from \$20 to \$40 per h.p. year.

MONTMAGNY.

Aug., 1918.

Basin Electric Light and Power Company, Ltd. (Hydro Power Plant No. 2PH₁).

Address,—Montmagny, Que.

Directors,—H. E. Price, Quebec; A. J. Price, Quebec; Sir W. Price, Quebec; C. W. Torrens, Quebec; W. Walsh, Montmagny.

Officials,—H. E. Price, Quebec (Pres.); Geo. Collie, Montmagny (Sec.-Treas.).

History,—Plant installed in 1898; purchased by Montmagny Light and Power Company in 1901; and acquired by present company in 1908.

Capital,—Authorized, \$20,000. Issued, \$20,000.

Capital invested in Plant and Equipment,—\$46,805.

Plant. Official,—Geo. Collie (Supt.).

Location,—Plant located on South river, 1½ mile from Montmagny station on Canadian Government Rys., and adjacent to private railway siding and St. Lawrence River navigation. Auxiliary plant located at main power-house.

Installation,—Plant operates under an average head of 20 feet. The water is conveyed to power-house through a steel flume. Turbine—1 Wm. Hamilton, 36-inch, hor., Samson, 250 h.p., 210 r.p.m.; Generator—1 West., A.C., 3-phase, 60-cycle, 175 k.w., 900 r.p.m.; Exciter—1 generator, 10 k.w., 825 r.p.m. Auxiliary Plant—2 Robb boilers, 100 h.p. each, 1 Robb reciprocating steam engine, 300 h.p.

Basin Electric Light and Power Company, Ltd.—Con.

Power. *Local distribution lines* serve the municipality of Montmagny and the parish of Montmagny.

Use of Power.—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Government Rys. and St. Lawrence river navigation.

The company has at present available for sale 50 h.p.

MONTMORENCY.

Served by Quebec Railway Light, Heat and Power Co., Ltd.; see Quebec, Que.

MONTREAL.

Montreal Light, Heat and Power Consolidated, formerly the Civic Investment and Industrial Company; controls and operates Cedars Rapids Manufacturing and Power Company; Montreal Light, Heat and Power Company; Montreal and St. Lawrence Light and Power Company; Provincial Light, Heat and Power Company; Lachine Rapids Hydraulic and Land Company; Temple Electric Company; Royal Electric Company; Standard Light and Power Company; Imperial Electric Light Company; and Montreal Gas Company. Sept., 1918.

Address.—Head Office, Power Bldg., Montreal, Que.

Directors.—Sir Herbert Holt, Montreal; J. S. Norris, Montreal; G. H. Montgomery, K.C., Montreal; C. R. Hosmer, Montreal; Sir H. Montague Allan, C.V.O., Montreal; Hon. H. B. Rainville, Montreal; George Caverhill, Montreal; J. E. Aldred, Montreal; Hon. Narcisse Perodeau, Montreal; Sir Rodolphe Forget, Montreal.

Officials.—Sir Herbert Holt, Montreal (Pres.); J. S. Norris, Montreal (Vice-Pres.); C. S. Bagg, Montreal (Sec.-Treas.); G. R. Whatley, Montreal (Asst. Sec.-Treas.); H. R. Lyons, Montreal (Compt.).

History.—The company was organized in August, 1916, under the name of the Civic Investment and Industrial Company and, by agreement, will operate Montreal Light, Heat and Power Company and Cedars Rapids Manufacturing and Power Company and their subsidiaries for a period of ninety-eight years. The name was changed on February 9, 1918, to Montreal Light, Heat and Power Consolidated.

Capital.—Authorized, \$75,000,000. Issued, \$63,717,200.

Plants.

Cedars Rapids Plant. (Hydro Power Plant No. 2MO₂). Cedars Rapids Manufacturing and Power Company, controlled and operated by Montreal Light, Heat and Power, Consolidated.

History.—The company was incorporated in 1913 and the plant installed in 1914, with additional units in 1916.

Location.—Plant located at Cedars Rapids on St. Lawrence river, 3½ miles from Cedars station on Grand Trunk Ry., and adjacent to St. Lawrence River navigation.

Installation.—Plant operates under an average head of 30 feet; Turbines—9 I. P. Morris, 194½-inch, vert., Francis, single runner, 10,800 h.p. each, 55-6 r.p.m.; 3 Wellman-Seavers-Morgan, 194½-inch, vert., Francis, single runner, 10,800 h.p. each 55-6 r.p.m., total 129,600 h.p.; Generators—12 Gen. Elect., A.C., 3-phase, 62½-cycle, 10,000 k.v.a. each, 55-6 r.p.m., total 120,000 k.v.a.; Exciters—3 I.P. Morris, vert., Francis, single runner, turbines, 1,500 h.p. each, 150 r.p.m.; 3 Gen Elect., A.C., 3-phase, 60-cycle generators, 1,250 k.v.a. each, 150 r.p.m., which supply power for 10 motor-generator sets, motors,

QUEBEC.

Cedars Rapids Plant.—Con.

3-phase, 2,200 v., generators 150 k.w. each, 900 r.p.m.; Transformers—1 bank of 3 West., single-phase, water-cooled, oil-insulated, primary 4,000 v., secondary 66,000 v., 2,500 k.v.a. each, 1 bank of 4 Gen. Elect., single-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 66,000 v., 5,000 k.v.a. each.

Soulanges Plant. (Hydro Power Plant No. 2MC₆). Provincial Light, Heat and Power Company, controlled and operated by Montreal Light, Heat and Power Consolidated.

History.—Plant installed in 1906, with additional units in 1916.

Location.—Plant located on Soulanges Canal (St. Lawrence river), 4 miles from Cedars station on Grand Trunk Ry., and adjacent to St. Lawrence River navigation.

Installation.—One unit operates under an average head of 50 feet, and two under an average head of 52 feet; Turbines—1 Allis-Chalmers-Bullock, 48-inch, hor., four runner, 5,350 h.p., 237 r.p.m., 2 Wellman-Seavers-Morgan, 48-inch, hor., four runner, 5,350 h.p. each, 237 r.p.m., total 16,050 h.p.; Generators—3 West., A.C., 3-phase, 62½-cycle, 3,750 k.v.a. each, 237 r.p.m., total 11,250 k.v.a.; Exciters—2 turbines, 21-inch, single runner, 300 h.p. each, 450 r.p.m., 2 generators, 150 k.w. each, 450 r.p.m.; Transformers—1 bank of 3 West., single-phase, water-cooled, oil-insulated, primary 4,000 v., secondary 44,000 v., 2,500 k.v.a. each.

Lachine Plant. (Hydro Power Plant No. 2OA₄). Lachine Rapids Hydraulic and Land Company, controlled and operated by Montreal Light, Heat and Power Consolidated.

History.—Plant installed in 1898, with additional units in 1910.

Location.—Plant located at Lachine rapids on St. Lawrence river, 5 miles from Montreal, and adjacent to St. Lawrence River navigation.

Installation.—Plant operates under an average head of 14 feet; Turbines—8 Stilwell Bierce & Smith Vaile, 51-inch, vert., six runner, 1,250 h.p. each, 180 r.p.m., 4 S. Morgan Smith, 51-inch, vert., six runner, 1,450 h.p. each, 180 r.p.m., total 15,800 h.p.; Generators—8 Gen. Elect., A.C., 3-phase, 62½-cycle, 750 k.v.a. each, 180 r.p.m., 4 Can. Gen. Elect., A.C., 3-phase, 62½-cycle, 940 k.v.a. each, 180 r.p.m., total 9,760 k.v.a.; Exciters—4 generators, 75 k.w. each, 600 r.p.m.; Transformers—1 bank of 4 Can. Gen. Elect., single-phase, water-cooled, oil-insulated, primary 4,000 v., secondary 12,000 v., 2,000 k.v.a. each.

Chamblly Plant. (Hydro Power Plant No. 2OJ₁). Montreal and St. Lawrence Light and Power Company, controlled and operated by Montreal Light, Heat and Power Consolidated.

Location.—Plant located at Richelieu, on Richelieu river, one-half mile from Central Vermont Railway station, and adjacent to Richelieu River navigation;

Installation.—Plant operates under an average head of 31 feet; Turbines—8 S. Morgan Smith, 51-inch, hor., four runner, 2,700 h.p. each, 152 r.p.m., total 21,600 h.p.; Generators—4 Gen. Elect., A.C., 2-phase, 62½-cycle, 1,800 k.v.a. each, 152 r.p.m., 4 S.K.C., A.C., 2-phase, 62½-cycle, 1,800 k.v.a. each, 152 r.p.m., total 14,400 k.v.a.; Exciters—1 27-inch, double runner turbine, 450 h.p., 250 r.p.m., 1 27-inch, double runner turbine, 525 h.p., 250 r.p.m., 2 generators, 300 k.w. each, 250 r.p.m., 1 S.K.C., 2-phase motor, 2,200 v., 600 r.p.m., 1 S.K.C., generator, 75 k.w., 600 r.p.m.; Transformers—5 banks of 2 West., single-phase, air-cooled, primary 2,200 v., secondary 25,000 v., 2,750 k.v.a. each.

Auxiliary Plant. (Fuel Power Plant No. 20A₄). Montreal Light, Heat and Power Company, controlled and operated by Montreal Light, Heat and Power Consolidated.

History.—Plant installed in 1914, with additional units in 1916.

Location.—Plant located near Lachine canal in Montreal.

Installation.—Boilers—12 Babcock & Wilcox, 620 h.p. each, total 7,440 h.p.; Steam Turbine Units—2 Gen. Elect., 10,000 h.p. each, 1 West., 2,000 h.p., total 22,000 h.p.; Transformers—2 banks of 2 Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 24,000 v., secondary 12,000 v., 9,375 k.v.a. each, 1 bank of 4 Gen. Elect., single-phase, water-cooled, oil-insulated, primary 66,000 v., secondary 12,000 v., 5,000 k.v.a. each.

Power. *Transmission Lines.*—Power is transmitted by 26.6 miles of steel tower line from Cedars Rapids plant; 28.1 miles of wooden pole line from Soulanges plant; two circuits of 4.2 miles of wooden pole line from Lachine plant; and two wooden pole lines of 16.7 miles each from Chambly plant; and is served through the controlling company to the municipalities of Montreal, Westmount, Montreal West, Outremont, Greenfield Park, St. Lambert, Longueuil, Richelieu, Chambly, Dorval, Pt. Claire, Maisonneuve, Tetraultville, Verdun, Lachine, St. Anne de Bellevue and Marieville.

Power is purchased in bulk from Shawinigan Water and Power Company.

Power is sold in bulk to Southern Canada Power Company, and the municipalities of Westmount, Verdun, Lachine, Dorval, Pt. Claire and St. Anne de Bellevue, Outremont, Greenfield Park, and Marieville.

Use of Power.—Power is used for lighting, operation of street railways, electro-chemical and electro-metallurgical processes, operation of pulp and paper mills, and for general manufacturing and power purposes.

Power is delivered adjacent to Canadian Government Rys., Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., New York Central Ry., Central Vermont Ry., Quebec, Montreal and Southern Ry., Montreal and Southern Counties Electric Ry., and St. Lawrence River, Ottawa River and Ocean navigation.

The company has power available for sale.

Montreal Public Service Corporation. (Fuel Power Plant No. 20A₄). Controls St. Paul Electric Company, the Dominion Light, Heat and Power Company, and the entire distribution system formerly owned by Canadian Light and Power Company in Montreal. Sept., 1918.

Address.—Head Office, 263 St. James street, Montreal, Que.

Directors.—E. A. Robert, Montreal; J. W. McConnell, Montreal; Hon. J. M. Wilson, Montreal; F. H. Wilson, Montreal; Hon. N. Curry, Montreal; J. M. McIntyre, Montreal; Hon. J. L. Perron, K.C., Montreal; F. J. Shaw, Montreal; K. B. Thornton, Montreal; P. J. McIntosh, New York.

Officials.—E. A. Robert, Montreal (Pres. and Mng. Dir.); Hon. J. M. Wilson, Montreal (Vice-Pres.); F. H. Wilson, Montreal (Vice-Pres.); D. K. Goodfellow, Montreal (Sec.-Treas.); K. B. Thornton, Montreal (Ch. Engr. and Optg. Mgr.).

History.—By authority of Act of Legislature, Quebec 3, George V, 1912, Chapter 89, assented to December 21, 1912, the name of the Saraguay Electric and Power Company was changed to Montreal Public Service Corporation. At the same time the Montreal Public Service Corporation was authorized to acquire St. Paul Electric Company, the Dominion Light, Heat and Power Company, and the distribution systems of the Canadian Light and Power Company in Montreal. The property formerly operated under the name of

Montreal Public Service Corporation.—Con.

the Central Light, Heat and Power Company was acquired by the Canadian Light and Power Company and leased by them to Montreal Public Service Corporation.

Capital.—Authorized, \$5,000,000. Issued, \$3,384,200.

Capital invested in Plant and Equipment.—\$6,535,283.

Plant. Location.—Plant located on North bank of Lachine canal in Montreal, and adjacent to St. Lawrence River navigation.

Installation.—Steam Engines—3 Belliss & Morcom, reciprocating, 240 h.p. each, 1 Belliss & Morcom, reciprocating, 570 h.p., total 1,290 h.p.; Generators—3 Swedish Gen. Elect., D.C., 145 k.w. each, 1 Swedish Gen. Elect., D.C., 375 k.w., total 810 k.w. Reserve installation—Steam Engines—3 Belliss & Morcom, reciprocating, 330 h.p., 365 h.p. and 145 h.p., total 840 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 200 k.w., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 250 k.w., 1 Allis-Chalmers-Bullock, D.C., 100 k.w., total 550 k.w.

Power. Transmission Lines.—32 miles of wooden pole lines distribute power to substations and distribution lines serve municipalities of Montreal, Maisonneuve, St. Laurent, Montreal East, Pont Viau, and parishes of Sault au Récollet and Pointe aux Trembles.

Power is purchased from the Canadian Light and Power Company and is received at Terminal Station of the latter company in Montreal.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing and general power purposes.

Power is sold in bulk to Montreal Tramways Company.

Power is delivered adjacent to Canadian Government Rys., Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., New York Central Ry., Quebec, Montreal and Southern Ry., Montreal and Southern Counties Electric Ry., and St. Lawrence River, Ottawa River, Great Lakes and Ocean navigation.

Power rates range from \$25 to \$75 per horse-power per annum.

Canadian Light and Power Company. (Hydro Power Plant No. 2MC₄). Controlled by Montreal Tramway and Power Company. Dec., 1918.

Address.—Head Office, Eastern Townships Bank Bldg., Montreal, Que. Works, St. Timothée, Que.

Directors.—F. Howard Wilson, Montreal; E. A. Robert, Montreal; G. G. Foster, K.C., Montreal; J. M. McIntyre, Montreal; N. Curry, Montreal; R. N. Smyth, Montreal; Wm. C. Finley, Montreal; Hon. J. M. Wilson, Montreal; F. J. Shaw, Montreal; J. W. McConnell, Montreal.

Officials.—F. Howard Wilson, Montreal (Pres.); E. A. Robert, Montreal (Vice-Pres. and Mng. Dir.); D. K. Goodfellow, Montreal (Sec.-Treas.); K. B. Thornton, Montreal (Ch. Engr. and Optg. Mgr.).

History.—Initial installation of three units in 1911; one unit added in 1914 and one turbine replaced in 1915. Delivery of power commenced in September, 1911. In 1913 the entire distribution system in Montreal was taken over by Montreal Public Service Corporation. The company acquired the property formerly operated under the name of the Central Light, Heat and Power Company, which property is now leased to Montreal Public Service Corporation. The company has rights to distribute and sell power and light in Montreal and several adjacent counties.

Capital.—Authorized, \$7,000,000. Issued, \$6,000,000.

Bonds.—Authorized, \$6,500,000. Issued, \$6,500,000.

Capital invested in Plant and Equipment.—\$13,262,977.

Canadian Light and Power Company.—Con.

Plant. *Location.*—Plant located on Beauharnois canal (St. Lawrence river), at St. Timothée, one mile from St. Timothée station on New York Central Railway. Auxiliary steam plant located at terminal station in Montreal.

Installation.—Plant operates under an average head of 50 feet; Turbines—2 S. Morgan-Smith, 71-inch hor., Francis, double runner, 7,600 h.p. each, 150 r.p.m.; 2 I. P. Morris, 72-inch, hor., Francis, double runner, 7,600 h.p. each, 150 r.p.m., total 30,400 h.p.; Generators—3 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 5,000 k.v.a. each, 150 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 5,000 k.v.a., 150 r.p.m., total 20,000 k.v.a.; Exciters—2 turbines 450 h.p. each, 500 r.p.m., 2 generators, 250 k.w. each, 500 r.p.m.; Transformers—1 bank of 3 Allis-Chalmers-Bullock, 3-phase, water-cooled, oil-insulated, primary 2,300 v., secondary 44,000 v., 5,000 k.v.a. each, 1 Can. Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 2,300 v., secondary 44,000 v., 5,000 k.v.a.; Auxiliary Steam Plant—1 Allis-Chalmers, steam turbine unit, 1,500 k.w.

Power. *Transmission Lines.*—26.85 miles of steel tower lines serve the municipalities of Montreal (through Montreal Public Service Corporation), Beauharnois municipality of St. Timothée.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing and general power purposes.

The company sells all power in bulk except a small quantity distributed in the municipality of St. Timothée.

Power is sold in bulk to Montreal Public Service Corporation and Beauharnois Electric Company, Ltd.

Power is delivered adjacent to Canadian Government Rys., Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., New York Central Ry., Quebec, Montreal and Southern Ry., Montreal and Southern Counties Electric Ry., and St. Lawrence River, Ottawa River, Great Lakes, and Ocean navigation.

The hydraulic plant is designed for an ultimate turbine capacity of 76,000 h.p. or an additional installation of 45,600 h.p.

Southern Canada Power Company, Ltd. Controls and operates South Shore Power and Paper Company; La Cie de Gaz, Electricité et Pouvoir de St. Hyacinthe; St. Johns Electric Light Company; Brome Lake Electric Power Company; Richmond County Electric Company; and Sherbrooke Railway and Power Company, which includes Lennoxville Light and Power Company, Eastern Townships Electric Company, Stanstead Electric Light Company, Burroughs Falls Power Company, and International Electric Company of Vermont. Oct., 1918.

Address.—Head Office, 330 Coristine Bldg., Montreal, Que.

Directors.—W. K. Baldwin, M.P., Baldwins Mills, Que.; H. T. Chalifoux, St. Hyacinthe, Que.; Jas. Davidson, Montreal, Que.; J. S. Gillies, Arnprior, Ont.; W. C. Hawkins, Hamilton, Ont.; W. H. Miner, Granby, Que.; Lieut.-Col. J. R. Moodie, Hamilton, Ont.; A. J. Nesbitt, Montreal, Que.; Geo. Parent, K.C., M.P., Quebec, Que.; Chas. E. Read, Ottawa, Ont.; J. M. Robertson, Montreal, Que.; Harry Sifton, Toronto, Ont.; F. W. Teele, Montreal, Que.; C. W. Tooke, Syracuse, N.Y.; J. B. Woodyatt, Montreal, Que.

Officials.—W. C. Hawkins, Hamilton, Ont. (Pres.); F. W. Teele, Montreal, Que. (Vice-Pres.); J. B. Woodyatt, Montreal, Que. (Gen. Mgr.); L. C. Haskill, Montreal, Que. (Sec.-Treas.).

History.—The company was incorporated in 1913, and has since acquired, in addition to the above-named companies, the municipal plants at Drummondville, Iberville, Bromptonville and Granby, and the private plants at Cowans-

Southern Canada Power Company, Ltd.—Con.

ville, Actonvale, and West Shefford. A number of the plants have been enlarged and remodelled and, while this report was in the course of preparation, the company has made some extensive alterations in its system. These alterations are included in the accompanying description of the plants.

Capital,—Authorized, \$6,000,000. Issued, \$4,300,000.

Bonds,—Authorized, \$5,000,000. Issued, \$3,500,000.

Plants.

Officials,—P. R. Davies, Montreal, Que. (Commercial Mgr.); L. C. Haskell, Montreal, Que. (Pur. Agt.); C. Johnstone, Montreal, Que. (Compt.); L. Anciaux, Montreal, Que. (Plant Dept.); G. R. Atchison, Montreal, Que. (Merchandise Dept.); J. W. Dunfield, Richmond, Que. (Transformer Dept.); E. R. Spence, St. Hyacinthe, Que. (Meter Dept.); F. A. Chisholm, Sherbrooke, Que. (Div. Supt., Sherbrooke); F. X. Couture, Sherbrooke, Que. (Supt. Ry. Dept.); G. Pominville, St. Hyacinthe, Que. (Div. Supt. St. Hyacinthe); H. B. Fisk, Drummondville, Que. (Div. Supt. Drummondville); A. P. Broadhead, Granby, Que. (Div. Supt. Granby); G. W. Cowan, St. Johns, Que. (Div. Supt. St. Johns); L. W. Hill, Waterloo, Que. (Agent Waterloo Br.); E. G. Miller, Knowlton, Que. (Sub. Agent Knowlton Br.); Miss Ruiter, Cowansville, Que. (Agent Cowansville Br.); B. Faraday, Richmond, Que. (Agent Richmond Br.); P. Martin, Bromptonville, Que. (Agent Bromptonville Br.); A. Whitchee, Lennoxville, Que. (Agent Lennoxville Br.); C. J. Dearborn, North Hatley, Que. (Agent North Hatley Br.); W. G. Libby, Ayers Cliff, Que. (Agent Ayers Cliff Br.); J. A. Gray, Rock Island, Que. (Agent Rock Island Br.); A. Guertin, Actonvale, Que. (Agent Actonvale Br.).

Sherbrooke Plant. (Hydro Power Plant No. 20E₁₀).

Location,—Plant located in Sherbrooke on Magog river about 600 feet above its junction with St. Francis river and one-quarter mile from railway station.

History,—Original plant installed in 1896 by the Sherbrooke Street Railway Company, about 600 feet above present site. In 1910 the Sherbrooke Street Railway Company was superseded by Sherbrooke Railway and Power Company and in 1911 the new company, having purchased additional rights above and below the former plant, installed the present plant. This company was later acquired by Southern Canada Power Company, Ltd.; and in 1917 a substation addition was built, receiving power from Shawinigan Water and Power Company.

Installation,—Plant operates under an average head of 57 feet. Water is conveyed from intake dam through a steel penstock, 9 feet 6 inches in diameter and 650 feet long, to a standpipe 16 feet in diameter and 56 feet high, situated adjacent to the power-house; Turbines—3 Jenckes, 27-inch, hor., double runner, 1,350 h.p. each, 360 r.p.m., total 4,050 h.p.; Generators—3 Gen. Elect., A.C., 3-phase, 60-cycle, 940 k.v.a. each, 300 r.p.m., total 2,820 k.v.a.; Exciters—3 Jenckes, turbines, 14-inch, 100 h.p. each, 750 r.p.m., 1 Can. Gen. Elect. motor, A.C., 3-phase, 2,200 v., 40 h.p., 870 r.p.m., 4 Can. Gen. Elect. generators, D.C., 50 k.w. each, 750 r.p.m., 1 Can. Gen. Elect. generator, D.C., 25 k.w. 870 r.p.m., 1 Crocker-Wheeler generator, D.C., 25 k.w., 600 r.p.m.; Transformers—1 bank of 3 Gen. Elect., single-phase, water-cooled, primary 2,200 v., secondary 22,000 v., 500 k.v.a. each, 1 bank of 3 Crocker-Wheeler, single-phase, self-cooled, primary 48,000 v., secondary 2,400 v., 500 k.v.a. each, 1 bank of 1 Can. West. and 1 Can. Gen. Elect., single-phase, water-cooled, primary 48,000 v., secondary 2,400 v., 1,000 and 2,000 k.v.a. respectively. For power purchased from Shawinigan Water and Power Company: Motor Generator Sets—2 Can. Gen. Elect., 250 k.w. 750

Sherbrooke Plant.—Con.

r.p.m., 2-phase, 60-cycle, 2,200 v., A.C., to 500 v., D.C. for street railway. 2 Crocker-Wheeler, 1,500 k.w., 600 r.p.m., 3-phase, 30-cycle, 2,200 v., A.C., to 3-phase, 60-cycle, 2,200 v., A.C., for purchased power.

Kingsbury Plant. (Hydro Power Plant No. 20F₁).

Location.—Plant located on Salmon creek, one mile from Kingsbury station on Canadian Pacific Ry.

History.—Plant installed in 1887 by Richmond County Electric Company, purchased by Southern Canada Power Company, Ltd., in 1913, and remodelled in 1917.

Installation.—Plant operates under an average head of 25 feet. Turbines—2 Wm. Kennedy, 25-inch, vert., New American, single runner, 115 h.p. each, 250 r.p.m., total 230 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., total 150 k.w.; Exciters—2 T. H. Bi-Polar generators, 7.5 k.w. each.

Drummondville Plant. (Hydro Power Plant No. 20F₂).

Location.—Plant located on the St. Francis river, one-quarter mile from Drummondville railway station.

History.—Plant installed by municipality of Drummondville in 1906, and purchased by Southern Canada Power Company, Ltd., in 1913. Power-house extended and third unit installed in 1917.

Installation.—Plant operates under an average head of 10 feet. Turbines—1 Wm. Hamilton, 62-inch, vert., single runner, 200 h.p., 75 r.p.m., 1 Jenckes, 62-inch, vert., single runner, 150 h.p., 75 r.p.m., 1 S. Morgan-Smith, 66-inch, vert., single runner, 280 h.p., 76 r.p.m., total 630 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 150 k.v.a., 225 r.p.m., 1 Allis-Chalmers, A.C., 3-phase, 187 k.v.a., 225 r.p.m., 1 Allis-Chalmers, A.C., 3-phase, 400 k.w., 300 r.p.m.; Exciters—2 Can. West. generators, 17 k.w. each, 1,125 r.p.m., 1 Electromotor, generators, 17 k.w., 1,125 r.p.m.

Foster Plant. (Hydro Power Plant No. 20G₁).

Location.—Plant located at Brome Lake outlet, one mile from Foster station on Canadian Pacific Ry.

History.—Plant installed in 1890 by the Brome Lake Electric Power Company, and acquired by Southern Canada Power Company, Ltd., and rebuilt in 1917. Sub-station near plant built in 1918.

Installation.—Plant operates under an average head of 31 feet. Turbine—1 Jenckes, 36-inch, hor., double runner, 300 h.p., 292 r.p.m.; Generator—1 Walker, A.C., 3-phase, 60-cycle, 150 k.w., 600 r.p.m.; Exciters—1 Wagner generator, 3 k.w., 2,000 r.p.m., 1 Can. Gen. Elect. generator, 3 k.w., 1,500 r.p.m.

St. Johns Plant. (Fuel Power Plant No. 20J₁).

Location.—Plant located on Richelieu street, St. Johns, Que.

History.—Plant installed in 1906 by the St. Johns Electric Light Company and purchased in 1913 by Southern Canada Power Company, Ltd.

Installation.—Boilers—1 Doty, hor., return tubular, 200 h.p., 1 Erie City, water tube, 250 h.p.; Steam Engines—1 West., vert., reciprocating, 500 h.p., 1 Leonard, hor., reciprocating, 175 h.p., total 675 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 340 k.w. 257 r.p.m., 1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 115 k.w., 900 r.p.m., total 455 r.p.m.; Exciters—1 West generator, 15 k.w., 1,050 r.p.m., 1 Ed. Bi-polar generator, 15 k.w., 1,050 r.p.m.; Transformers—3 Can. Gen. Elect., primary 2,200 v., secondary, 22,000 v., 500 k.v.a. each.

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Granby Plant. Dismantled in 1918, and replaced by sub-station which commenced operation in May, 1918.

Cowansville Plant. Dismantled in 1918, and replaced by outdoor sub-station in 1918.

St. Hyacinthe (Rapide Plat) Plant. Dismantled and power received from Montreal Light, Heat and Power Consolidated, at sub-station in St. Hyacinthe (installed in 1917).

Power. *Transmission Lines*,—57 miles of 24,000 volt, 175 miles of 48,000 volt, and 10 miles of 6,000 volt, wooden pole lines serve the municipalities of Sherbrooke, Bromptonville, Lennoxville, Huntingville, North Hatley, Waterville, Compton, Eustis, Capelon, Ayers Cliff, Ways Mills, Massawippi, Hatley, Rock Island, Stanstead, Beebe, Drummondville, St. Germain, St. Cyrille, Actonvale, Richmond, Melbourne, Kingsbury, New Rockland, Granby, West Sheffield, Cowansville, Sweetsburg, Waterloo, Foster, Knowlton, Eastman, St. Johns, Ixerville, St. Hyacinthe, La Providence, St. Joseph, St. Antoine, St. Simon, St. Hugues, St. Madeleine, St. Hilaire, Beloeil, St. Mathias, and St. Rosalie, all in the province of Quebec, and Derby Line, Derby, and Beebe in the state of Vermont.

Power is purchased in bulk from Montreal Light, Heat and Power Consolidated, and Shawinigan Water and Power Company (through Continental Light, Heat and Power Company). A small amount of power is also purchased from A. Bazinet at St. Hugues for distribution in the municipality of St. Hugues.

Use of Power,—Power is used for lighting, operation of electric railways, operation of copper mines, general manufacturing and general power purposes.

Power is sold in bulk to the municipalities of Beloeil and St. Hilaire.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Canadian Government Rys., Quebec Central Ry., Central Vermont Ry., and Boston and Maine Ry.

All power-plants are inter-connected by transmission lines so that the full amount of power is available anywhere on the system.

The company owns six power-sites on St. Francis river in the vicinity of Drummondville, with an ultimate aggregate capacity of 90,000 h.p., 24-hour power, and a peak capacity of 150,000 h.p. One of these sites, located within the limits of the town of Drummondville, is at present under construction and will contain the following initial installation: 2 Boving, vert. turbines, at 2,400 h.p. each, 150 r.p.m., 2 Can. West., A.C., 3-phase generators, at 3,250 k.v.a. each, 150 r.p.m., 1 turbine-driven exciter set, 1 motor generator set. This plant will operate under an average head of about 36 feet, and is expected to be in operation by April, 1919. The ultimate capacity of the plant is 17,000 h.p.

The company contemplates the installation of a 30,000 k.w. steam plant in St. Johns, to be used as a main auxiliary station, and the installation of an additional 1,000 k.w. unit in the Sherbrooke plant.

The ultimate capacity of Kingsbury plant and Foster plant is 1,500 k.w. each.

The company is prepared to supply any amount of power up to the ultimate capacity as the demand warrants. Rates—for small blocks of power, \$40 per kilowatt per annum; for very large blocks of power, \$25 per kilowatt per annum.

MONTREAL EAST.

Served by Montreal Public Service Corporation; see Montreal, Que.

MONTREAL WEST.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

QUEBEC.

MORIN HEIGHTS.

Argenteuil Lumber Company, Ltd. (Hydro Power Plant No. 2LC₃₇). Nov., 1918.

Address,—Morin Heights, Que.

History,—Plant installed in 1909.

Plant. *Location*,—Plant located on Simon river.

Installation,—Plant operates under an average head of 36 feet; Turbine—1 J. C. Wilson, 10-inch, vert., Little Giant, single runner, 30 h.p., 500 r.p.m.; Generator—1 at 15 k.w.

Power. *Local distribution lines* serve the municipality of Morin Heights.

Use of Power,—Power is used for lighting only.

The company has an additional turbine of 150 h.p. capacity, installed in connection with the saw-mill.

MURRAY BAY.

Nairn Falls Power and Pulp Company, Ltd. (Hydro Power Plant No. 2PF₁). controls and operates Labrador Electric and Pulp Company. Sept., 1918.

Address,—Murray Bay, Que.

Officials,—J. T. Donohue, Murray Bay (Pres.); Sir R. Forget, Montreal (Vice-Pres.); L. C. Morin, Montreal (Sec.); Chas. Donohue, Murray Bay (Mng. Dir.).

History,—Plant installed in 1910, and is operated in connection with the company's pulp mills.

Capital invested in Plant and Equipment,—(Not including real estate), \$80,000.

Plant. *Officials*,—J. O. Duguay, Murray Bay (Supt.); Victor Blois, Murray Bay (Ch. Engr.).

Location,—Plant located at Nairn falls on Malbaie river, 5 miles from Murray Bay.

Installation,—Plant operates under an average head of 58 feet; Turbine—1 S. Morgan Smith, 42-inch, vert., single runner, 500 h.p., 480 r.p.m.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 375 k.w., 900 r.p.m.

Power. *Transmission Lines*,—21 miles of wooden pole lines serve the municipalities of Murray Bay, Malbaie, Cap à L'Aigle, St. Irénée, and Pointe au Pic.

Use of Power,—Power is used for lighting.

The company has installed three units, of 2,400 h.p. capacity each, used to operate their pulp mills.

Power is delivered adjacent to St. Lawrence River navigation.

NEW GLASGOW.

Bernard Bros. (Hydro Power Plant No. 2OB₄₃). Nov., 1918.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$1,000.

Plant. *Location*,—Plant located on Achigan river at New Glasgow, Quebec.

Installation,—Plant operates under a head of 19 feet; Turbine—1 at 40 h.p.; Generator—1 D.C., 6 k.w.

Power. *Local distribution lines* serve the municipality of New Glasgow.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

NEW ROCKLAND.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

NICOLET.

Served by St. Maurice Light and Power Co.; see Shawinigan Falls, Que.

NORTH COATICOOK.

Served by municipality of Coaticook; see Coaticook, Que.

QUEBEC.

NORTH HATLEY.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ORMSTOWN.

J. B. Walsh. (Hydro Power Plant No. 2OA_g). Nov., 1918.

History,—Plant installed in 1904.

Capital invested in Plant and Equipment,—\$7,000.

Plant. *Location*,—Plant located on Chateauguay river at Ormstown, Que.

Installation,—Plant operates under an average head of 11 feet: Turbine—1 at 175 h.p.; Generator—1 single-phase, 120 k.w.

Power. *Local distribution lines* serve the municipality of Ormstown.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Grand Trunk Ry.

OUTREMONT.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

PAPINEAUVILLE.

Papineauville Electric Company. (Hydro Power Plant No. 2LD₁). Sept., 1918.

Address,—Papineauville, Que.

Officials,—L. A. Latour, Ottawa (Pres.); E. Coté, Papineauville (Vice-Pres.);

E. A. Coté, Papineauville (Sec.-Treas.); J. E. H. Coté, Papineauville (Mgr.).

History,—Plant installed in 1904, with a new turbine in 1907.

Capital invested in Plant and Equipment,—\$20,000.

Plant. *Official*,—L. Lacoste (Engr. Pwr. Sta.).

Location,—Plant located at Portage de la Nation on the North Nation river.

Installation,—Plant operates under an average head of 15 feet; Turbine—1 J.

C. Wilson, 54-inch, vert., Little Giant, single runner, 200 h.p., 81 r.p.m.;

Generator—1 Allis-Chalmers-Bullock, A.C., 3-phase, 125 k.w., 720 r.p.m.

Power. *Transmission Lines*,—35 miles of wooden pole lines serve the municipalities of Papineauville, St. André Avellan, Montebello and Portage de la Nation.

Use of Power,—Power is used for lighting and for operation of lumber mills.

Power is delivered adjacent to Canadian Pacific Ry., and Ottawa River navigation.

PHILIPSBURG.

Missisquoi Marbles, Ltd. (Fuel Power Plant No. 2OH₂). Nov., 1918.

Plant. *Location*,—Plant located at Philipsburg, Quebec.

Installation,—Boilers—2 return tubular 125 h.p. each, 3 return tubular 150 h.p. each, total 700 h.p.; Engines—1 reciprocating, 450 h.p., 1 reciprocating, 175 h.p., total 625 h.p.; Generators—1 at 250 k.w. and 1 at 120 k.w., total 370 k.w.

Power. *Local distribution lines* serve the municipality of Philipsburg.

Use of Power,—Power is used for lighting and the operation of the mill and quarries.

PIERREVILLE.

Served by St. Maurice Light and Power Co.; see Shawinigan Falls, Que.

PLESSISVILLE.

Served by Plessis Electric Co., with power purchased from Continental Heat and Light Co., a subsidiary of Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

POINTE AU PIC.

Served by Nairn Falls Power and Pulp Co., Ltd.; see Murray Bay, Que.

POINTE AUX TREMBLES.

Served by Montreal Public Service Corporation; see Montreal, Que.

POINTE CLAIRE.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

POINTE GATINEAU.

Served by the municipality with power purchased from Ottawa Electric Co., Ltd., see Ottawa, Ont.

POINT FORTUNE.

Aug., 1918.

National Hydro-Electrical Company, Ltd. (Hydro Power Plant No. 2LB₁).

Address,—4 St. Lawrence Blvd., Montreal, Que.

Officials,—Henry Miles, Montreal (Pres. and Gen. Mgr.); Louis Gosselin, K.C., Montreal (Sec.).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$225,000.

Plant. *Location*,—Plant located at Carillon falls on Ottawa river; one-half mile from Point Fortune station on Canadian Pacific Ry.

Installation,—Plant operates under an average head of 10 feet; Turbine—1 Boving, 60-inch vert., single runner, 250 h.p., 97.5 r.p.m.; Generator—1 Swedish Gen. Elect. A.C., 3-phase, 60-cycle, 200 k.w., 97.5 r.p.m.; Exciter—1 generator, 19 k.w., 470 r.p.m.

Power. *Transmission Line*,—1½ mile of wooden pole line serves the municipality of Point Fortune.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and Ottawa River navigation.

The company has at present available for sale about 200 horse-power.

The present plant was installed for use in the construction of a proposed development of 150,000 h.p., utilizing the total power available at the site. In 1914 the company had to temporarily abandon the proposed development but will proceed with it at some later date.

Served also by—

The North River Electric Co., Ltd.; see St. Andrews East, Que.

PONT ROUGE.

Chas. A. Julien Company, Ltd. (Hydro Power Plant No. 2PC₅). Aug., 1918.

Address,—Pont Rouge, Que.

Directors,—Chas. A. Julien, Pont Rouge; J. A. Paquet, Quebec; E. Hamel, Pont Rouge; Dr. Bedard, Pont Rouge; S. P. Lulesc, Pont Rouge; M. Julien, Pont Rouge; Joseph Samson, Quebec.

Officials,—Chas. A. Julien, Pont Rouge (Pres. and Mgr.); J. A. Paquet, Quebec (Vice-Pres.).

History,—Plant installed in 1915, and operated in connection with the company's manufacturing plant of which it forms part.

Capital invested in Plant and Equipment,—\$30,900.

Plant. *Location*,—Plant located on Jacques Cartier river, 1½ mile from Point Rouge station on Canadian Pacific Ry.

Installation,—Plant operates under an average head of 10 feet: Turbine—1 Hercules, 40-inch, vert., single runner, 100 h.p., 90 r.p.m.; Generator—1 Gen. Elect., A.C., 3-phase, 50 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Pont Rouge.

Use of Power,—Power is used for lighting, and the operation of the company's farm implement and gas engine plant.

Power is delivered adjacent to Canadian Pacific Ry.

PONT VIAU.

Served by Montreal Public Service Corporation; see Montreal, Que.

QUEBEC.

PORTAGE DE LA NATION.

Served by Papineauville Electric Co.; see Papineauville Que.

PORT ALFRED.

Served by La Société d'Eclairage et d'Energie Electrique du Saguenay; see Chicoutimi, Que.

PORTNEUF.

Served by the North Shore Power Co.; see Three Rivers, Que.

PRINCEVILLE.

Served by Plessis Electric Co., with power purchased from Continental Heat and Light Co., a subsidiary of Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

PROULXVILLE.

Proulxville Electric Plant. (Hydro Power Plant No. 2PA₁). Sept., 1918.

Address,—Proulxville, Que.

Owner,—Antoine Lambert.

History,—Plant installed in 1906. Formerly owned by Dr. Lacour.

Capital invested in Plant and Equipment,—\$15,000.

Plant. *Officials*,—Achille Lambert (Mgr.); Edward Chevalier (Engr. Pwr. Sta.).

Location,—Plant located on River des Envies, 2 miles from Proulxville on Canadian Northern Ry.

Installation,—Plant operates under an average head of 8 feet; Turbine—1 48-inch, vert., single runner, 100 h.p., 60 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 100 k.w., 900 r.p.m.

Power. *Transmission Line*,—6 miles of wooden pole line serves the municipalities of Proulxville and St. Tite.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

QUEBEC.

Quebec Railway, Light, Heat and Power Company, Ltd. Controls Quebec Railway, Light and Power Company; Quebec Jacques Cartier Electric Company; the Canadian Electric Light Company; Frontenac Gas Company; Quebec Gas Company; and Quebec and Saguenay Railway. Nov., 1918.

Address,—Head Office, Montreal, Que. Local Office, Quebec Railway Bldg., Quebec, Que.

Directors,—Sir Rodolphe Forget, M.P., Montreal; Lorne C. Webster, Montreal; J. T. Stewart, Hamilton, Ont.; Paul Galibert, Montreal; L. J. Tarte, Montreal; L. G. Morin, Montreal; C. A. Lavigne, Montreal; C. Donohue, Quebec; Arthur Picard, Quebec; J. T. Donohue, Quebec.

Officials,—Sir Rodolphe Forget, M.P., Montreal (Pres.); Lorne C. Webster, Montreal (Vice-Pres.); W. J. Lynch, Quebec (Gen. Mgr.); H. K. Tennant, Quebec (Compt.); R. A. Wilson, Quebec (Treas.); A. Le Moine, Quebec (Sec.); L. Burran, Quebec (Ch. Engr.); A. P. Doddridge, Quebec (Supt. Lt. and Pwr.).

Capital,—Authorized, \$10,000,000. Issued, \$9,999,500.

Bonds,—Authorized, \$10,000,000. Issued, \$6,341,000.

Natural Steps Plant. (Hydro Power Plant No. 2PD₁). Quebec Railway, Light and Power Company, controlled by Quebec Railway, Light, Heat and Power Company, Ltd.

History,—Plant installed in 1908.

Capital invested in Plants and Equipment,—Natural Steps plant and Montmorency Falls plant combined, \$2,640,126.

QUEBEC.

Natural Steps Plant.—Con.

Location.—Plant located on Montmorency river, at St. Louis de Courville, one mile from Montmorency Falls station on Quebec Railway, Light and Power Company's Ry.

Installation.—Plant operates under an average head of 62 feet. Turbine—1 Allis-Chalmers-Bullock, 44-inch, hor., double runner, 2,225 h.p., 212 r.p.m.; Generator—1 Allis-Chalmers-Bullock, A.C., 2-phase, 63½-cycle, 1,500 k.w., 212 r.p.m.; Exciter—1 Bullock generator, 35 k.w., 650 r.p.m.

Montmorency Falls Plant. (Hydro Power Plant No. 2PD₂). Quebec Railway, Light and Power Company, controlled by Quebec Railway, Light, Heat and Power Company, Ltd.

History.—Plant installed in 1894, with additional units in 1898 and 1900.

Location.—Plant located on the Montmorency river, at Montmorency Falls, Que. 6 miles from Quebec.

Installation.—Plant operates under an average head of 198 feet. Turbines—4 Stillwell-Bierce, 45-inch, hor., single runner, 1,000 h.p. each, 272 r.p.m., 1 Stillwell-Bierce, 52-inch, hor., single runner, 1,400 h.p. 272 r.p.m., total 5,400 h.p.; Generators—4 Stanley, A.C., 2-phase, 63½-cycle, 500 k.w. each, 272 r.p.m., 1 Stanley, D.C., 600 k.w., 286 r.p.m., total 2,600 k.w.; Exciters—2 Stillwell-Bierce, turbines, 11½-inch, 60 h.p. each, 1,200 r.p.m., 2 Royal, generators, 32 k.w. each, 1,200 r.p.m.; Transformers—1 bank of 4 West., single-phase, water-cooled, primary 5,600 v., secondary 24,000 v., 1,000 k.v.a. each, 2 banks of 3 West., single-phase, water-cooled, primary 5,600 v., secondary 24,000 v., 1,500 k.v.a. each, 1 bank of 2 Stanley, single-phase, water-cooled, primary 5,600 v., secondary 2,300 v., 100 k.v.a. each.

St. Gabriel Plant. (Hydro Power Plant No. 2PC₁). Quebec Jacques Cartier Company, controlled by Quebec Railway, Light, Heat and Power Company, Ltd.

History.—Plant installed in 1899. Steam Auxiliary plant installed in 1899.

Capital.—Issued, \$640,000.

Bonds.—Issued, \$849,000.

Capital invested in Plant and Equipment.—\$1,652,774.

Location.—Hydraulic plant located on Jacques Cartier river, one mile from St. Gabriel, 20 miles from Quebec. Steam plant located on Vallier Street in Quebec.

Installation.—Plant operates under an average head of 31 feet. Turbines—2 S. Morgan-Smith, 51-inch, hor., McCormick, double runner, 1,100 h.p. each, 161 r.p.m., total 2,200 h.p.; Generators—2 West., A.C., 3-phase, 63½-eyelet, 750 k.w. each, 160 r.p.m., total 1,500 k.w.; Exciters—2 S. Morgan-Smith, 26-inch, turbines, 52 h.p. each, 390 r.p.m., 2 West., generators, 37.5 k.w. each, 390 r.p.m.; Transformers—1 bank of 6, single-phase, water-cooled, primary 2,000 v., secondary 24,000 v., 333 k.v.a. each. Steam Auxiliary Plant—Babcock & Wilcox boilers, total 2,150 h.p., Robb-Armstrong steam engines 2,250 h.p. Generators—total capacity 1,050 k.w.

Power. *Transmission Lines.*—1 mile of wooden pole line transmits power from Natural Steps plant to Montmorency Falls plant; 22 miles of wooden pole line from Montmorency Falls plant and 18 miles of wooden pole line from St. Gabriel plant serve the municipalities of Quebec, Montmorency, St. Louis de Courville, Beauport, Giffard, L'Ange Gardien, Chateau Riches, Ste. Anne de Beupre, and Loretteville.

Power is purchased in bulk from Laurentian Power Company, Ltd.

Use of Power.—Power is used for lighting, operation of electric railways, general manufacturing, and general power purposes.

QUEBEC.

St. Gabriel Plant.—Con.

Power is delivered adjacent to Canadian Government Rys., Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., and St. Lawrence River, Great Lakes and Ocean navigation

The company also controls and operates the Canadian Electric Light Company at Levis, Que.

Public Service Corporation of Quebec. (Fuel Power Plant No. 2PD₁). Controlled by Shawinigan Water and Power Company. Dec., 1918.

Address,—Head Office, 611 Power Bldg., Montreal, Que. Local Office, Quebec, Que.

Directors,—J. C. Smith, Montreal; Thos. McDougall, Montreal; H. Murray, Montreal; W. S. Hart, Montreal; H. L. Hervey, Montreal; C. H. Branchaud, Montreal; G. E. Tanguay, Quebec; J. T. Ross, Quebec; Geo. Parent, Quebec.

Officials,—Julian C. Smith, Montreal (Pres.); J. E. Tanguay, Quebec (Mgr.); James Wilson, Montreal (Sec.).

History,—Plant installed in 1912, with an additional unit in 1915, and used as auxiliary to purchased power.

Capital,—Authorized, \$3,000,000. Issued, \$1,600,000.

Debtenture Stock,—Authorized, \$1,000,000. Issued, \$500,000.

Capital invested in Plant and Equipment,—\$2,208,972.

Plant. Officials,—R. B. McDunnough, Quebec (Supt.); E. Richards, Quebec (Engr. Pwr. Sta.).

Location,—Plant located on Grant St., in Quebec, Que., adjacent to Canadian Pacific Ry., and tide-water St. Charles river.

Installation,—Boilers—4 Babcock & Wilcox, Taylor Stokers 250 h.p. each; Steam Turbines—2 Gen. Elect., Curtis, 1,000 h.p. each; 1 West., Parsons, 1,500 h.p., total 3,500 h.p.; Generators—2 Gen. Elect., A.C., 3-phase, 60-cycle, 750 k.w. each, 3,600 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 1,000 k.w., 1,800 r.p.m., total 2,500 k.w.; Exciters—1 steam-driven generator, 30 k.w., 1 motor-driven generator, 20 k.w., 2 direct-connected generators, 7.5 k.w.; Transformers—3 transformers, 60-cycle, single-phase, primary 57,000 v., secondary 24,000 v., 2,000 k.w. each.

Power. Transmission Line,—65 miles of steel tower line from Grand Mere transmits power to Quebec and serves the municipalities of Quebec and Charlesbourg.

Power is purchased in bulk from Shawinigan Water and Power Company.

Use of Power,—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Northern Ry., Grand Trunk Ry., Canadian Pacific Ry., Quebec Central Ry., Canadian Government Rys., St. Lawrence River, Great Lakes and Ocean navigation.

Laurentian Power Company, Ltd. (Hydro Power Plant No. 2PE₁). Sept., 1918.

Address,—Head Office, 93 Peter St., Quebec. Local Office, Beaufré, Que.

Directors,—Hon. C. E. Dubord, Quebec; Neuville Belleau, Quebec; C. E. Warrens, Toronto; W. G. Graham, Beaufré; James Ruddick, Beaufré.

Officials,—Hon. C. E. Dubord, Quebec (Pres.); Neuville Belleau, Quebec (Vice-Pres.); James Ruddick, Beaufré (Mgr. and Ch. Engr.).

History,—The company is successor to the Stadacona Hydraulic Company. Plant was completed in February, 1916.

Capital,—Authorized, \$2,000,000. Issued, \$2,000,000.

Bonds,—Authorized, \$2,000,000. Issued, \$2,000,000.

Capital invested in Power and Equipment,—\$3,945,654.

Plant. Official,—H. Taylor, St. Fereol (Engr. Pwr. Sta.).

Location,—Plant located on the St. Annes river at St. Fereol, 10 miles from Beaufré on the Quebec Railway, Light and Power Company's Ry.

QUEBEC.

Laurentian Power Company, Ltd.—Con.

Installation,—Plant operates under an average head of 410 feet; Turbines—4 Allis-Chalmers, 40-inch, hor., Francis, single runner, 6,000 h.p. each, 600 r.p.m., total 24,000 h.p.; Generators—3 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 4,680 k.v.a. each, 600 r.p.m., total 14,040 k.v.a.; Exciter—2 turbines, 225 h.p. each, 900 r.p.m., 1 motor, 3-phase, 650 v., 800 r.p.m., 2 generators, 130 k.w. each, 900 r.p.m.; Transformers—1 bank of 9 Can. West., single-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 50,000 v., 1,566 k.v.a. each.

Power. *Transmission Line*,—24 miles of steel tower line serves the municipality of Quebec through Quebec Railway, Light, Heat and Power Company.

Use of Power,—Power is used for lighting, operation of street railway, and operation of electro-chemical industry at Beaupré.

The entire output of the plant is sold in bulk to Quebec Railway, Light, Heat and Power Company, and delivered at their Montmorency Falls generating station.

The turbines installed include one spare for which a fourth generator will be installed at a later date.

Served also by—

Shawinigan Water and Power Co.: see Shawinigan Falls, Que.

RAWDON.

March, 1918.

La Cie Electrique des Laurentides, Ltd. (Hydro Power Plant No. 2OB₃).

Address,—Laurentides, Que.

Officials,—J. M. Desjardines (Pres.); S. Goulet (Sec.-Treas.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$72,500.

Plant. *Official*,—Edgar Rochette (Supt.).

Location,—Plant located on Ouareaux river.

Installation,—Plant operates under an average head of 22 feet; Turbine—1 Jenckes, 60-inch, hor., single runner, 300 h.p., 180 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 280 k.v.a., 180 r.p.m.

Power. *Transmission Lines*,—41 miles of wooden pole lines serve the municipalities of Rawdon, St. Julienne, St. Esprit, St. Jacques, L'Achigan, Montcalm Mills and St. Lin des Laurentides.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

The company contemplates enlarging the power-house and adding a 600 h.p. additional unit.

REPENTIGNY.

Served by Shawinigan Water and Power Co.: see Shawinigan Falls, Que.

RICHELIEU.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

RICHMOND.

Served by Southern Canada Power Co., Ltd.: see Montreal, Que.

RIMOUSKI.

Le Credit Municipal Canadien. (Hydro Power Plant No. 2QA₁). Sept., 1918.

Address,—Rimouski, Que.

Directors,—J. E. A. Dubuc, Chicoutimi; J. E. Clothier, Chicoutimi; F. X. Gosselin, Chicoutimi; George St. Pierre, Chicoutimi.

Officials,—J. E. A. Dubuc (Pres.); J. E. Clothier (Vice-Pres.); Raymond Bellocq (Sec.); E. J. Mattais (Treas.); L. E. Dubuc (Gen. Mgr.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$196,258.

QUEBEC.

Le Credit Municipal Canadien.—Con.

Plant. *Officials.*—A. Fournier (Supt). R. E. Joron (Engr. Pwr. Sta.)

Location.—Plant located on Rimouski river, at Rimouski.

Installation.—Plant operates under an average head of 20 feet. Turbine—1 S. Morgan-Smith, 33-inch. hor., Francis, double runner, 550 h.p., 225 r.p.m.; Generators—2 S.K.C., A.C., 2-phase, 60-cycle, 200 k.w. each, 666 r.p.m., total 400 k.w.

Power. *Local distribution lines* serve the municipality of Rimouski.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Government Rys.

RIVIERE BLANCHE.

Served by the Roy Company, Ltd.; see St. Ulric, Que.

RIVIERE DU MOULIN.

Served by La Société d'Eclairage et d'Energie Electrique du Saguenay; see Chicoutimi, Que.

ROBERTSON.

Served by the St. Francis Water Power Co.; see Thetford Mines, Que.

ROBERTSONVILLE.

Served by Robertsonville Electric Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

ROBERVAL.

Municipality of Roberval. (Hydro Power Plant No. 2RG₆). Nov., 1918.

History.—Plant first installed in 1896, with additions in 1904.

Capital invested in Plant and Equipment.—\$50,000.

Plant. *Location.*—Plant located on the Ouïatchuan river, about 4 miles from Roberval.

Installation.—Plant operates under an average head of 45 feet. Turbine—1 at 120 h.p.; Generators—2 single-phase, 1 at 120 k.w. and 1 at 50 k.w., total 170 k.w.

Power. *Local distribution lines* serve the municipality of Roberval.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

ROBINSON.

Served by Westbury Light and Power Co.; see Cookshire, Que.

ROCK FOREST.

Served by municipality of Sherbrooke; see Sherbrooke, Que.

ROCK ISLAND.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ROUGEMONT.

Served by St. Cesaire Electric Light Plant; see St. Cesaire, Que.

ROXTON FALLS.

Roxton Falls Electric Plant. (Hydro Power Plant No. 2OG₄₆) Nov., 1918.

Owner.—T. Mainville.

Plant. *Location.*—Plant located at Roxton Falls, on the Black river.

Installation.—Plant operates under a head of 27 feet. Turbine—1 at 107 h.p.; Generators—1 A.C., single-phase, 133-cycle, 50 k.w. Auxiliary Steam Plant—Boiler—1 return tubular, 80 h.p.; Engine—1 reciprocating, 80 h.p. (may be belted to generator).

Power. *Local distribution lines* serve the municipality of Roxton Falls.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

STE. AGATHE DES MONTS.

Municipality of Ste. Agathe Des Monts. (Hydro Power Plant No. 2LC₈). Sept., 1918.

Officials.—E. D. Godon (Mayor); Rodolphe Daze (Sec.-Treas.).

History.—Plant installed in 1898. The municipality purchased the plant from the Laurentian Water and Power Company in 1910, and installed an additional unit in 1916.

Capital invested in Plant and Equipment.—\$98,000.

Plant. *Officials.*—O. Doré (Mgr.); J. Renaud (Engr. Pwr. Sta.).

Location.—Plant located on North river, 1½ mile from Ste. Agathe station on the Canadian Pacific Ry.

Installation.—Plant operates under an average head of 50 feet. Turbines—2 Allis-Chalmers, 26-inch, hor., single runner, 150 h.p. each, 600 r.p.m., total 300 h.p.; Generators—2 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 600 r.p.m., total 275 k.w.

Power. *Local distribution lines* serve the municipality of Ste. Agathe des Monts.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is delivered adjacent to the Canadian Pacific Ry.

ST. ALBAN.

Served by The Hydraulic Company of Portneuf; see Deschambault, Que.

ST. ALEXIS.

Served by La Société d'Eclairage et d'Energie Electrique du Saguenay; see Chicoutimi, Que.

ST. ANDRE AVELLIN.

Served by Papineauville Electric Co.; see Papineauville, Que.

ST. ANDREWS EAST.

The North River Electric Company, Ltd. (Hydro Power Plant No. 2LC₈). May, 1918.

Address.—St. Andrews, Que.

Officials.—R. W. Barclay (Pres. and Gen. Mgr.); B. H. Robertson (Sec. and Mng. Dir.).

History.—Plant installed in 1906, with an additional unit in 1914.

Capital invested in Plant and Equipment.—\$75,000.

Plant. *Officials.*—R. de H. Robertson (Supt. Ovhd. Distbn.); F. A. Robertson (Pur. Agt.).

Location.—Plant located on the North river at Isle aux Chats.

Installation.—Plant operates under an average head of 12 feet. Turbines—1 Wm. Kennedy, 54-inch, hor., single runner, 135 h.p., 75 r.p.m., 1 Wm. Hamilton, 60-inch, hor., single runner, 250 h.p., 100 r.p.m., total 385 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 200 k.w., 600 r.p.m., total 275 k.w.

Power. *Transmission Lines.*—30 miles of wooden pole lines serve the municipalities of St. Andrews East, Carillon, Point Fortune, in Quebec, and St. Eugene in Ontario.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry., Canadian Pacific Ry., and Ottawa River navigation.

STE. ANGELE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

STE. ANNE.

Served by La Société d'Eclairage et d'Energie Electrique du Saguenay; see Chicoutimi, Que.

QUEBEC.

STE. ANNE DE BEAUPRE.

Served by Quebec Railway, Light, Heat and Power Co., Ltd.; see Quebec, Que.

STE. ANNE DE BELLEVUE.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

ST. ANSELME.

Deblois and Veulleux. (Hydro Power Plant No. 2PH₃₄). Nov., 1918.

History,—Plant installed in 1914.

Plant. Location,—Plant located on Etchemin river.

Installation,—Plant operates under a head of 8 feet. Turbine—1 at 65 h.p.; Generator—1 A.C., 2-phase, 125-cycle, 50 k.w.

Power. Local distribution lines serve the municipality of St. Anselme.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Quebec Central and Canadian Government Rys.

ST. ANTOINE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. BARNABE NORD.

Served by La Compagnie d'Eclairage de Yamachiche, Ltée., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. BARTHELEMI.

Served by the Louisville Electric Co., Ltd.; see Louisville, Que.

ST. BAZILE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. BAZILE DE PORTNEUF.

Jan., 1918.

St. Bazile de Portneuf Electric Light Plant. (Hydro Power Plant No. 2PC₂).

Address,—St. Bazile de Portneuf, Que.

Owner,—Hector Piché.

History,—Plant installed in 1902.

Capital invested in Plant and Equipment,—\$7,000.

Plant. Location,—Plant located on Portneuf river.

Installation,—Plant operates under an average head of 8 feet. Turbine—1 Vulcan, 48-inch, hor., single runner, 45 h.p., 702 r.p.m.; Generator—1 A.C., about 30 k.v.a., 1,000 r.p.m.

Power. Local distribution lines serve the municipality of St. Bazile de Portneuf.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Government Rys.

Served also by—

North Shore Power Co; see Three Rivers, Que.

ST. BONIFACE.

Served by La Compagnie d'Eclairage de Yamachiche, Ltée., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. BRUNO.

Served by La Cie Centrale d'Eclairage; see Hebertville, Que.

ST. CANUTE.

St. Canute Electric Light Plant. (Hydro Power Plant No. 2LC₇). Nov., 1918.

Address,—780 St. Valier St., Montreal.

Owner,—Mde. Cordelia Renaud, Montreal.

Capital invested in Plant and Equipment,—\$15,000.

St. Canute Electric Light Plant.—Con.

Plant. *Officials.*—Alderic Cousineau (Supt.); N. J. Fortier (Engr. Pwr. Sta.).

Location.—Plant located at St. Columban falls on North river, one-half mile from St. Canute station on Canadian Northern Ry.

Installation.—Turbine—1 Allis-Chalmers-Bullock, 48-inch, vert., single runner. 50 h.p., 480 r.p.m.; Generator—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 40 k.w., 1,200 r.p.m.

Power. *Transmission Lines.*—6 miles of wooden pole line serves the municipalities of St. Canute and St. Scholastique.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry.

ST. CASIMIR.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. CESAIRE.

St. Cesaire Electric Light Plant. (Hydro Power Plant No. 20G₁₀). April, 1918.

Address.—St. Cesaire, Que.

Owner.—A. N. Dufresne.

History.—Plant installed in 1902 and second unit added in 1905. Power was transmitted to Marieville until 1914 when the municipality acquired the distribution system.

Capital invested in Plant and Equipment.—\$53,000.

Plant. *Location.*—Plant located on Yamaska river, 2½ miles from St. Cesaire, on Central Vermont Ry.

Installation.—Plant operates under an average head of 10 feet. Turbines—2 Jenckes, vert., single runner, 100 h.p. each, total 200 h.p.; Generator—1 West, A.C., 2-phase, 60-cycle, 120 k.w., 720 r.p.m.; Exciter—1 generator, 3 k.w., 1,800 r.p.m.

Power. *Transmission Lines.*—10 miles of wooden pole lines serve the municipalities of St. Cesaire and Rougemont.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Central Vermont Ry. and Montreal and Southern Counties Electric Ry.

ST. CHRYSOSTOME.

St. Chrysostome Electric Light Plant. (Fuel Power Plant No. 20A₇). Nov., 1918.

Owner.—L. N. Preville.

History.—Plant installed in 1914.

Capital invested in Plant and Equipment.—\$1,250.

Plant. *Location.*—Plant located in St. Chrysostome, Que.

Installation.—Gasolene Engine—1 at 3½ h.p.; Generator—1 D.C., 1½ k.w.

Power. *Local distribution lines* serve the municipality of St. Chrysostome.

Use of Power.—Power is used for lighting.

ST. CÔME DE LINIERE.

St. Côme Electric Company. (Fuel Power Plant No. 2PJ₂). Sept., 1918.

Address.—St. Côme de Linier.

Official.—Jos. Elie dit Breton, St. Côme de Linier (Pres. and Mgr.).

History.—Plant installed in 1916.

Capital invested in Plant and Equipment.—\$8,280.

Plant. *Location.*—Plant located in St. Côme de Linier.

Installation.—Oil Engine—1 at 50 h.p.; Generator—1 Northern Elect., A.C., single-phase, 18 k.w., 258 r.p.m.

Power. *Local distribution lines* serve the municipality of St. Côme de Linier.

Use of Power.—Power is used for lighting.

QUEBEC.

ST. CYRILLE.

Served by Southern Canada Power, Ltd.; see Montreal, Que.

ST. DAVID.

Served by Canadian Electric Light Co.; see Lévis, Que.

ST. ELIE.

Served by La Compagnie d'Eclairage de Yamachiche, Ltée., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. ETIENNE DE BEAUHARNOIS.

March, 1918.

St. Etienne de Beauharnois Electric Light Plant. (Hydro Power Plant No. 2MC₃).

Address.—St. Etienne de Beauharnois.

Owner.—Jas. Gordon Dunn.

History.—Plant installed in 1910.

Capital invested in Plant and Equipment.—\$15,000.

Plant. *Location.*—Plant located on St. Louis river.

Installation.—Plant operates under an average head of 9 feet. Turbine—1 Swain, 24-inch, hor., single runner, 80 h.p., 80 r.p.m.; Generator—1 Thompson, A.C., 3-phase, 60-cycle, 60 k.w., 600 r.p.m.

Power. *Transmission Lines.*—9 miles of wooden pole lines serve the municipalities of St. Etienne de Beauharnois, St. Louis, and Howick.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Ry.

ST. ESPRIT.

Served by La Cie Electrique des Laurentides; see Rawdon, Que.

ST. EUSTACHE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. FELICIEN.

Compagnie Hydraulic de St. Felicien. (Hydro Power Plant No. 2RF₁). March, 1918.

Address.—St. Felicien, Que.

Officials.—Edmond Tremblay, St. Felicien (Pres.); Edmond Tite, St. Felicien (Mgr.); F. X. Lamontagne, St. Felicien (Sec.)

History.—Plant installed in 1916.

Capital invested in Plant and Equipment.—\$38,500.

Plant. *Location.*—Plant located on Rivière à L'Ours.

Installation.—Plant operates under an average head of 58 feet. Turbine—1 Wm. Hamilton, 14-inch, hor., 250 h.p., 720 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 170 k.w., 720 r.p.m.

Power. *Transmission Line.*—5½ miles of wooden pole line serves the municipality of St. Felicien.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

ST. FRANCOIS DE SALES.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. GABRIEL DE BRANDON.

Served by the Laval Electric Co., Ltd., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

STE GENEVIEVE.

Served by the Pierrefonds Electric Co., Ltd., with power purchased from Montreal Light, Heat and Power Co., Ltd.; see Montreal, Que.

STE. GENEVIEVE DE BATISCAN.

Served by North Shore Power Co.; see Three Rivers, Que.

STE. GENEVIEVE DE PIERREFONDS.

Served by the Pierrefonds Electric Co., Ltd., with power purchased from Montreal Light, Heat and Power Co., Ltd.; see Montreal, Que.

ST. GEORGE DE BEAUCE.

Served by Beauce Electric and Power Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

Lessard Electric Light Plant. (Hydro Power Plant No. 2PJ₂). Nov., 1918.

Owner,—T. Lessard.

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$12,000.

Plant. *Location*,—Plant located on Chaudiere river at Jersey Mills.

Installation,—Plant operates under a head of 20 feet; Turbine,—1 at 350 h.p.; Generator,—1 A.C., 3-phase, 60-cycle, 250 k.w.

Power. *Local distribution lines* serve the municipalities of St. George de Beauce, and St. Come.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Quebec Central Ry.

ST. GERARD.

Served by the St. Francis Water Power Co.; see Thetford Mines, Que.

STE. GERMAINE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. HILAIRE.

Served by the municipality with power purchased from Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. HUBERT**St. Hubert Electric Light Plant.** (Hydro Power Plant No. 2OA₁). Jan., 1918.

Address,—St. Hubert, Que.

Owner,—J. Honoré Massé.

History,—Plant installed in November, 1912.

Capital invested in Plant and Equipment,—\$3,000.

Plant. *Official*,—Fred. Massé (Mgr.).

Location,—Plant located on Scenescop river near St. Hubert, on Canadian Government Rys.

Installation,—Plant operates under an average head of 9 feet; Turbine—1 Vulcan, 30-inch, hor., double runner, 12 h.p., 200 r.p.m.; Generator—1 Peebles Elect., D.C., 20 k.w., 800 r.p.m.; Auxiliary Plant—1 International Harvester, oil engine, 12 h.p.

Power. *Transmission Line*,—1.5 mile of wooden pole line serves the municipality of St. Hubert.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Government Rys.

ST. HUGUES.**St. Hugues Electric Light Plant.** (Hydro Power Plant No. 2OG₂). Feb., 1918.

Address,—St. Hugues, Que.

Owner,—Alphonse Bazinet.

History,—Plant installed in 1915.

Plant. *Location*,—Plant located on Yamaska river 3 miles from St. Hugues.

Installation,—Plant operates under an average head of 27 feet; Turbines—1 18-inch, 60 h.p.; Generator—1 A.C., 3-phase, about 50 k.w., 1,200 r.p.m.

QUEBEC.

St. Hugues Electric Light Plant.—Con.

Power. Power is sold in bulk to Southern Canada Power Company for distribution in the municipality of St. Hugues.

Use of Power.—Power is used for lighting.

The plant is operated in connection with a grist mill of which it forms part.

There is also installed an overshot wheel of 80 h.p. capacity. The power is used during the day to operate the mill.

Power is delivered adjacent to Canadian Pacific Ry.

Served also by—

Southern Canada Power Co., Ltd.; see Montreal, -Que.

ST. HYACINTHE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. IRENEE.

Served by Nairn Falls Power and Pulp Co., Ltd.; see Murray Bay, Que.

ST. JACQUES.

Served by La Cie Electrique des Laurentides; see Rawdon, Que.

ST. JÉRÔME.

Municipality of St. Jérôme. (Hydro Power Plant No. 2LC₂). Oct., 1918.

Officials.—E. Fournier, M.D. (Mayor); Alvarez Laplante (Clerk); Henri Marchand (Treas.).

History.—Plant installed in November, 1913.

Capital invested in Plant and Equipment.—\$216,129.

Plant. *Official.*—Napoleon Nantel (Engr. Pwr. Sta.).

Location.—Plant located at Maille falls on North river, 4 miles from St. Jerome station on Canadian Pacific Ry., and Canadian Northern Ry.

Installation.—Plant operates under an average head of 20 feet; Turbines—2 Allis-Chalmers-Bullock, 36-inch, hor., single runner, 270 h.p. each, 277 r.p.m., total 540 h.p.; Generators—2 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 150 k.w. each, 275 r.p.m., total 300 k.w.; Exciters—2 generators, 10 k.w. each, 1,150 r.p.m.

Power. *Transmission Line.*—4 miles of wooden pole line serves the municipality of St. Jérôme.

Use of Power.—Power is used for lighting and general manufacturing, including the operation of wood-working, rubber, and cement block industries.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Northern Ry. The municipality has at present available for sale 250 h.p., day service, at \$35 per horse-power per annum.

ST. JOACHIM DE CHATEAUGUAY.

Served by Beauharnois Electric Co., Ltd., with power purchased from Canadian Light and Power Co.; see Montreal, Que.

ST. JOHNS.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. JOSEPH.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. JOSEPH DE BEAUCE.

Served by Beauce Electric and Power Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

ST. JOVITE.

St. Jovite Electric Light Plant. (Hydro Power Plant No. 2LC₉). May, 1918.

Address.—St. Jovite, Que.

Owner.—Mde. Jos. Vanehestling, St. Jovite.

History.—Plant installed in 1912.

Capital invested in Plant and Equipment.—\$5,000.

Plant. *Location.*—Plant located on Black river, 1 mile from St. Jovite station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 40 feet; Turbine—1 Vulcan, 25-inch, hor., single runner, 80 h.p., 325 r.p.m.; Generator—1 Edison, A.C., single-phase, 75 k.w., 1,200 r.p.m.

Power. *Transmission Line.*—1 mile of wooden pole line serves the municipality of St. Jovite.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

STE. JULIENNE.

Served by La Cie Electrique des Laurentides; see Rawdon, Que.

ST. JUSTIN.

Served by the Louisville Electric Co., Ltd.; see Louisville, Que.

ST. LAMBERT.

Served by the municipality with power purchased from L. E. Waterman Company, Ltd.

L. E. Waterman Company, Ltd. (Fuel Power Plant No. 2OA₁). Sept., 1918.

Address.—Head Office, 179 St. James St., Montreal, Que. Local Office, St. Lambert, Que.

Officials.—F. D. Waterman, Montreal, Que. (Pres.); F. G. McConnell, Montreal, Que. (Mgr. and Sec.).

History.—Plant installed in 1908, with an additional unit in 1911.

Capital invested in Plant and Equipment.—\$21,000.

Plant. *Official.*—L. Juster, St. Lambert, Que. (Supt.).

Location.—Plant located in St. Lambert, Que.

Installation.—Steam Engine—1 reciprocating, 100 h.p.; Gas Engine—1 at 100 h.p., total prime power 200 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 60 k.v.a., 1,200 r.p.m., 1 Can. West., A.C., 3-phase, 60-cycle, 75 k.v.a., 900 r.p.m., total 135 k.v.a.

Power. *Local distribution lines* serve the municipality of St. Lambert.

Power is purchased in bulk from Montreal Light, Heat and Power Consolidated.

Use of Power.—Power is used for lighting and general manufacturing.

Power is sold in bulk to the municipality of St. Lambert.

Power is delivered adjacent to Grand Trunk Ry., Central Vermont Ry., Quebec, Montreal and Southern Ry., and Canadian Government Rys.

Served also by—

Montreal Light, Heat and Power Consolidated; see Montreal, Que.

ST. LAURENT.

Served by Montreal Public Service Corporation; see Montreal, Que.

ST. LIN DES LAURENTIDES.

Served by La Cie Electrique des Laurentides; see Rawdon, Que.

ST. LOUIS.

Served by St. Etienne de Beauharnois Electric Light Plant; see St. Etienne de Beauharnois, Que.

QUEBEC.

ST. LOUIS DE COURVILLE.

Served by Quebec Railway, Light, Heat and Power Co., Ltd.; see Quebec, Que.

STE. MADELEINE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

ST. MARC.

Served by North Shore Power Co.; see Three Rivers, Que.

ST. MARC DES CARRIERES.

Served by The Hydraulic Company of Portneuf, Ltd.; see Deschambault, Que.

ST. MATHIAS.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

STE. MARIE DE BEAUCE.

Served by Beauce Electric and Power Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

ST. MAURICE.

Served by North Shore Power Co.; see Three Rivers, Que.

ST. NARCISSE.

Served by North Shore Power Co.; see Three Rivers, Que.

ST. PAUL L'ERMITE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. PAULIN.

Served by La Compagnie d'Eclairage de Yamachiche, with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. PHILIPPE.

Served by Ayers Ltd.; see Lachute, Que.

ST. PIE.

St. Pie Electric Plant. (Hydro Power Plant No. 2OG.). March, 1918.

Address.—St. Pie, Que.

Owner.—N. Bélanger.

History.—Plant installed in 1915.

Capital invested in Plant and Equipment.—about \$15,000.

Plant. *Location.*—Plant located on Black river, one mile from St. Pie.

Installation.—Plant operates under an average head of 12 feet. Turbine—1. S. Morgan-Smith, 27-inch, vert., single runner, 75 h.p., 200 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 60 k.w., 1,200 r.p.m.; Exciter—1 generator, 2.5 k.w., 1,800 r.p.m.

Power. *Transmission Line.*—1 mile of wooden pole line serves the municipality of St. Pie.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

ST. RAYMOND.

Municipality of St. Raymond. (Hydro Power Plant No. 2PB.). Sept., 1918.

Officials.—Dr. Jules Desrochers (Mayor); Jos. E. Savary (Clerk).

History.—Plant installed in 1915.

Capital invested in Plant and Equipment.—\$40,000.

Plant. *Official.*—N. Brisson (Supt.).

Location.—Plant located at Pare rapids, on North Branch, St. Anne river, 2½ miles from St. Raymond station on Canadian Northern Ry.

Municipality of St. Raymond.—Con.**Plant.—Con.**

Installation,—Plant operates under an average head of 14 feet. Turbine—1 Can. Gen. Elect., vert., single runner, 100 h.p., 225 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 75 k.w., 225 r.p.m.

Power. *Local distribution lines* serve the municipality of St. Raymond.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

The municipality contemplates installing an additional unit consisting of one 140 h.p. turbine and one 120 k.w. generator, and will then have 75 k.w. available for sale.

ST. REMI.

Wm. Clark Company. (Fuel Power Plant No. 20A₈). Nov., 1918.

Plant. *Location*,—Plant located in St. Remi, Que.

Installation,—Boilers—2 return tubular, 75 h.p. each, total 150 h.p.; Steam Engines—1 at 50 h.p. and 1 at 100 h.p., total 150 h.p.; Generators—1 A.C., 3-phase, 60-cycle, 30 k.v.a.

Power. *Local distribution lines* serve the municipality of St. Remi. Part of the installed prime power is used in the operation of the company's factory.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry.

ST. ROCH DE L'ACHIGAN.

Jan., 1918.

St. Roch de L'Achigan Electric Light Plant. (Hydro Power Plant No 20B₁).

Address,—St. Roch de l'Achigan, Que.

Owner,—Edward Leclerc.

History,—Plant installed in 1904.

Capital invested in Plant and Equipment,—\$7,000.

Plant. *Official*,—Pierre Larose (Engr. Pwr. Sta.).

Location,—Plant located on River L'Achigan.

Installation,—Plant operates under an average of 10 feet; Turbine—1 Chas. Barber, 60-inch, vert., single runner, 80 h.p., 600 r.p.m.; Generator—1 Can. Gen. Elect., A.C., single-phase, 60 k.w., 1,500 r.p.m.; Exciter—1 generator, 20 amp., 1,600 r.p.m.

Power. *Transmission Lines*,—7 miles of wooden pole lines serve the municipalities of St. Roch de L'Achigan and L'Epiphanie.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., and to Canadian Northern Ry.

ST. ROMUALD.

Served by Canadian Electric Light Co.; see Levis, Que.

STE. ROSALIE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

STE. ROSE.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

STE. SCHOLASTIQUE.

Served by the St. Canute Electric Light Plant; see St. Canute, Que.

ST. SEVERE.

Served by La Compagnie d'Eclairage de Yamachiche, Ltée., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. SIMON.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

QUEBEC.

ST. STANISLAS.

Served by North Shore Power Co.; see Three Rivers, Que.

STE. THERESE.

Served by Laval Electric Co., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

ST. TIMOTHEE.

Served by Canadian Light and Power Co.; see Montreal, Que.

ST. TITE.

Served by Proulxville Electric Plant; see Proulxville, Que.

ST. ULRIC.

The Roy Company, Ltd. (Hydro Power Plant No. 2QB₁). Oct., 1918.

Address,—St. Ulric, Que.

Officials,—J. E. Roy (Pres. and Mgr.); J. B. D. Roy (Sec.-Treas.).

History,—Plant installed in September, 1914, with a new generator in 1917.

Capital invested in Plant and Equipment,—\$5,300.

Plant. *Official*,—Lewis Roy (Engr. Pwr. Sta.).

Location,—Plant located on Blanche river, one-eighth mile from Rivière Blanche station on Canada and Gulf Terminal Ry.

Installation,—Plant operates under an average head of 23 feet. Turbine—1 Vulcan, 26½-inch, vert., single runner, 40 h.p., 400 r.p.m.; Generator—1 West, A.C., 3-phase, 60-cycle, 30 k.w., 1,300 r.p.m.

Power. *Transmission Line*,—1 mile of wooden pole line serves the municipalities of St. Ulric and Rivière Blanche.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canada and Gulf Terminal Ry.

STE. URSULE.

Served by the Louisville Electric Co., Ltd.; see Louisville, Que.

ST. VINCENT-DE-PAUL.

Penitentiary of St. Vincent-de-Paul. (Fuel Power Plant No. 20A₅). Nov., 1918.

History,—Plant installed in 1901.

Plant. *Location*,—Plant located at St. Vincent-de-Paul, Que.

Installation,—Boilers—3 water-tube, total capacity 400 h.p.; Steam Engines—2 reciprocating, 1 at 50 h.p. and 1 at 105 h.p., total 155 h.p.; Generators—2 Can. Gen. Elect., D.C., 75 k.v.a. and 30 k.v.a., total 105 k.v.a.

Power. *Local distribution lines* serve the municipality of St. Vincent-de-Paul.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

SAULT AU RECOLLET.

Served by Montreal Public Service Corporation; see Montreal, Que.

SAWYERVILLE.

Sawyerville Electric Plant. (Hydro Power Plant No. 20E₁). July, 1918.

Address,—Sawyerville, Que.

Owner,—A. G. Hurd.

History,—Plant installed in 1907.

Capital invested in Plant and Equipment,—\$7,500.

Plant. *Location*,—Plant located on Eaton river, one-half mile from Sawyer ville station on Maine Central Ry.

Installation,—Plant operates under an average head of 15 feet; Turbine—1 S. Morgan Smith, 24-inch, hor., 85 h.p., 275 r.p.m.; Generator—1 Can. Gen. Elect., A.C., single-phase, 125-cycle, 30 k.w., 1,500 r.p.m.; Exciter—1 generator, 1½ k.w., 1,900 r.p.m.

Sawyerville Electric Plant.—Con.

Power. *Local distribution lines* serve the municipality of Sawyerille.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Maine Central Ry.

SAYABEC.

Served by Amqui Electric Co.; see Amqui, Que.

SCOTSTOWN.

Scotstown Electric Light Company. (Hydro Power Plant No. 20E.). March, 1918.

Address.—Scotstown, Que.

History.—Plant installed in 1918.

Capital invested in Plant and Equipment.—\$17,000.

Plant. *Location.*—Plant located on Salmon river near Scotstown.

Installation.—Plant operates under an average head of 17.5 feet; Turbine—1 Jenckes, 30-inch, hor., single runner, 200 h.p., 300 r.p.m.; Generator—1 Bullock, A.C., 3-phase, 60-cycle, 150 k.v.a., 1,200 r.p.m.; Exciter—1 Generator, 3.75 k.w., 1,000 r.p.m.

Power. *Transmission Line.*—One-half mile of wooden pole line serves the municipality of Scotstown.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

SHAWINIGAN FALLS.

Shawinigan Water and Power Company. (Hydro Power Plant No. 2NG₂). Dec., 1918.

Controls North Shore Power Company, Laval Electric Company, St. Maurice Light and Power Company, Public Service Corporation of Quebec, Continental Heat and Light Company, and a number of industrial companies.

Address.—Head Office, 611 Power Bldg., Montreal, Que. Local Office, Shawinigan Falls, Que.

Directors.—J. E. Aldred, Montreal; Thos. McDougall, Montreal; Howard Murray, Montreal; Julian C. Smith, Montreal; R. M. Aitken, London; W. S. Hart, Montreal; Sir Herbert S. Holt, Montreal; R. W. Kelley, New York; Sir M. Mitchell-Thomson, Bart., Edinburgh; E. R. Wood, Toronto; Maurice J. Curran, Boston; Col. Geo. P. Murphy, C.M.G., Ottawa.

Officials.—J. E. Aldred, Montreal (Pres.); Thos. McDougall, Montreal (Chmn. Bd.); Howard Murray, Montreal (Vice-Pres.); Julian C. Smith, Montreal (Vice-Pres. and Ch. Engr.); R. J. Beaumont, Montreal (Pur. Agt.); W. S. Hart, Montreal (Treas.); James Wilson, Montreal (Sec.).

History.—The company was incorporated by special Act of the Legislature of the Province of Quebec, January 15, 1898. The development at Shawinigan Falls consists of two power-houses, served by the one intake dam. One power-house was installed in 1901, and units added in 1904 and 1909, making a total installation of six units. The other power-house was installed in 1911 with five units. The company has extended its operations, through its subsidiary companies, to include a number of industrial undertakings.

Capital.—Authorized, \$20,000,000. Issued, \$15,000,000.

Bonds.—Authorized, \$5,000,000. Issued, \$5,000,000.

Debtenture Stock.—Authorized, \$5,500,000. Issued, \$5,472,261.

Capital invested in Plant and Equipment.—\$20,289,032.

Plant. *Officials.*—John Morse (Gen. Supt.); E. J. Reid (Asst. Supt. Opern.); C. E. Reid (Elect. Engr.); W. A. Kerr (Pwr. House Supt.); L. A. Marcotte (Supt. Term. Stas.); C. Thornton (Line Supt.).

QUEBEC.

Shawinigan Water and Power Company.—Con.**Plant.—Con.**

Location.—Plant located at Shawinigan Falls, on St. Maurice river, one mile from Shawinigan Falls railway station and 20 miles northwest of Three Rivers and adjacent to railway sidings from Canadian Pacific Ry. and Canadian Northern Ry.

Installation.—Plant operates under a head of 150 feet. A steel and concrete dam in each of the two channels above the falls diverts the water to a canal 1,000 feet in length leading to the forebay. The water is conveyed from the gate houses, at the forebay, through six steel penstocks to No. 1 power-house and through five steel penstocks to No. 2 power-house. An exciter penstock is installed for each power-house. Turbines—Power-house No. 1, 3 I. P. Morris, 82 $\frac{3}{4}$ -inch, Francis, single runner, 10,500 h.p. each, 180 r.p.m., 2 I. P. Morris, 76-inch, Francis, double runner, 9,000 h.p. each, 180 r.p.m., 1 Escher Wyss, 71-inch, Francis, double runner, 9,000 h.p., 180 r.p.m.; Power-house No. 2, 5 I. P. Morris, 80-inch, Francis, double runner, 18,000 h.p. each 225 r.p.m., total 148,500 h.p.; Generators—Power-house No. 1, 2 Can. West., A.C., 2-phase, 30-cycle, 3,750 k.w. each, 180 r.p.m., 2 Can. West., A.C., 2-phase, 30-cycle, 2,000 k.w. each, 180 r.p.m., 1 Dick-Kerr, A.C., 2-phase, 30-cycle, 3,750 k.w., 180 r.p.m., 1 Can. West., A.C., 2-phase, 30-cycle, 3,000 k.w., 180 r.p.m., 2 Can. West., A.C., 2-phase, 30-cycle, 6,600 k.w. each, 180 r.p.m., 1 Can. West., A.C., 2-phase, 30-cycle, 8,000 k.w., 180 r.p.m.; Power-house No. 2, 5 Can. West., A.C., 3-phase, 60-cycle, 14,000 k.w. each, 225 r.p.m., total 109,450 k.w.; Exciters—Power-house No. 1, 3 turbines, 26-inch, 500 h.p. each, 500 r.p.m., 1 motor, 2-phase, 2,200 v., 450 h.p., 580 r.p.m., 1 generator, 125 v., 300 k.w., 4 generators, 125 v., 156 k.w. each, 500 r.p.m.; Power-house No. 2, 2 turbines, 28-inch, 750 h.p. each, 580 r.p.m., 1 motor, 3-phase, 440 v., 580 h.p., 580 r.p.m., 3 generators, 125 v., 400 k.w. each, 580 r.p.m.; Transformers—Power-house No. 1, 1 bank of 8 Can. West., water-cooled, oil-insulated, primary 2,200 v., secondary 50,000 v., 2,200 k.v.a. each, 1 bank of 4 Can. West., water-cooled, oil-insulated, primary 2,200 v., secondary 50,000 v., 1,100 k.v.a. each, 1 bank of 2 Can. Crocker-Wheeler, water-cooled, oil-insulated, primary 2,200 v., secondary 50,000 v., 2,200 k.v.a. each, 1 bank of 5 Can. Gen. Elect., water-cooled, oil-insulated, primary 2,200 v., secondary 50,000 v., 2,200 k.v.a. each; Power-house No. 2, 1 bank of 3 Can. Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 100,000 v., 14,000 k.v.a. each, 1 bank of 6 Gen. Elect., 3-phase, water-cooled, oil-insulated, primary 6,600 v., secondary 57,800 v., 5,000 k.v.a. each.

Power. *Transmission Lines.*—203 miles of steel tower line and 541 miles of wooden pole line serve, either direct or through subsidiary companies, the municipalities of Quebec, Champlain, St. Narcisse, St. Marc, St. Basile, Berthier, Nicolet, La Baie, Victoriaville, Warwick, Black Lake, Windsor Mills, Joliette, L'Assomption, Terrebonne, Charlemagne, Repentigny, St. Eustache, Lachenaie, St. Casimir, Three Rivers, St. Geneviève de Batiscan, St. Stanislas, Portneuf, Donnacona, Shawinigan Falls, Pierreville, Plessisville, Arthabaska, Thetford Mines, Asbestos, St. Gabriel de Brandon, Lanoraie, Mascouche, L'Épiphanie, St. Paul L'Érmitte, Ste. Rose, Ste. Therese, St. Francois de Sales, Sorel and St. Angele.

Use of Power.—Power is used for lighting, operation of electric railway, operation of electro-chemical industries, operation of pulp and paper mills, operation of stone quarries and chrome mines, general manufacturing and general power purposes.

Power is sold in bulk for distribution to Montreal Light, Heat and Power Consolidated of Montreal; Laval Electric Company of Charlemagne; North Shore Power Company of Three Rivers; St. Maurice Light and Power

QUEBEC.

Shawinigan Water and Power Company.—Con.**Power.—Con.**

Company of Shawinigan Falls; Public Service Corporation of Quebec; Continental Heat and Light Company of Victoriaville; La Compagnie d'Eclairage d'Yamachiche; Arthabaska Water and Power Company; Southern Canada Power Company; Sorel Electric Company; and Plessisville.

Power is sold in bulk through Laval Electric Company to the municipalities of Joliette, Terrebonne, and St. Gabriel de Brandon.

Power is sold for industrial purposes to Northern Aluminium Company, Canadian Carbide Company, American Electro Products Company, Shawinigan Electro-Metals Company, Canadian Electrode Company, Canadian Aloxite Company, Canadian Ferro-Alloys, Ltd., Belgo-Canadian Pulp and Paper Company, Wayagamack Pulp and Paper Company, St. Maurice Paper Company, Donnacona Paper Company, Canada Cement Company, Tide Water Shipbuilders, Ltd., Asbestos Corporation of Canada, Manville Asbestos Company, Brompton Pulp and Paper Company, Bells Asbestos Company, Jacobs Asbestos Mining Company, Mutual Chemical Company of Canada, Dominion Mines and Quarries, Ltd., and Canadian Ingersoll-Rand Company.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., Canadian Government Rys., Quebec Central Ry., Quebec, Montreal and Southern Ry., and St. Lawrence River, Great Lakes, and Ocean navigation.

The company has entered into a contract with Laurentide Power Company, Ltd., by which it will operate the plant at Grand Mère and take over a large quantity of the power generated there. The balance of the power is sold to the Laurentide Company, Ltd., for the operation of paper mills.

The company controls at Gres falls, on St. Maurice river, four miles below Shawinigan Falls, a power site capable of developing about 75,000 h.p.

Provision has been made at Grand Mère for the installation of 60,000 h.p., additional power, when required.

Suitable sites for large manufacturing plants with water and railroad facilities are available at Shawinigan Falls and Three Rivers.

St. Maurice Light and Power Company. (Hydro Power Plant No. 2NG.). Controlled by the Shawinigan Water and Power Company. Nov., 1918.

Address.—Head Office, Montreal. Local Office, Three Rivers, Que.

Officials.—W. S. Hart, Montreal (Pres.); F. J. Beaumont, Montreal (Gen. Mgr.); Jas. Wilson, Montreal (Sec.).

History.—Plant installed in 1904.

Capital invested in Plant and Equipment.—\$151,581.

Plant. *Official.*—John Bourgeois, jr., Shawinigan Falls (Supt.).

Location.—Plant located on the Little Shawinigan river at Shawinigan Falls, Que.

Installation.—Plant operates under an average head of 90 feet; Turbine—1 Lavoie & Guay, 60-inch, hor., 500 h.p., 600 r.p.m.; Generator—1 Bullock, A.C., 3-phase, 60-cycle, 225 k.w., 600 r.p.m.

Power. *Transmission Lines.*—42 miles of wooden pole lines serve the municipalities of Shawinigan Falls, Berthierville, Nicolet, and Pierreville.

Power is purchased from the Shawinigan Water and Power Company.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Canadian Government Rys.

SHAWVILLE.

Municipality of Shawville. (Fuel Power Plant No. 2KG.). April, 1918.

History.—Plant installed in 1912.

Capital invested in Plant and Equipment.—\$7,600.

QUEBEC.

Municipality of Shawville.—Con.

Plant. *Official*,—A. D. McCredie (Mgr.).

Location,—Plant located in Shawville, Que.

Installation,—Gas Engines—2 at 10 h.p. each, total 20 h.p.; Generators—2 Lister
Bruston, D.C., 6 k.w. each, 500 r.p.m., total 12 k.w.

Power. *Local distribution lines* serve the municipality of Shawville.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

SHERBROOKE.

Municipality of Sherbrooke. Aug., 1918.

Officials,—Charles D. White (Mayor); E. C. Gatién (City Sec.-Treas.); B. A. Dugal (Sec.-Treas. Gas and Elect. Dept.).

History,—Sherbrooke plant installed in 1905 and remodelled with larger units in 1917. Two synchronous condensers added in 1918. Rock Forest plant installed in 1911, the turbines changed for larger units in February, 1916. Weedon plant purchased by the municipality in 1917 and the capacity is at present being increased by another unit.

Capital invested in Plants and Equipment,—Sherbrooke and Rock Forest plants combined, \$1,155,534. Weedon plant, \$375,000.

Plants. *Officials*,—Charles J. Desbaillets (Mgr. Engr. Gas and Elect. Dept.); G. L. Bockers (Supt. Pwr. Houses); E. L. Noel (Supt. Distbn.).

Sherbrooke plant. (Hydro Power Plant No. 2OE₈).

Location,—Plant located on Magog river, on Frontenac street in Sherbrooke.

Installation,—Plant operates under an average head of 37 feet; Turbines—2 Boving, 36-inch, hor., double runner, 1,450 h.p. each, 300 r.p.m., total 2,900 h.p.; Generators—2 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,000 k.v.a. each, 300 r.p.m., total 2,000 k.v.a.; Exciters—2 Jenckes, turbines, 18-inch, hor., 60 h.p. each, 500 r.p.m., 2 generators 35 k.w., 550 r.p.m., 1 Can. Gen. Elect. motor generator set, 50 k.w., 550 r.p.m.

Rock Forest Plant. (Hydro Power Plant No. 2OE₇).

Location,—Plant located on Magog river, one-half mile from Rock Forest station on Canadian Pacific Ry., and six miles from Sherbrooke.

Installation,—Plant operates under an average head of 30 feet; Turbines—2 S. Morgan-Smith, 41-inch, hor., double runner, 1,470 h.p. each, 180 r.p.m., total 2,940 h.p.; Generators—2 Can. West., A.C., 3-phase, 60-cycle, 925 k.v.a. each, 180 r.p.m., total 1,850 k.v.a.; Exciters—2 Jenckes, turbines, 18-inch, hor., 90 h.p. each, 450 r.p.m., 2 Can. West., generators, 60 k.w. each, 450 r.p.m.

Weedon Plant. (Hydro Power Plant No. 2OE₁₁).

Location,—Plant located on St. Francis river, 4 miles from Weedon station on Quebec Central Ry.

Installation,—Plant operates under an average head of 30 feet; Turbine—1 Wm. Hamilton, 36-inch, hor., double runner, 1,250 h.p., 200 r.p.m.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 750 k.v.a., 200 r.p.m.; Exciter—1 generator, 40 k.w., belted to main unit.

Power. *Transmission Lines*,—6 miles of wooden pole line transmits power from Rock Forest plant to Sherbrooke. Local distribution lines serve the municipalities of Sherbrooke and Rock Forest. The municipality has under construction 30 miles of wooden pole line from the Weedon plant to Sherbrooke which will be completed in 1918 and will serve the municipalities of Weedon, Marbleton, Bishops Crossing, Ascot, and Sherbrooke.

Use of Power,—Power is used for lighting, general manufacturing and general power purposes, including operation of an electric furnace.

Weedon Plant.—Con.**Power.—Con.**

Power is sold in bulk from Weedon plant to St. Francis Water Power Company of Thetford Mines, Que.

Power is delivered adjacent to Canadian Pacific Ry., Grand Trunk Ry., Boston & Maine Ry., Maine Central Ry., and Quebec Central Ry.

The municipality is installing an additional unit in the Weedon plant, consisting of one Boving 42-inch, hor., double-runner turbine of 1,700 h.p., capacity direct connected to one Can. West., A.C., 3-phase generator at 1,300 k.v.a., 225 r.p.m., and one exciter generator at 50 k.w. belted to the main unit.

In connection with the transmission line, now under construction to Sherbrooke, there will be installed in the Weedon plant one Can. West., 3-phase, water-cooled, transformer, primary 2,200 v., secondary 55,000 v., 2,000 k.v.a.

The municipality has at present 5,200 horse-power available for sale, and with the completion of the enlargement of Weedon plant will have an additional 1,300 k.v.a. available.

Served also by—

Southern Canada Power Co., Ltd.; see Montreal, Que.

SHIPSHAW.

Price Brothers and Company. (Hydro Power Plant No. 2RH₁₁). Nov., 1918.

History.—Plant installed in 1913.

Capital invested in Plant and Equipment.—\$900,000.

Plant. *Location.*—Plant located on Shipshaw river, 2 miles from its junction with Saguenay river.

Installation.—Plant operates under an average head of 90 feet. Turbines—3 at 3,500 h.p. each, total 10,500 h.p.; Generators—3 A.C., 3-phase, 60-cycle, 2,250 k.w. each, total 6,750 k.w.; Exciters—2 at 150 k.w. each, operated by separate exciter turbines.

Power. *Transmission Lines* serve the company's mills at Kenogami and Jonquiere.

Use of Power.—The power is practically all used in the operation of the company's pulp and paper mills and a small amount used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

SOREL.

Served by the Sorel Light and Power Co., Ltd., with power purchased from Shawinigan Water and Power Co., Ltd.; see Shawinigan Falls, Que.

STANBRIDGE EAST.

Stanbridge East Electric Light Plant. (Hydro Power Plant No. 2OH₂). Jan., 1918.

Address.—Stanbridge East, Que.

Owner.—M. S. Connell & Sons.

History.—Plant installed in 1899.

Capital invested in Plant and Equipment.—\$5,114.

Plant. *Location.*—Plant located on Pike river, near Stanbridge East.

Installation.—Plant operates under an average head of 9 feet. Turbine—1 Jenckes, 27-inch, vert., single runner, 31½ h.p., 127 r.p.m.; Generator—1 Can. Gen. Elect., D.C., 17½ k.w., 1,175 r.p.m.

Power. *Local distribution lines* serve the municipality of Stanbridge East.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Central Vermont Ry.

STANSTEAD.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

STAYNERVILLE.

Served by Ayers, Ltd.; see Lachute, Que.

QUEBEC.

SWEETSBURG.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

TERREBONNE.

Served by the Laval Electric Co., Ltd., with power purchased from Shawinigan Water and Power Co., Ltd.; see Shawinigan Falls, Que.

TETRAULTVILLE.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

THETFORD MINES.

April, 1918.

Saint Francis Water Power Company. (Hydro Power Plant No. 20E₁₂).

Address.—Thetford Mines, Que.

Officials.—I. L. Lafleur, Montreal (Pres.); Hon. J. E. Roberge, Lambton (Vice-Pres.); O. E. Dorias, Sherbrooke (Mgr. Dir.); Robt. Poisson, Thetford Mines (Sec.-Treas.).

History.—Plant installed in 1904, with additional units in 1906, 1910 and 1912.

Capital.—\$500,000. Bonds, \$100,000.

Capital invested in Plant and Equipment.—\$524,583.

Plant. *Location.*—Plant located at D'Israeli, on St. Francis river.

Installation.—Plant operates under an average head of 42 feet. Turbines—2 Jenckes, hor., double runner, 1,300 h.p. each, 200 r.p.m., 1 Boving, hor., double runner, 1,600 h.p. each, 300 r.p.m., total 4,200 h.p.; Generators—2 Bullock, A.C., 3-phase, 60-cycle, 750 k.w. each, 200 r.p.m., 1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 1,000 k.w., 300 r.p.m., total 2,500 k.w.; Transformers—1 bank of 3 Can. Gen. Elect., water-cooled, single-phase, primary 2,400 v., secondary 15,000 v., 1,000 k.v.a. each. Auxiliary Plant—1 Jenckes, reciprocating steam engine, 1,750 h.p. Connected to 1,000 k.w. generator when required.

Power. *Transmission Lines.*—50 miles of wooden pole lines serve the municipalities of Weedon, St. Gerard, Garthby, D'Israeli, Coleraine, Thetford Mines, Robertson, East Broughton, Tring Junction, St. Joseph de Beauce, St. Marie Beauce, Beauce Junction, and St. George de Beauce.

Power is purchased in bulk from the Weedon plant of the municipality of Sherbrooke.

Use of Power.—Power is used for lighting, general manufacturing and general power purposes.

Power is sold in bulk to Beauce Electric and Power Company.

Power is delivered adjacent to Quebec Central Ry.

The company contemplates installing 2,800 h.p. additional turbine capacity.

La Compagnie Electrique De Thetford Mines.

Serves the municipality with power purchased from the Continental Light, Heat and Power Co., a subsidiary of Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

THREE RIVERS.

North Shore Power Company. (Hydro Power Plant No. 2PA₂). Controlled by Shawinigan Water and Power Company. Nov., 1918.

Address.—Head Office, Montreal. Local Office, Three Rivers.

Officials.—Thos. McDougall, Montreal (Pres.); Julian C. Smith, Montreal (Vice-Pres.); W. S. Hart, Montreal (Man. Dir.); Jas. Wilson, Montreal (Sec.-Treas.); R. T. Beaumont, Montreal (Gen. Mgr.).

History.—Plant installed in 1895, with an additional unit in 1905.

Capital invested in Plant and Equipment.—\$1,272,510.

QUEBEC.

North Shore Power Company.—Con.

Plant. *Official.*—W. B. Baptist, Three Rivers (Mgr.).

Location.—Plant located on the Batiscan river, 6 miles from St. Narcisse station on Canadian Pacific Ry.

Installation.—Plant operates under an average head of 65 feet. Turbines—2 Jenckes, 19-inch, hor., double runner, 350 h.p. each, 400 r.p.m., 1 St. Morgan-Smith, 22-inch, hor., double runner, 900 h.p., 400 r.p.m., total 1,600 h.p.; Generators—2 Stanley, A.C., 3-phase, 60-cycle, 250 k.v.a. each, 400 r.p.m., 1 Allis-Chalmers-Bullock, A.C., 3-phase, 600 k.v.a., 400 r.p.m., total 1,100 k.v.a.; Exciters—1 motor, 3-phase, 220 v., 1,200 r.p.m., 1 generator, 125 v., 1,200 r.p.m., 1 generator, 125 v., 400 r.p.m.; Transformers—1 bank of 4 Allis-Chalmers-Bullock, single-phase, water-cooled, primary 2,500 v., secondary 11,000 v., 200 k.v.a. each.

Power. *Transmission Lines.*—30 miles of wooden pole lines serve the municipalities of St. Maurice, St. Genevieve, St. Stanislas, St. Narcisse, Champlain, Three Rivers, St. Casimir, St. Marc, Portneuf, Deschambault and St. Bazile.

Power is purchased from Shawinigan Water and Power Company.

Use of Power.—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Government Ry., Canadian Northern Ry., and St. Lawrence River navigation.

Served also by—

St. Francis Water Power Co.; see Thetford Mines, Que.

TRING JUNCTION.

Served by Beauce Electric and Power Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

TROIS PISTOLES.

Trois Pistoles Electric Company. (Fuel Power Plant No. 2QA₁). Jan., 1918.

Address.—Trois Pistoles, Que.

Directors.—Joseph Oullet, Leau D'Amours, Antole Rioux, J. S. Gagnon.

Officials.—Joseph Oullet (Pres.); Ant. Bernier (Mgr.); J. L. Thebuge (Sec.).

History.—Plant installed in 1912.

Capital invested in Plant and Equipment.—\$12,000.

Plant. *Location.*—Plant located in Trois Pistoles, Que.

Installation.—Oil Engine—1 at 50 h.p.; Generator—1 A.C., 3-phase, 30 k.w.

Power. *Local distribution lines* serve the municipality of Trois Pistoles.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Government Rys.

VAL BRILLIANT.

Served by Amqui Electric Co.; see Amqui, Que.

VALLEYFIELD.

May, 1918.

Valleyfield Electrical Company. (Hydro Power Plant No. 2MC₇). Controlled by the Montreal Cotton Company, which is operated by Montreal Cottons, Ltd.

Address.—Valleyfield, Que.

Officials.—S. N. Ewing, Valleyfield (Pres.); C. B. Gordon, Valleyfield (Vice-Pres.); John Lowe, Valleyfield (Gen. Mgr. and Sec.-Treas.).

History.—Plant installed in 1900 and an addition turbine and present generator installed in 1902.

Capital.—Authorized, \$35,000. Issued, \$35,000.

Capital invested in Plant and Equipment.—\$35,000.

QUEBEC.

Valleyfield Electric Company.—Con.

Plant. *Location.*—Plant located on St. Lawrence river at Valleyfield.

Installation.—Plant operates under an average head of 10 feet. Turbines—1 S. Morgan-Smith, 50-inch, vert., single runner, 85 h.p., 200 r.p.m., 1 S. Morgan Smith, 30-inch, hor., double runner, 50 h.p., 200 r.p.m., total 135 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.w., 600 r.p.m.; Exciter—1 motor, 125 v., 1,200 r.p.m. Auxiliary Plant—1 West. reciprocating steam engine, 700 h.p.

Power. *Local distribution lines* serve the municipality of Valleyfield.

Power is sold in bulk to municipality of Valleyfield.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Grand Trunk Ry., New York Central Ry., and St. Lawrence River and Great Lakes navigation.

VALLEY JUNCTION.

Served by Beauce Electric and Power Co., with power purchased from St. Francis Water Power Co.; see Thetford Mines, Que.

VERDUN.

Served by Montreal Light, Heat and Power Consolidated; see Montreal, Que.

Municipality of Verdun. (Fuel Power Plant No. 20A₀). Nov., 1918.

History.—Plant installed in 1910 and used as auxiliary to power purchased from Montreal Light, Heat and Power Consolidated.

Capital invested in Plant and Equipment.—\$48,000.

Plant. *Location.*—Plant located in Verdun, Que.

Installation.—Boilers—3 water tube and 2 return tubular, total capacity 1,120 h.p.; Steam Engines—2 reciprocating, vertical, total capacity 600 h.p.; Generators—2 A.C., 3-phase, 60-cycle, total capacity 470 k.w.

Power. The plant is used only as auxiliary to purchased power, which is used for lighting and general power purposes.

VICTORIAVILLE.

Served by Arthabaska Water and Power Co., with power purchased from Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

WARWICK.

Served by Shawinigan Water and Power Co.; see Shawinigan Falls, Que.

WATERLOO.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

WATERVILLE.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

WAYS MILLS.

Served by Southern Canada Power Co., Ltd.; see Montreal, Que.

WEEDON.

Served by Municipality of Sherbrooke; see Sherbrooke, Que.

Served by St. Francis Water Power Co., Ltd.; see Thetford Mines, Que.

WESTMOUNT.

Municipality of Westmount. (Fuel Power Plant No. 20A₂). Feb., 1918.

History.—Plant installed in 1906, with an additional engine in 1910.

Capital invested in Plant and Equipment.—\$582,711.

Plant. *Officials.*—Geo. W. Thompson, Westmount (Mgr.); J. Donnelly, Westmount (Engr. Pwr. Sta.).

Location.—Plant located on Glen Road, Westmount, Que.

Municipality of Westmount.—Con.**Plant.—Con.**

Installation.—Steam Engines—4 reciprocating, total capacity 1,650 h.p.: Generators—2 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 200 k.v.a. each, 360 r.p.m., 1 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 180 k.v.a., 360 r.p.m., 1 Crocker-Wheeler, A.C., 3-phase, 60-cycle, 400 k.v.a., 360 r.p.m., total 930 k.v.a.

Power. *Local distribution lines* serve the municipality of Westmount.

Use of Power.—Power is used for lighting and general manufacturing.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., Grand Trunk Ry., Canadian Government Rys., New York Central Ry., Quebec Montreal and Southern Ry., and Great Lakes and Ocean navigation.

Served also by—

Montreal Light, Heat and Power Consolidated; see Montreal, Que.

WEST SHEFFORD.

West Shefford Electric Light Plant. (Hydro Power Plant No. 20G₁). Jan., 1918.

Address.—West Shefford, Que.

Owner.—S. Rousseau.

History.—Plant installed in 1906.

Capital invested in Power and Equipment.—\$10,000.

Plant. *Location.*—Plant located on Yamaska river, 2 miles from West Shefford.

Installation.—Plant operates under an average head of 7 feet; Turbines—1 Leffel, hor., single runner, 32 h.p., 1 Leffel, hor., single runner, 69 h.p., total 101 h.p.; Generator—1 Royal, A.C., 2-phase about 25 k.w., 1,300 r.p.m.

Power. *Local distribution lines* serve the municipality of West Shefford.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Central Vermont Ry., and Canadian Pacific Ry.

Served also by—

Southern Canada Power Co., Ltd.; see Montreal, Que.

WINDSOR.

Served by Shawinigan Water and Power Co., Ltd.; see Shawinigan Falls, Que.

The municipality owns a hydro-electric plant, on Wattapikaw river at Windsor Mills, which has not been operated for two years.

The plant is designed to operate under an average head of 27½ feet and contains the following equipment: 1 Jenckes, 15-inch, hor., double runner, turbine, 75 h.p., 1 Crocker-Wheeler, A.C., 3-phase, generator, 100 k.v.a., 900 r.p.m., 1 exciter generator belted to main unit, 1 auxiliary steam engine, 75 h.p.

WINDSOR MILLS.

Served by Shawinigan Water and Power Co., Ltd.; see Shawinigan Falls, Que.

YAMACHICHE.

Served by La Compagnie d'Éclairage de Yamachiche, Ltée., with power purchased from Shawinigan Water and Power Co., Ltd.; see Shawinigan Falls, Que.

SASKATCHEWAN.**ARCOLA.**

Arcola Light and Power Company. (Fuel Power Plant No. 5NC₁). July, 1918.

Address.—Arcola, Sask.

Owners.—W. R. Jefferson, Arcola; H. Forbes-Roberts, Arcola.

History.—First unit installed in 1912; additional unit in 1917.

Capital invested in Plant and Equipment.—\$13,900.

SASKATCHEWAN.

Arcola Light and Power Company.—*Con.***Plant.** *Official.*—H. Forbes-Roberts (Mgr.).*Location.*—Plant located at Arcola, Sask., adjacent to Canadian Pacific Ry.*Installation.*—Oil Engines—1 Petters, semi-Diesel, 45 h.p., 1 Fairbanks-Morse, semi-Diesel, 25 h.p., total 70 h.p.; Generators—1 West., A.C., single-phase, 60-cycle, 60 k.w., 900 r.p.m., 1 West., A.C., single-phase, 60-cycle, 37½ k.w., 1,100 r.p.m., total 97½ k.w.; Exciters—2 West., generators, 4 k.w. each, belted to main units.**Power.** *Local distribution lines* serve the municipality of Arcola.*Use of Power.*—Power is used for lighting and general power purposes.*Power is delivered* adjacent to Canadian Pacific Ry.

The company contemplates changing from single to three-phase and adding one 75 h.p. semi-Diesel oil engine, direct connected to a 3-phase generator.

The company has at present available for sale 100 h.p. day load only.

ASSINIBOIA.**Municipality of Assiniboia.** (Fuel Power Plant No. 5JD₁). Sept., 1918.*History.*—Plant installed in November, 1917.*Capital invested in Plant and Equipment.*—\$80,000.**Plant.** *Official.*—R. J. Nixon (Engr.).*Location.*—Plant located in Assiniboia, Sask.*Installation.*—Oil Engine—1 semi-Diesel, 50 h.p.; Generator—1 West., A.C., 3-phase, 100 k.v.a., 240 r.p.m.**Power.** *Local distribution lines* serve the municipality of Assiniboia.*Use of Power.*—Power is used for lighting and operation of municipal pumping station.*Power is delivered* adjacent to Canadian Pacific Ry.

The power-house is designed for an ultimate capacity of 250 h.p.

BATTLEFORD.

Served by municipality of North Battleford; see North Battleford, Sask.

BIG RIVER.**Ladder Lake Lumber Company, Ltd.** (Fuel Power Plant No. 6AE₁). Nov., 1918.*Address.*—Big River, Sask.**Plant.** *Location.*—Plant located in Big River, Sask.*Installation.*—Steam Engines—1 reciprocating, 1,200 h.p., 1 reciprocating, 175 h.p., total 1,375 h.p.; Generators—1 Can. Crocker-Wheeler, A.C., 3-phase, 60-cycle, 1,000 k.v.a., 1 Can. Crocker-Wheeler, A.C., 3-phase, 60-cycle, 150 k.v.a., total 1,150 k.v.a.; Exciters—2 generators, total capacity 40 k.w.**Power.** Practically the entire output of the plant is used in the operation of the company's mill, and a small amount of power is sold for lighting in Big River to employees only.**BORDEN.****Borden Electric Light Plant.** (Fuel Power Plant No. 5GD₂). Nov., 1918.*Owner.*—D. E. Crabb.*History.*—Plant installed in 1910.*Capital invested in Plant and Equipment.*—\$3,000.**Plant.** *Location.*—Plant located in Borden, Sask.*Installation.*—Oil Engine—1 at 12 h.p.; Generator—1 D.C., 10 k.w.**Power.** *Local distribution lines* serve the municipality of Borden.*Use of Power.*—Power is used for lighting.*Power is delivered* adjacent to Canadian Northern Ry.

BROADVIEW.

Municipality of Broadview. (Fuel Power Plant No. 5JM₁). May, 1918.

Officials,—J. O. Colquhoun (Mayor); A. Sinclair (Town Clerk).

History,—Plant installed in September, 1914.

Capital invested in Plant and Equipment,—\$27,000.

Plant. *Location*,—Plant is located at Broadview, Sask.

Installation,—Gas Engines—1 Ruston-Proctor 75 h.p., 1 Fairbanks-Morse 25 h.p., total 100 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 50 k.v.a., 1,200 r.p.m., 1 Fairbanks-Morse, A.C., 3-phase, 60-cycle, 20 k.v.a., total 70 k.v.a.

Power. *Local distribution lines* serve the municipality of Broadview.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

CANORA.

Municipality of Canora. (Fuel Power Plant No. 5MB₁). May, 1918.

Officials,—Wm. Johnston (Mayor); H. M. Sutherland (Town Clerk).

History,—Plant installed in January, 1913.

Capital invested in Plant and Equipment,—\$39,367.

Plant. *Official*,—C. G. Keebler (Supt.).

Location,—Plant is located in Canora, Sask.

Installation,—Oil Engine—1 Willans-Diesel, 96 h.p.; Generator—1 Peebles, A.C., 3-phase, 60-cycle, 63 k.v.a., 240 r.p.m.

Power. *Local distribution lines* serve the municipality of Canora.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry., and Grand Trunk Pacific Ry.

CARLYLE.

Municipality of Carlyle. (Fuel Power Plant No. 5ND₁). Aug., 1918.

Officials,—Geo. Riddell (Mayor); Geo. Bryson (Secy.-Treas.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$20,000.

Plant. *Official*,—Wm. Grant (Engr. Pwr. Sta.).

Location,—Plant is located in Carlyle, Sask.

Installation,—Steam Engine—1 reciprocating, 52 h.p.; Generator—1 Simske, Swedish, A.C., 3-phase, 60-cycle, 35 k.v.a., 514 r.p.m.

Power. *Local distribution lines* serve the municipality of Carlyle.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry., and Canadian Northern Ry.

DAVIDSON.

Municipality of Davidson. (Fuel Power Plant No. 5JG₂). May, 1918.

Officials,—D. S. Hutcheson (Mayor); A. G. Roberts (Town Clerk).

History,—Plant installed in December, 1913, with an additional unit in February, 1917.

Capital invested in Plant and Equipment,—\$35,150.

Plant. *Official*,—J. W. Mitchell (Supt.).

Location,—Plant located at Davidson, Sask.

Installation,—Gas Engines—1 at 45 h.p. and 1 at 125 h.p., total 170 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 75 k.v.a., 265 r.p.m., 1 Can. West., A.C., 3-phase, 60-cycle, 30 k.v.a., 200 r.p.m., total 105 k.v.a.

Power. *Local distribution lines* serve the municipality of Davidson.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

The municipality has at present available for sale about 100 k.w., power rate \$2 per h.p. per month.

SASKATCHEWAN.

EARL GREY.

Municipality of Earl Grey. (Fuel Power Plant No. 5JH₂). Nov., 1918.

History,—Plant installed in 1916.

Capital invested in Plant and Equipment,—\$2,200.

Plant. *Location*,—Plant located in Earl Grey, Sask.

Installation,—Oil Engine—1 at 15 h.p.; Generator—1 D.C., 10 k.w.

Power. *Local distribution lines* serve the municipality of Earl Grey.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

EASTEND.

Eastend Electric Light Plant. (Fuel Power Plant No. 11AC₁). April, 1918.

Address,—Eastend, Sask.

Official,—H. A. Crawford, Eastend (Mgr.).

History,—Plant installed in October, 1914.

Capital invested in Plant and Equipment,—\$7,000.

Plant. *Location*,—Plant located in Eastend, Sask.

Installation,—Oil Engine—1 at 25 h.p.; Generator—1 Fairbanks-Morse, D.C., 15 k.w. 1,350 r.p.m.

Power. *Local distribution lines* serve the municipality of Eastend.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

ESTEVEAN.

Municipality of Estevan. (Fuel Power Plant No. 5NB₁). May, 1918.

Officials,—P. C. Duncan (Mayor); W. L. Thompson (Town Clerk).

History,—Plant installed in 1911, with additional unit in 1913.

Capital invested in Plant and Equipment,—\$77,836.

Plant. *Official*,—S. G. Dethridge (Supt.).

Location,—Plant located in Estevan, Sask.

Installation,—Boilers—1 Babcock & Wilcox and 1 Robb-Munford, total 700 h.p.; Steam Engines—1 Robb-Munford, reciprocating, 200 h.p., 1 Goldie-McCullough, reciprocating, 125 h.p., total 325 h.p.; Generators—1 Can. West., A.C., 3-phase, 60-cycle, 125 k.v.a., 257 r.p.m., 1 Can. West., A.C., 3-phase, 60-cycle, 75 k.v.a., 450 r.p.m., total 200 k.v.a.

Power. *Local distribution lines* serve the municipality of Estevan.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry. and Canadian Northern Ry.

The municipality contemplates increasing capacity of plant to 1,000 k.w. as soon as conditions become normal.

FORT QU'APPELLE.

Fort Qu'Appelle Power Co. (Fuel Power Plant No. 5JL₃). March, 1918.

Address,—Fort Qu'Appelle, Sask.

Lessee,—S. P. Bennett, Fort Qu'Appelle (Mgr.).

History,—Plant installed in 1914.

Capital invested in Plant and Equipment,—\$8,000.

Plant. *Location*,—Plant located in Fort Qu'Appelle, Sask.

Installation,—Oil Engine—1 at 25 h.p.; Generator—1 Fairbanks-Morse, A.C., 3-phase, 60-cycle, 15 k.v.a., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Fort Qu'Appelle.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Pacific Ry.

GOVAN.

Municipality of Govan. (Fuel Power Plant No. 5JH₁). April, 1918.

Officials,—J. Orville Clarke (Mayor); A. Graham (Town Clerk).

History,—Plant installed in April, 1913.

Capital invested in Plant and Equipment,—\$5,000.

Plant. *Location*,—Plant is located at Govan, Sask.

Installation,—Oil Engine—1 Fairbanks-Morse, 20 h.p.; Generator—1 Fairbanks-Morse, D.C., 12.5 k.w., 1,375 r.p.m.

Power. *Local distribution lines* serve the municipality of Govan.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Ry.

GRENFELL.

Municipality of Grenfell. (Fuel Power Plant No. 5JM₂). Jan., 1918.

Officials,—A. C. Walters (Mayor); J. Walker (Town Clerk).

History,—Plant installed in October, 1913, with an additional unit in 1914.

Capital invested in Plant and Equipment,—\$25,814.

Plant. *Official*,—H. E. Hurst (Supt.).

Location,—Plant located in Grenfell, Sask.

Installation,—Gas Engines—1 at 64 h.p. and 1 at 15 h.p., total 79 h.p.; Generators—2 West., A.C., 3-phase, 60-cycle, 30 k.v.a. and 15 k.v.a., total 45 k.v.a.

Power. *Local distribution lines* serve the municipality of Grenfell.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

GULL LAKE.

Gull Lake Electric Light Plant. (Fuel Power Plant No. 5HA₂). May, 1918.

Address,—Gull Lake, Sask.

Owner,—Joseph Hutchinson.

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$16,046.

Plant. *Official*,—R. Curless (Engr.).

Location,—Plant located in Gull Lake, Sask.

Installation,—Gas Engine—1 Ruston-Proctor, producer-gas, 64 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Gull Lake.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

HERBERT.

May, 1918.

H. M. Klassen Electric Light and Power Plant. (Fuel Power Plant No. 5JC₁).

Address,—Herbert, Sask.

Owner,—H. M. Klassen.

History,—Plant installed in 1913.

Plant. *Officials*,—Alex. Imrie (Ch. Engr. Pwr. Sta.); Andrew Imrie (Asst. Engr. Pwr. Sta.).

Location,—Plant located in Herbert, Sask.

Installation,—Gas Engine—1 Ruston-Proctor, 60 h.p.; Generator—1 West., A.C., 3-phase, 30 k.v.a., 1,200 r.p.m.; Exciter—1 West., D.C., 2 k.w., 1,400 r.p.m.

Power. *Local distribution lines* serve the municipality of Herbert.

Use of Power,—Power is used for lighting and operation of small motors.

Power is delivered adjacent to Canadian Pacific Ry.

SASKATCHEWAN.

HUMBOLDT.

Municipality of Humboldt. (Fuel Power Plant No. 5KA₁). May, 1918.

Officials,—Robt. Telfer (Mayor); H. Dean Creed (Town Clerk).

History,—Plant installed in 1913, with additional unit in 1915.

Capital invested in Plant and Equipment,—\$60,000.

Plant. *Officials*,—F. K. Martin (Supt.).

Location,—Plant located in Humboldt, Sask., adjacent to Canadian Northern Ry.

Installation,—Boilers—2 Leonard-Waterous, 200 h.p.; Steam Engines—1 Leonard reciprocating, condensing, 200 h.p., 1 McEwen reciprocating, 50 h.p., total 250 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 125 k.v.a., 277 r.p.m., 1 West., A.C., 60-cycle, 37 k.v.a., 1,200 r.p.m., total 162 k.v.a.; Exciters—1 generator, direct connected to 125 k.v.a. unit, 1 generator, belted to 37 k.v.a. unit.

Power. *Local distribution lines* serve the municipality of Humboldt.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

The municipality has at present available for sale about 150 h.p.; power rates range from 10 to 5 cents per k.w. hr.

INDIAN HEAD.

Municipality of Indian Head. (Fuel Power Plant No. 5JL₄). April, 1918.

Officials,—G. S. Davidson (Mayor); O. J. Godfrey (Town Clerk).

History,—Plant installed in 1905.

Capital invested in Plant and Equipment,—\$42,296.

Plant. *Officials*,—John Bell (Mgr.); L. Marks (Engr. Pwr. Sta.).

Location,—Plant is located at Indian Head, Sask.

Installation,—Boiler—1 Can. Fdry., 250 h.p.; Steam Engine—1 Goldie & McCullough, reciprocating, 225 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 150 k.w., 150 r.p.m.

Power. *Local distribution lines* serve the municipality of Indian Head.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

KAMSACK.

Municipality of Kamsack. (Fuel Power Plant No. 5MD₁). Feb., 1918.

Officials,—W. G. Blewett (Mayor); A. A. Crawford (Town Clerk).

History,—Plant installed in April, 1915.

Capital invested in Plant and Equipment,—\$40,000.

Plant. *Official*,—F. N. Bradshaw (Supt.).

Location,—Plant located in Kamsack, Sask.

Installation,—Gas Engine—1 Fairbanks-Morse, producer gas, 200 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 125 k.v.a., 257 r.p.m.

Power. *Local distribution lines* serve the municipality of Kamsack.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

KINDERSLEY.

Municipality of Kindersley. (Fuel Power Plant No. 5GB₁). May, 1918.

Officials,—C. R. S. Stewart (Mayor); H. R. Dyer (Town Clerk).

History,—Plant installed in 1913.

Capital invested in Plant and Equipment,—\$44,595.

Plant. *Official*,—M. Johnston (Supt.).

Location,—Plant located in Kindersley, Sask.

Installation,—Steam Engine—1 reciprocating, 125 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 75 k.w., 277 r.p.m.

Municipality of Kindersley.—Con.

Power. *Local distribution lines* serve the municipality of Kindersley.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

The municipality has at present available for sale about 55 k.w. at rates ranging from 16 to 12.5 cents per k.w. hr.

Capacity of plant can be increased without additional boilers.

LANG.

Lang Electric Light Plant. (Fuel Power Plant No. 5JE₁). Jan., 1918.

Address.—Lang, Sask.

Owner.—W. A. Perkins.

History.—Plant installed in 1917.

Capital invested in Plant and Equipment.—\$4,000.

Plant. *Location.*—Plant located in Lang, Sask.

Installation.—Gas Engine—1 at 10 h.p.; Generator—1 D.C., 6 k.w., 550 r.p.m.

Power. *Local distribution lines* serve the municipality of Lang.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

LANGHAM.

Municipality of Langham. (Fuel Power Plant No. 5GD₁). May, 1918.

Officials.—J. H. Beaton (Mayor); J. G. Stockan (Town Clerk).

History.—Plant installed in September, 1913.

Capital invested in Plant and Equipment.—\$13,700.

Plant. *Official.*—E. Obee (Engr. Pwr. Sta.).

Location.—Plant located in Langham, Sask.

Installation.—Gas Engine—1 producer gas, 50 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Langham.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

LASHBURN.

Lashburn Electric Company. (Fuel Power Plant No. 5FE₁). Jan., 1918.

Address.—Lashburn, Sask.

Owner.—W. W. Morrison.

History.—Plant installed in January, 1914.

Capital invested in Plant and Equipment.—\$2,800.

Plant. *Location.*—Plant located in Lashburn, Sask.

Installation.—Oil Engine—1 at 25 h.p.; Generator—1 Fairbanks-Morse, D.C., 15 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Lashburn.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

LEADER.

Leader Electric Light Plant. (Fuel Power Plant No. 5HB₁). Nov., 1918.

Owner.—H. Lake, Leader, Sask.

History.—Plant installed in 1916.

Capital invested in Plant and Equipment.—\$18,000.

Plant. *Location.*—Plant located in Leader, Sask.

Installation.—Oil Engines—1 at 37½ h.p., and 1 at 25 h.p., total 62½ h.p.; Generators—1 D.C., 25 k.w., and 1 D.C., 15 k.w., total 40 k.w.

Power. *Local distribution lines* serve the municipality of Leader.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

SASKATCHEWAN.

LLOYDMINSTER.

Lloydminster Electric Light Plant. (Fuel Power Plant No. 5EF₁). Jan., 1918.

Address,—Lloydminster, Sask.

Owners,—W. Johnson & Son.

History,—Plant installed in 1907.

Capital invested in Plant and Equipment,—\$22,000.

Plant. *Official*,—E. H. Johnson (Mgr.).

Location,—Plant located in Lloydminster, Sask.

Installation,—Gas Engine—1 at 100 h.p.; Generator—1 Fairbanks-Morse, D.C., 65 k.w., 250 r.p.m.

Power. *Local distribution lines* serve the municipalities of Lloydminster, Sask., and Lloydminster, Alta.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

LUMSDEN.

Electric Light and Power Company.—(Fuel Power Plant No. 5JF₁). May, 1918.

Address,—Regina, Sask., care Ross, Hogarth & Co.

Officials,—S. P. Porter, Ernest Brown, Ross Hogarth & Co. (Act. Secy. and Mgr.).

History,—Plant installed in November, 1913, with additional unit in March, 1915.

Capital invested in Plant and Equipment,—\$19,500.

Plant. *Official*,—J. L. Bittner (Engr. Pwr. Sta.).

Location,—Plant located in Lumsden, Sask.

Installation,—Oil Engines—1 Petters 15 h.p., 1 Marshall, semi-Diesel, 25 h.p., total 40 h.p.; Generators—1 Fairbanks-Morse, A.C., 3-phase, 60-cycle, 10 k.w., 1,200 r.p.m., 1 Bruce Peebles & Co., A.C., 3-phase, 60-cycle, 15 k.w., 1,200 r.p.m., total 25 k.w.

Power. *Local distribution lines* serve the municipality of Lumsden.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

MAPLE CREEK.

The Maple Creek Light, Power and Milling Company, Ltd. (Fuel Power Plant No. 5HA₁). Jan., 1918.

Address,—Maple Creek, Sask.

Officials,—A. A. Meneley (Pres.); G. W. Quick (1st Vice-Pres.); J. H. Fleming (2nd Vice-Pres.); D. Kearns (Sec.-Treas. and Mgr.).

History,—Plant installed in 1911.

Capital invested in Plant and Equipment,—\$10,500.

Plant. *Location*,—Plant located in Maple Creek, Sask.

Installation,—Steam Engine—1 reciprocating, 100 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 75 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Maple Creek.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

The company is installing an additional unit, consisting of a Goldie & McCullough steam engine and a Westinghouse 175 k.v.a. generator.

MELFORT.

Municipality of Melfort. (Fuel Power Plant No. 5KB₂). May, 1918.

Officials,—W. W. Mansell (Mayor); H. W. Greenwood (Town Clerk).

History,—Plant installed in September, 1913.

Capital invested in Plant and Equipment,—\$33,579.

Plant. *Location*,—Plant located in Melfort, Sask.

Installation,—Oil Engine—1 Diesel, 150 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.v.a., 240 r.p.m.

Municipality of Melfort.—Con.

Power. *Local distribution lines* serve the municipality of Melfort.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

MELVILLE.

Municipality of Melville. (Fuel Power Plant No. 5JM₃). Aug., 1918.

Officials.—George N. Hart (Mayor); Fred. H. Clarkson (Sec.).

History.—Plant installed in 1911, with an additional unit in 1913.

Capital invested in Plant and Equipment.—\$78,000.

Plant. *Official.*—W. J. Lay (Supt.).

Location.—Plant located in Melville, Sask.

Installation.—Gas Engines—1 Tangye & Daniels, 85 h.p., 1 Tangye & Daniels, 200 h.p., total 285 h.p.; Generators—1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 75 k.v.a., 900 r.p.m., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 155 k.v.a., 225 r.p.m., total 230 k.v.a.

Power. *Local distribution lines* serve the municipality of Melville.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to the Grand Trunk Pacific Ry.

MILESTONE.

Milestone Electric Light Works. (Fuel Power Plant No. 5JE₃). May, 1918.

Address.—Milestone, Sask.

Owner.—Arthur Townsend.

History.—Present plant installed in January, 1907.

Capital invested in Plant and Equipment.—\$10,400.

Plant. *Location.*—Plant located in Milestone, Sask.

Installation.—Oil Engine—1 Petter, semi-Diesel, 30 h.p.; Generator—1 Ideal Elect., D.C., 20 k.w., 1,100 r.p.m.

Power. *Local distribution lines* serve the municipality of Milestone.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

MOOSEJAW.

Municipality of Moosejaw. (Fuel Power Plant No. 5JG₁). June, 1918.

Officials.—W. W. Davidson (Mayor); R. P. Riddell (City Clerk).

History.—Original plant installed in 1905 and destroyed by fire in 1912. Present plant installed with one unit in 1912 and additional units in 1913 and 1914.

Capital invested in Plant and Equipment.—\$635,000.

Plant. *Official.*—J. D. Peters (Supt.).

Location.—Plant located on Selwyn St., Moosejaw, Sask., and adjacent to main line of Canadian Pacific Ry.

Installation.—Boilers—8 Babcock & Wilcox, total 2,700 h.p.; Steam Turbines—1 at 650 h.p., 1 at 1,350 h.p., and 1 at 2,000 h.p., total 4,000 h.p.; Generators—1 Gen. Elect., A.C., 3-phase, 60-cycle, 1,000 k.w., 3,600 r.p.m., 1 Gen. Elect., A.C., 3-phase, 60-cycle, 500 k.w., 3,600 r.p.m., 1 Siemens, A.C., 3-phase, 60-cycle, 1,500 k.w., 3,600 r.p.m., total 3,000 k.w.; Exciters—1 Gen. Elect., generator, 35 k.w., turbine driven, 1 Gen. Elect., generator, 35 k.w., motor driven, 1 Gen. Elect., generator, 15 k.w., motor driven.

Power. *Local distribution lines* serve the municipality of Moosejaw.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Grand Trunk Pacific Ry.

The minimum rate for power is 1 cent per k.w. hr.

The plant is designed for an ultimate capacity of 6,000 k.w.

SASKATCHEWAN.

MORSE.

Morse Electric Light Plant. (Fuel Power Plant No. 5JC₂). May, 1918.

Address.—Morse, Sask.

Owner.—E. Lapajade.

History.—Plant installed May, 1914.

Capital invested in Plant and Equipment.—\$30,000.

Plant. *Location.*—Plant located in Morse, Sask.

Installation.—Gas Engine—1 Field & Pratt, 68 h.p.; Generator—1 West., A.C., 3-phase, 60-cycle, 30 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Morse.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

NORTH BATTLEFORD.

Municipality of North Battleford. (Fuel Power Plant No. 5EG₁). May, 1918.

Officials.—H. Basil Thomas (Mayor); R. Farquharson (City Clerk); M. D. Caldwell (Supt. Utilities).

History.—Plant installed in 1910 with additional unit in 1913.

Capital invested in Plant and Equipment.—\$136,803.

Plant. *Location.*—Plant located in North Battleford, Sask.

Installation.—Steam Engines—1 reciprocating, 200 h.p., 1 reciprocating, 1,000 h.p., total 1,200 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 125 k.w., 225 r.p.m.; 1 West., A.C., 3-phase, 60-cycle, 550 k.w., 300 r.p.m., total 675 k.w.; Exciters—2 generators, 15 k.w. and 16 k.w.

Power. *Transmission Line.*—3 miles of wooden pole line serves municipality of Battleford and local distribution lines serve municipality of North Battleford.

Use of Power.—Power is used for lighting and general power purposes.

Power is sold in bulk to municipality of Battleford.

Power is delivered adjacent to Canadian Northern Ry.

The municipality has at present available for sale about 400 h.p.

The plant is designed for an ultimate capacity of 3,000 h.p.

OUTLOOK.

Municipality of Outlook. (Fuel Power Plant No. 5HF₁). Oct., 1915.

Officials.—A. A. Evans (Mayor); Thos. J. Colby (Town Clerk).

Capital invested in Plant and Equipment.—\$18,729.

Plant. *Official.*—R. Smith (Supt.).

Location.—Plant located in Outlook, Sask.

Installation.—Gas Engine—1 Ruston Proctor, producer gas, 75 h.p.; Generator—1 West., A.C., 3-phase, 50 k.w., 300 r.p.m.

Power. *Local distribution lines* serve the municipality of Outlook.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

Power rate is 10 cents per k.w. hr.

OXBOW.

Municipality of Oxbow. (Fuel Power Plant No. 5ND₂). Nov., 1918.

History.—Plant installed in 1917.

Capital invested in Plant and Equipment.—\$18,000.

Plant. *Location.*—Plant located in Oxbow, Sask.

Installation.—Oil Engine—1 at 25 h.p.; Generator—1 D.C., 20 k.w.

Power. *Local distribution lines* serve the municipality of Oxbow.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

PONTEIX.

Ponteix Electric Light Plant. (Fuel Power Plant No. 5JB₂). Nov., 1918.

Owner,—A. L. Thompson.

History,—Plant installed in 1917.

Capital invested in Plant and Equipment,—\$3,700.

Plant. *Location*,—Plant located in Ponteix, Sask.

Installation,—Oil Engine—1 at 20 h.p.; Generator—1 D.C., at 10 k.w.

Power. *Local distribution lines* serve the municipality of Ponteix.

Use of Power,—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

PRINCE ALBERT.

Municipality of Prince Albert. (Fuel Power Plant No. 5GG₁). Jan., 1918.

Officials—Wm. Knox (Mayor); J. B. Brown (City Clerk).

History,—Plant acquired by municipality in 1904. The existing units were installed in 1908 and 1912.

Capital invested in Plant and Equipment,—\$250,000.

Plant. *Official*,—R. Wright (Elect. Engr.).

Location,—Plant located at 644 River St., West Prince Albert.

Installation,—Boilers,—Babcock & Wilcox and Goldie & McCullough, total 1,400 h.p.; Steam Engines—1 Cross compound reciprocating, 420 h.p.; 1 Corliss condensing reciprocating, 1,100 h.p., total 1,520 h.p.; Generators—1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 260 k.v.a., 150 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 632 k.v.a., 120 r.p.m., total 896 k.v.a.

Power. *Local distribution lines* serve the municipality of Prince Albert.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry., and Grand Trunk Pacific Ry.

QU'APPELLE.

The Qu'Appelle Electric Light Company. (Fuel Power Plant No. 5JL₂). May, 1918.

Address,—Qu'Appelle, Sask.

Official,—H. H. Kajewski, Qu'Appelle (Pres. and Mgr.).

History,—Plant installed in 1911.

Capital invested in Plant and Equipment,—\$15,000.

Plant. *Location*,—Plant located in Qu'Appelle.

Installation,—Gas Engine—1 producer gas, 100 h.p.; Generators—2 Allis-Chalmers-Bullock, D.C., 70 k.w. each, 1,050 r.p.m., total 140 k.w.

Power. *Local distribution lines* serve the municipality of Qu'Appelle.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

RADISSON.

Radisson Iron Works. (Fuel Power Plant No. 5GD₂). Jan., 1918.

Address,—Radisson, Sask.

Owners,—Radisson Iron Works.

History,—First unit installed in 1912; additional unit in 1917.

Capital invested in Plant and Equipment,—\$4,000.

Plant. *Official*,—N. Snyder (Mgr.).

Location,—Plant located in Radisson, Sask.

Installation,—Oil Engines—1 at 8 h.p. and 1 at 25 h.p., total 33 h.p.; Generators—1 Fairbanks-Morse, D.C., 5 k.w., 1,025 r.p.m., 1 West., D.C., 20 k.w., 1,900 r.p.m., total 25 k.w.

Power. *Local distribution lines* serve the municipality of Radisson.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Northern Ry.

SASKATCHEWAN.

REGINA.**Municipality of Regina.** Aug., 1918.*Officials*.—Henry Black (Mayor); George Beach (Clerk).*History*.—Plant No. 1 installed in 1909, with additional units in 1911 and 1913, and is now partly used as water pumping station and sub-station for street railway and street lighting. Plant No. 2 installed in 1911, with additional units in 1913 and 1915.*Capital invested in Plants and Equipment*.—\$1,500,000.**Plant No. 1.** (Fuel Power Plant No. 2JF₂).*Officials*.—F. W. Bull (Supt.); A. Cole (Engr. Pwr. Sta.).*Location*.—Plant located at Dewdney Ave. and Broad St. in Regina, Sask.*Installation*.—Boilers—4 Babcock & Wilcox, hand-fired, 250 h.p. each; Steam Engines—2 Bellis & Morcom, 580 h.p. each; Steam Turbine—1 West., 603 h.p., total prime power 1,763 h.p.; Generators—2 Siemens, D.C., 400 k.w. each, 350 r.p.m., 1 West., A.C., 3-phase, 450 k.w., 3,600 r.p.m., total 1,250 k.w.; Exciter—1 motor-driven generator, 10 k.w.**Plant No. 2.** (Fuel Power Plant No. 5JF₃).*Location*.—Plant located at Douglas Ave. and Winnipeg St. in Regina, Sask.*Installation*.—Boilers—6 Babcock & Wilcox, Riley under-feed stokers, 500 h.p. each; Steam Turbines—1 Willans & Robinson, 4,043 h.p., 2 Willans & Robinson, 2,011 h.p., total 8,065 h.p.; Generators—1 Siemens, A.C., 3-phase, 60-cycle, 1,500 k.w., 1,800 r.p.m., 1 Siemens, A.C., 3-phase, 60-cycle, 1,500 k.w., 3,600 r.p.m., 1 Siemens, A.C., 3-phase, 60-cycle, 3,000 k.w., 3,600 r.p.m., total 6,000 k.w.; Exciters—1 steam turbine-driven generator, 125 k.w., 1 Terry, non-condensing steam turbine, 187 h.p., 3,100 r.p.m., 1 motor-driven generator, 25 k.w., 1 motor-driven generator, 125 k.w.**Power.** *Local distribution lines* serve the municipality of Regina.*Use of Power*.—Power is used for lighting, operation of electric railway, general manufacturing and general power purposes.*Power is delivered* adjacent to Canadian Pacific Ry. and Grand Trunk Ry.

The municipality are now installing in Plant No. 2 a 5,000 k.w. Gen. Elect. Curtis steam turbine and will have available for sale before the end of 1918 about 5,000 k.w.

Plant No. 2 is designed for an ultimate capacity of 21,000 k.w.

ROSETOWN.

April, 1918.

Rosetown Electric Light and Power Company, Ltd. (Fuel Power Plant No. 5GC₁).*Address*.—Rosetown, Sask.*Officials*.—W. G. King, Rosetown (Chmn.); D. H. Evans, Rosetown (Mng. Dir. and Sec.-Treas.).*History*.—Plant originally installed with steam power in 1913 and was taken over by present owners in 1915. Present oil engine installed in January, 1915, to replace former steam engine.*Capital invested in Plant and Equipment*.—\$20,000.**Plant.** *Official*.—W. Wegner, Rosetown (Elect. Engr.).*Location*.—Plant located in Rosetown, Sask.*Installation*.—Oil Engine—1 at 75 h.p.; Generator—1 Fairbanks-Morse, A.C., 3-phase, 60-cycle, 60 k.v.a., 1,200 r.p.m.**Power.** *Local distribution lines* serve the municipality of Rosetown.*Use of Power*.—Power is used for lighting only.*Power is delivered* adjacent to Canadian Pacific Ry. and Canadian Northern Ry.**SASKATCHEWAN.**

ROSTHERN.

Municipality of Rosthern. (Fuel Power Plant No. 5HH₁). May, 1918.

Officials,—R. S. Fleury (Mayor); K. A. Reeder (Town Clerk).

History,—Plant commenced operating March 25, 1918.

Capital invested in Plant and Equipment,—\$18,600.

Plant. *Location*,—Plant located in Rosthern, Sask.

Installation,—Oil Engine—1 at 40 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 30 k.v.a., 1,200 r.p.m.; Exciter—1 Can. West., D.C., 2 k.w., 1,400 r.p.m.

Power. *Local distribution lines* serve the municipality of Rosthern.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

The power-house is designed for duplication of present units.

ROULEAU.

Municipality of Rouleau. (Fuel Power Plant No. 5JE₁). May, 1918.

Officials,—A. E. Westbrook (Mayor); R. R. Carter (Town Clerk).

History,—Plant installed in 1911.

Capital invested in Plant and Equipment,—\$75,000.

Plant. *Official*,—Geo. A. Taylor (Supt. and Engr. Pwr. Sta.).

Location,—Plant located in Rouleau, Sask.

Installation,—Gas Engine—1 Smith, 172 h.p.; Oil Engine—1 at 20 h.p., total prime power, 192 h.p.; Generator—1 Can. Gen. Elect., A.C., 3-phase, 75 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Rouleau.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

SALTCOATS.

Municipality of Saltcoats. (Fuel Power Plant No. 5MD₂). Aug., 1918.

Officials,—W. J. Munro (Mayor); S. G. Fisher (Town Clerk).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$15,815.

Plant. *Official*,—Jas. Ritchie (Engr. Pwr. Sta.).

Location,—Plant is located in Saltcoats, Sask.

Installation,—Gas Engine—1 Tangyes, 50 h.p.; Generator—1 A.C., 3-phase, 37 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Saltcoats.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

SASKATOON.

Municipality of Saskatoon. (Fuel Power Plant No. 5HG₁). May, 1918.

Officials,—Dr. A. M. Young (Mayor); C. J. Yorath (Com'r.); A. Leslie (City Clerk).

History,—Original plant installed in 1908, about 1½ mile from Saskatoon. Present plant installed in 1912 and enlarged and additional units added in 1914.

Capital invested in Plant and Equipment,—\$1,210,639.

Plant. *Officials*,—J. R. Cowley (City Elect. Engr.); Charles Cutting (Ch. Engr. Pwr. Sta.); Jas. Porter (Line Supt.).

Location,—Plant located on Avenue A, Saskatoon, adjacent to siding from Canadian Northern Ry.

SASKATCHEWAN

Municipality of Saskatoon.—Con.

Installation.—Steam Engine—1 Robb, reciprocating, 1,000 h.p.; Steam Turbines—1 Allis-Chalmers, 2,700 h.p., 1 West., 4,300 h.p., total prime power 8,000 h.p.; Generators—1 Can. Gen. Elect., A.C., 2-phase, 60-cycle, 937 k.v.a., 120 r.p.m., 1 Allis-Chalmers, A.C., 2-phase, 60-cycle, 2,500 k.v.a., 1,800 r.p.m., 1 West., A.C., 2-phase, 60-cycle, 4,000 k.v.a., 3,600 r.p.m., total 7,437 k.v.a.; Exciters—2 Allis-Chalmers, turbo generators, 75 k.w. each.

Power. Transmission Lines.—3.3 miles of underground line serves Government grain elevator; 2.75 miles of wooden pole line serves Interprovincial Flour Milling Company. Local distribution lines serve the municipality of Saskatoon.

Use of Power.—Power is used for lighting, operation of electric railway, operation of municipal pumping plant, general manufacturing and general power purposes, including operation of flour mills, grain elevator, refrigerators and freight and passenger elevators.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry., and Grand Trunk Pacific Ry.

The municipality has at present available for sale about 1,000 k.w. at rates ranging from 5-4 cents to 1 cent per k.w. hr.

The capacity of the plant may be increased by 3,000 k.w. without extension of buildings.

SCOTT.

Municipality of Scott. (Fuel Power Plant No. 5GB₃). Nov., 1918.

History.—Plant installed in 1912.

Capital invested in Plant and Equipment.—\$32,500.

Plant. Location.—Plant located in Scott, Sask.

Installation.—Oil Engine—I Diesel, 100 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 75 k.w.

Power. Local distribution lines serve the municipality of Scott.

Use of Power.—Power is used for lighting and operation of water works.

Power is delivered adjacent to Grand Trunk Pacific Ry.

SEMANS.

Semans Electric Light Company, Ltd. (Fuel Power Plant No. 5JJ₂). Sept., 1918.

Address.—Semans, Sask.

Officials.—R. W. Lauder, Semans (Mgr.); W. G. Wright, Semans (Sec.-Treas.).

History.—Plant installed in 1915.

Capital invested in Plant and Equipment.—\$3,395.

Plant. Location.—Plant located in Semans, Sask.

Installation.—Oil Engines—1 at 9 h.p. and 1 at 15 h.p., total 24 h.p.; Generators—1 Fairbanks-Morse, D.C., 12.5 k.w., 1,500 r.p.m., 1 Fairbanks-Morse, D.C., 5.5 k.w., 1,750 r.p.m., total 18 k.w.

Power. Local distribution lines serve the municipality of Semans.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Pacific Ry.

SHAUNAVON.

Shaunavon Electric Light Plant. (Fuel Power Plant No. 5JB₁). Jan., 1918.

Address.—Shaunavon, Sask.

Owner.—H. G. Eakins.

History.—Plant installed in 1914.

Capital invested in Plant and Equipment.—\$4,500.

SASKATCHEWAN

✓ not included in 1918 schedules
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Shaunavon Electric Light Plant.—Con.

Plant. *Official.*—Bruce Fletcher (Engr. Pwr. Sta.).

Location.—Plant located in Shaunavon, Sask.

Installation.—Oil Engine—1 Special Electric, 25 h.p.; Generator—1 Fairbanks-Morse, D.C., 15 k.w., 1,250 r.p.m.

Power. *Local distribution lines* serve the municipality of Shaunavon.

Use of Power.—Power is used for lighting only.

STRASSBURG.

Municipality of Strassburg. (Fuel Power Plant No. 6JH₁). Nov., 1918.

History.—Plant installed in 1913.

Capital invested in Plant and Equipment.—\$14,000.

Plant. *Location.*—Plant located in Strassburg, Sask.

Installation.—Gas Engine—1 at 45 h.p.; Generator—1 A.C., 3-phase, 60-cycle, 37 k.v.a.

Power. *Local distribution lines* serve the municipality of Strassburg.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Pacific Ry.

SWIFT CURRENT.

Municipality of Swift Current. (Fuel Power Plant No. 5HD₁). May, 1918.

Officials.—W. Jones (Mayor); Geo. D. Arnott (City Clerk); J. W. Calder (City Engr.).

History.—In addition to the present plant the municipality formerly operated a steam plant which has recently been abandoned. The present plant was installed with two gas engines in 1911 and the oil engine added early in 1918.

Capital invested in Plant and Equipment.—\$280,000.

Plant. *Official.*—C. P. Tourn (Engr. Pwr. Sta.).

Location.—Plant located three-quarters of a mile south of Swift Current.

Installation.—Gas Engines—1 producer gas, 200 h.p., 1 producer gas, 65 h.p.; Oil Engine—1 Diesel, 600 h.p., total prime power 865 h.p.; Generators—2 Allis-Chalmers, A.C., 3-phase, 60-cycle, 35 k.w., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 125 k.w., 1 Swedish Gen. Elect., A.C., 3-phase, 60-cycle, 500 k.w., total 660 k.w.; Exciters—4 generators, one for each main unit; Transformers—3 single-phase, primary 2,200 v., secondary 4,100 v., 50 k.w. each.

Power. *Local distribution lines* serve the municipality of Swift Current.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

The municipality has at present available for sale about 600 k.w.; power rates range from 5 to 2 cents per k.w. hr. with 10 per cent discount.

TISDALE.

Tisdale Trading and Milling Company. (Fuel Power Plant No. 5KB₁). May, 1918.

Address.—Local Office, Tisdale, Sask.

Directors.—Capt. J. A. Turner, Winnipeg; D. A. Hanes, Tisdale; J. McFarlane, Tisdale.

Officials.—Capt. J. A. Turner, Winnipeg (Pres.); D. A. Hanes, Tisdale (Mng. Dir.); J. McFarlane, Tisdale (Sec.-Treas.).

History.—Plant installed in December, 1914. The lighting plant is operated in conjunction with the power plant required to operate the company's flour and grist mill.

Capital invested in Plant and Equipment.—\$6,000.

Plant. *Location.*—Plant located in Tisdale, Sask.

Installation.—Steam Engine—1 reciprocating, 125 h.p.; Generator—1 Allis-Chalmers, A.C., 3-phase, 60 k.w., 1,200 r.p.m.

SASKATCHEWAN.

Tisdale Trading and Milling Company.—Con.

Power. *Local distribution lines* serve the municipality of Tisdale.

Use of Power.—Power is used for lighting and operation of grist mill.

Power is delivered adjacent to Canadian Northern Ry.

TUGASKE.

Tugaske Electric Light Plant. (Fuel Power Plant 5JG₃). Nov., 1918.

Owner.—G. A. Turner.

Plant. *Location.*—Plant located in Tugaske, Sask.

Installation.—Gas Engine—1 at 2½ h.p.; Generator—1 D.C., 2 k.w.

Power. *Local distribution lines* serve the municipality of Tugaske.

Use of Power.—Power is used for lighting.

WADENA.

Municipality of Wadena. (Fuel Power Plant No. 5MA₁). Sept., 1918.

Officials.—W. E. Jenkins (Mayor); James F. T. Saich (Town Clerk).

History.—Plant installed in 1914.

Capital invested in Plant and Equipment.—\$16,000.

Plant. *Official.*—J. Danielson (Supt.).

Location.—Plant located in Wadena.

Installation.—Gas engine—1 Ruston-Proctor, producer gas, 65 h.p.; Generator—1 Can. West., A.C., 3-phase, 30 k.w., 1,200 r.p.m.; Exciter—1 generator, 2 k.w.

Power. *Local distribution lines* serve the municipality of Wadena.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Northern Ry.

Plant destroyed by fire August, 1918.

WATEROUS.

Waterous Electric Light Company. (Fuel Power Plant No. 5JJ₁). April, 1918.

Address.—Waterous, Sask.

History.—Plant installed in 1912.

Capital invested in Plant and Equipment.—\$20,000.

Plant. *Official.*—T. Ferguson (Supt.).

Location.—Plant located in Waterous, Sask.

Installation.—Gas Engines—1 Crossley, producer gas, 90 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 50 k.w., 1,200 r.p.m.

Power. *Local distribution lines* serve the municipality of Waterous.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Grand Trunk Pacific Ry.

WATSON.

Watson Electric Light Plant. (Fuel Power Plant No. 5MA₂). Nov., 1918.

Owner.—H. A. Green.

History.—Plant installed in 1917.

Plant. *Location.*—Plant located in Watson, Sask.

Installation.—Oil Engine—1 at 10 h.p.; Generator—1 D.C., 7½ k.w.

Power. *Local distribution lines* serve the municipality of Watson.

Use of Power.—Power is used for lighting.

Power is delivered adjacent to Canadian Northern Ry.

WEYBURN.

Municipality of Weyburn. (Fuel Power Plant No. 5NB₃). Aug., 1918.

Officials.—F. B. Moffet (Mayor); E. H. Phillips (City Clerk); Geo. V. Reed (City Commr.).

History.—Plant installed in 1907, with additional units in 1911 and 1914.

Capital invested in Plant and Equipment.—\$126,695.

Municipality of Weyburn.—Con.

Plant. *Officials*,—Geo. V. Reed (Supt.); A. J. Woodard (Engr. Pwr. Sta.).

Location,—Plant located in Weyburn, adjacent to Canadian Pacific Ry.

Installation,—Boilers—1 Babcock & Wilcox, water tube, 25 h.p., 2 International, water tube, 260 h.p. each; Steam Engines—1 Corliss, simple, 140 h.p., 120 r.p.m., 1 Corliss, cross compound, 400 h.p., 120 r.p.m., total 540 h.p.; Generators—1 Can. Gen. Elect., A.C., 3-phase, 60-cycle, 100 k.w., 900 r.p.m., 1 Allis-Chalmers-Bullock, A.C., 3-phase, 60-cycle, 250 k.w., 120 r.p.m., total 350 k.w.; Exciters—1 Allis-Chalmers generator, 6 k.w., 1,800 r.p.m., 1 Allis-Chalmers generator, 12 k.w., 900 r.p.m.

Power. *Local distribution lines* serve the municipality of Weyburn.

Use of Power,—Power is used for lighting and general power purposes, including operation of grain elevators, planing mills, and municipal pumping plant.

The municipality has at present available for sale about 150 k.w.

The power-house is designed for an ultimate capacity of about 1,500 k.w. and the municipality contemplates installing an additional 500 k.w. steam turbo-generator set with exciter unit.

WILCOX.

Wilcox Electric Light Plant. (Fuel Power Plant No. 5JE₂). June, 1918.

Address,—Wilcox, Sask.

Owner,—H. R. Gordon.

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$5,000.

Plant. *Official*,—D. M. Laurence (Mgr.).

Location,—Plant located at Wilcox, Sask.

Installation,—Gas Engine—1 vertical, 9 h.p.; Generator—1 Fairbanks-Morse, D.C., 7½ k.w., 1,750 r.p.m.

Power. *Local distribution lines* serve the municipality of Wilcox.

Use of Power,—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

WILKIE.

Municipality of Wilkie. (Fuel Power Plant No. 5GB₂). May, 1918.

Officials,—A. J. Scott (Mayor); T. A. Dinsley (Town Clerk and Commr.).

History,—Plant installed in 1912.

Capital invested in Plant and Equipment,—\$24,700.

Plant. *Official*,—T. Meakes (Engr. Pwr. Sta.).

Location,—Plant located in Wilkie, Sask.

Installation,—Oil Engine—1 at 100 h.p.; Generator—1 Can. West., A.C., 3-phase, 60-cycle, 75 k.w., 250 r.p.m.

Power. *Local distribution lines* serve the municipality of Wilkie.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

WOLSELEY.

Municipality of Wolseley. (Fuel Power Plant No. 5JL₂). Jan., 1918.

Officials,—R. J. Campbell (Mayor); A. Hill (Town Clerk).

Capital invested in Plant and Equipment,—\$40,500.

Plant. *Official*,—Chas. Stengel (Mgr.).

Location,—Plant is located at Wolseley, Sask.

Installation,—Engines—1 Olds, 60 h.p. gas engine, 1 Daniels, 80 h.p. gas engine, 1 Fairbanks-Morse, 50 h.p. oil engine, total 190 h.p.; Generators—1 West., A.C., 3-phase, 60-cycle, 50 k.w., 327 r.p.m., 1 West., A.C., 3-phase, 60-cycle, 50 k.w., 1,200 r.p.m., total 100 k.w.

SASKATCHEWAN.

Municipality of Wolseley.—Con.

Power. *Local distribution lines* serve the municipality of Wolseley.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry.

Power rate, 12 cents per k.w. hr.

YELLOW GRASS.

Municipality of Yellow Grass. (Fuel Power Plant No. 5NB₂). Jan., 1918.

Officials.—J. H. Allan, M.D. (Mayor); H. C. Dupont (Town Clerk).

History.—Plant installed in 1909. Present generator installed in 1913.

Capital invested in Plant and Equipment.—\$13,000.

Plant. *Official.*—D. Rowland (Engr. Pwr. Sta.).

Location.—Plant located in Yellow Grass, Sask.

Installation.—Oil Engine—1 at 25 h.p.; Generator—1 Siemens, D.C., 17 k.w., 1,140 r.p.m.

Power. *Local distribution lines* serve the municipality of Yellow Grass.

Use of Power.—Power is used for lighting only.

Power is delivered adjacent to Canadian Pacific Ry.

YORKTON.

Municipality of Yorkton. (Fuel Power Plant No. 5MB₂). May, 1918.

Officials.—Jas. E. Peaker (Mayor); F. H. Pilkington (Town Clerk).

History.—Plant installed in 1910, with additional unit in 1914.

Capital invested in Plant and Equipment.—\$228,005.

Plant. *Officials.*—W. D. McPherson (Supt.); Oscar Olson (Engr. Pwr. Sta.).

Location.—Plant is located in Yorkton, Sask.

Installation.—Oil Engines—2 Mirrless, Beckerton & Day, Diesel, 144 h.p. and 500 h.p., total 644 h.p.; Generators—1 Siemens, A.C., 3-phase, 60-cycle, 100 k.v.a., 240 r.p.m., 1 Siemens, A.C., 3-phase, 60-cycle, 400 k.v.a., 200 r.p.m., total 500 k.v.a.

Power. *Local distribution lines* serve the municipality of Yorkton.

Use of Power.—Power is used for lighting and general power purposes.

Power is delivered adjacent to Canadian Pacific Ry., Canadian Northern Ry. and Grand Trunk Pacific Ry.

YUKON TERRITORY.**DAWSON.**

Canadian Klondyke Power Company. (Hydro Power Plant No. 9EA₁). Controlled by the Canadian Klondyke Mining Co., Ltd. June, 1918.

Address.—Dawson, Yukon Territory.

Officials.—James McDougall, New York, N.Y. (Pres.); D. A. Boyle, Woodstock, Ont. (Vice-Pres.); J. Kennally, Dawson, Y.T. (Sec.); J. W. Boyle, Jr., Dawson, Y.T. (Act. Gen. Mgr.).

History.—Plant installed in 1911.

Capital invested in Plant and Equipment.—\$3,349,058.

Plant. *Officials.*—John C. R. Coates, Dawson (Supt. and Ch. Engr.); C. Diers, Glenboyle (Engr. Pwr. Sta.).

Location.—Plant located on north fork of Klondyke river about 26 miles from Dawson, Y.T.

Installation.—Plant operates under an average head of 223 feet; Turbines—2 I. P. Morris, 32-inch, Francis, 5,000 h.p. each, 514 r.p.m., total 10,000 h.p.; Generators—2 West., A.C., 3-phase, 60-cycle, 3,000 k.v.a. each, 514 r.p.m., total 6,000 k.v.a.; Exciters—1 Pelton, 36-inch turbine, 125 h.p., 385 r.p.m., 1 motor, 3-phase, 2,300 v., 385 r.p.m., 2 generators, 85 k.w. each, 385 r.p.m.; Transformers—1 bank of 6 West., single-phase, water-cooled oil-insulated, primary 2,300 v., secondary 33,000 v., 1,250 k.v.a. each.

Canadian Klondyke Power Company.—Con.

Power. *Transmission Line*,—35 miles of wooden pole line serves the municipality of Dawson, Y.T.

Use of Power,—Power is used for lighting and operation of mines.

Power is delivered adjacent to Ocean navigation, White Pass and Yukon steamboat route.

Power is sold in bulk to Dawson Electric Light and Power Co., Ltd., and to mining companies.

The Dawson Electric Light and Power Company. (Fuel Power Plant No. 9EA.).

Controlled by Northern Light, Power and Coal Company, Ltd. April, 1918.

Address,—Dawson, Yukon Territory.

Officials,—E. P. Burrall, Dawson, Y.T. (Pres.); A. E. Lee, Dawson, Y.T. (Vice-Pres. and Mgr.); M. J. McIver, Dawson, Y.T. (Sec.).

History,—The plant, which includes the water-supply pumping plant, was originally installed in 1900, leased to the Canadian Klondyke Mining Company and operated under the name of the Dawson Electric Light and Power Company, which company did the pumping, under contract, for the Dawson City Water and Power Company. The Dawson Electric Light and Power Company and the Dawson City Water and Power Company were acquired by the Northern Light, Power and Coal Company, Ltd., in 1909 and the interests became subsidiary companies. The plant was destroyed by fire in May, 1913, and re-installed immediately. At present the Water Company operates the plant and sells power to the Electric Light Company for distribution. The pumping plant is operated continuously but the electrical portion of the plant is used as auxiliary to purchased power.

Capital,—Authorized, \$150,000. Issued, \$150,000.

Capital invested in Plant and Equipment,—\$63,210.

Plant. *Location*,—Plant located on Craig street, adjacent to Klondyke river at Junction of Klondyke and Yukon rivers, in Dawson.

Installation,—Boilers—1 Babcock & Wilcox, water tube, 400 h.p., 1 Standard, water tube, 300 h.p.; Steam turbine—1 at 160 h.p.; Generator—1 West, A.C., 3-phase, 60-cycle, 125 k.w., 3,600 r.p.m.

Power. *Local distribution lines* serve the municipality of Dawson. Power is purchased in bulk from Canadian Klondyke Power Company, Ltd.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to White Pass and Yukon steamboat route. The pumping plant, for domestic water supply and fire protection, is located in the power-house.

Power rates range from 20 to 8 cents per k.w. hr.

WHITEHORSE.

Yukon Electrical Company, Ltd. (Fuel Power Plant No. 9AB₁). April, 1918.

Address,—Whitehorse, Y.T.

Officials,—A. G. Smith, Vancouver, B.C. (Pres.); W. L. Phelps, Whitehorse, Y.T. (Vice-Pres. and Gen. Mgr.); A. Wood, Whitehorse, Y.T. (Sec.).

History,—Plant installed in 1901.

Capital invested in Plant and Equipment,—\$5,740.

Plant. *Officials*,—C. E. French (Engr. Pwr. Sta.); F. W. Gray (Ch. Electn.).

Location,—Plant located in Whitehorse, Y.T.

Installation,—Steam Engine—1 reciprocating, 60 h.p.; Generator—1 West, D.C., 30 k.w., 1,050 r.p.m.

Power. *Local distribution lines* serve the municipality of Whitehorse.

Use of Power,—Power is used for lighting and general power purposes.

Power is delivered adjacent to White Pass and Yukon Ry., and Whitehorse and Dawson steamboat route.

YUKON TERRITORY.

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