CANADA

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY, 1923

CENTRAL ELECTRIC STATIONS IN CANADA

(Prepared in collaboration with the Dominion Water Power Branch, Department of the Interior, with the assistance of the Ontario Hydro-Electric Power Commission, the Quebec Streams Commission, The New Brunswick Electric Power Commission, The Nova Scotia Power Commission and The Manitoba Power Commission)

Published by authority of the Hon. Thos. A. Low, M.P., Minister of Trade and Commerce

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1925

Price, 25 cents

CANADA

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY, 1923

CENTRAL ELECTRIC STATIONS IN CANADA

(Prepared in collaboration with the Dominion Water Power Branch, Department of the Interior, with the assistance of the Ontario Hydro-Electric Power Commission, the Quebec Streams Commission, The New Brunswick Electric Power Commission, The Nova Scotia Power Commission and The Manitoba Power Commission)

Published by authority of the Hon. Thos. A. Low, M.P., Minister of Trade and Commerce

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1925

TABLE OF CONTENTS

TABLES

CENSUS OF INDUSTRY, 1923

CENTRAL ELECTRIC STATIONS

Preface

The sixth annual report on the Central Electric Station Industry of Canada has been compiled by authority of the Statistics Act, 1918 (8–9 George V, Chapter 43), under the direction of Mr. G. S. Wrong, B.Sc., of the Dominion Bureau of Statistics.

The Electricity and Gas Inspection Service Branch, Department of Trade and Commerce; the Dominion Water Power Branch, Department of the Interior; the Hydro-Electric Power Commission of Ontario; and other provincial departments and commissions have assisted in the collection of the schedules. Under the co-operative arrangement between the Bureau and the Dominion Water Power Branch, the schedules and report have been checked, under the direction of Mr. J. T. Johnston, Assistant Director, by Mr. Alexander Roger, Engineer of the Dominion Water Power Branch. The cordial thanks of the Bureau are tendered to the several departments co-operating as above and to the managers of the Central Electric Stations for their promptness in supplying the data.

R. H. COATS,
Dominion Statistician.

Dominion Bureau of Statistics,
Ottawa, December 16, 1924.

NOTE ON CANADIAN WATER-POWERS FOR CENTRAL STATIONS REPORT FOR 1923

Canada is richly endowed with water-power resources. Practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within easy transmission distance ample reserves of water-power. In both the central electric station and pulp and paper industries of Canada hydraulic energy furnishes more than 90 per cent of the prime motive power employed.

The administration of the water resources of the Dominion is a divided federal and provincial responsibility. The Department of Railways and Canals is responsible for water and storage projects incidental to canalization schemes, and the Department of Public Works, being responsible for the protection of navigation throughout Canada, is directly concerned with power and storage projects on all navigable bodies of water. In Alberta, Saskatchewan, Manitoba and the Yukon and Northwest Territories, control is vested in the Department of the Interior, Dominion Water Power Branch. Throughout the remainder of Canada, administration is carried out by the following respective provincial authorities: British Columbia, Department of Lands; Ontario, Department of Lands and Forests; Quebec, Department of Lands and Forests; Nova Scotia, Commissioner of Public Works and Mines; New Brunswick, Department of Lands and Mines; Prince Edward Island, Commissioner of Public Works.

In Manitoba, Ontario, New Brunswick and Nova Scotia, commissions under the Government have been formed to develop or purchase power and to transmit and distribute electric energy. The greatest development in this field has been in Ontario through the Hydro-Electric Power Commission formed in 1905. In general, the commission acts as administrator for municipalities undertaking to co-operatively purchase or develop electric energy; it also acts as trustee for the Provincial Government, the financing of the enterprises being backed by the Government. The Manitoba and Nova Scotia Power Commissions, formed in 1919, and the New Brunswick Electric Power Commission in 1920, have much the same functions as the Hydro-Electric Power Commission of Ontario. In the province of Quebec the Quebec Streams Commission is actively engaged in the examination of rivers and power sites and the construction of storage basins for water-power purposes.

The year just passed has witnessed a growth of over 300,000 horse-power in the hydraulic installation of the country, 90 per cent of which has been installed in central electric stations, while developments under construction or in actual prospect are expected to add another 640,000 horse-power before the end of 1925. Construction has been most active in the province of Quebec, the outstanding additions being 120,000 horse-power at the St. Maurice Power Company's station at La Gabelle, 22,000 horse-power at the Montreal Light, Heat and Power Consolidated's station at Cedars, and 20,000 installed on the Quinze river by the Northern Canada Power Company. The Saguenay development of the Duke-Price Power Company is rapidly nearing completion, 90,000 horse-power to be available by January, and 360,000 horse-power by September, 1925. The Ottawa River Power Company's Bryson development of 25,000 horse-power and the Hemmings Falls station of the Southern Canada Power Company, with 33,600 horse-power, will also be completed before the end of 1925. In Ontario the rapidly growing demand for power around the head of the Great Lakes has led to the installation of 2 units totalling 25,000 horse-

power in the Hydro-Electric Power Commission's Nipigon station, with the expectation of 2 similar units in 1925, completing the ultimate installation of 75,000 horse-power. At the Chippawa-Queenston station, units of 6 and 7 were brought into operation, and numbers 8 and 9 are expected to be in place before the end of 1925. The 10th and last unit will complete the total installation of 550,000 horse-power in 1926. Other activities of the Commission include the installation of 600 horse-power at Bingham Chutes for the Nipissing system and 6,600 horse-power on the Trent river for the Central Ontario system. New stations and additional equipment are being provided to supply the growing demand for power in the mining fields of Northern Ontario. Among these may be mentioned the 24,000 station recently completed by the Hollinger Consolidated Gold Mines, Limited, 2,000 horse-power additional installation by the Great Northern Power Company, 2,750 horse-power by the Lorne Power Company, and 1,100 h.p. by the Northern Ontario Light and Power Company, while much of the power generated by the Quinze river, Quebec, development, will also find a market here. Additional power for this area will be provided by a 7,000 horse-power extension to the Wahnapitae Power Company's plant in 1925. In the Maritime Provinces some 15,000 horse-power was added to the central electric station installation during 1924. While only one installation was completed in the Western Provinces during 1924, preliminary work under way indicates considerable activity for 1925. The West Kootenay Power and Light Company have demolished their 4,000 horse-power station at Lower Bonnington Falls and expect to have 40,000 horse-power of a 60,000 horse-power installation completed by the end of 1925, while the British Columbia Electric Railway Company will have increased the capacity of their Stave Falls plant to 75,000 horse-power by the same time.

The Dominion Water Power Branch, in co-operation with the various responsible provincial bodies, has effected a co-ordinated system of water-power analysis for the purpose of presenting the water-power resources of the Dominion upon a reliable and uniform basis. As a result of a careful re-analysis and computation by the branch, the total available and developed water-power resources of Canada are presented as follows:—

Province	Available 24-hour power at 80 p.c. efficiency		Turbine Installation h.p.
	At ordinary minimum flow h.p.	At ordinary 6 months flow h.p.	
1	2	3	4
British Columbia	1,931,142	5,103,460	355,722
Alberta	475,281	1,137,505	34,107
Saskatchewan	513,481	1,087,756	35
Manitoba	3,270,491	5,769,444	162,025
Ontario	4,950,300	6,808,190	1,585,182
Quebec	6,915,244	11,640,052	1,308,106
New Brunswick	50,406	120,807	44,656
Nova Scotia	29,751	128,264	63,957
Prince Edward Island	3,000	5,270	2,276
Yukon and Northwest Territories	125,220	275,250	13,209
	18,255,316	32,075,998	3,569,275

The figures in columns 2 and 3 are based only upon rapids, falls and power sites of which the actual drop or head possible of concentration is definitely known or reasonably well established. Many water-powers of greater or less capacity from coast to coast are not as yet recorded. The ratio of actual plant installation to theoretical power available indicates that the water-power resources of the Dominion as at present recorded, will permit of a turbine installation of 42,000,000 horse-power.

The above tabulated figures may be considered as representing the *minimum water-power possibilities* of the Dominion. As an example, the detailed analyses which have been made of the water-power resources of New Brunswick and Nova Scotia, indicate that by taking full advantage of reservoir facilities these two provinces possess, at the least, 200,000 and 300,000 commercial horse-power within their respective borders.

With a water-power development of 387 horse-power per 1,000 population, Canada stands well to the fore in respect to availability and utilization of hydro-power resources. The enormous water-power reserves still untouched form a substantial foundation for the progressive exploitation and development of other natural resources, especially if properly co-ordinated with the development and utilization of the well-known fuel resources of the Dominion.

OTTAWA, December 16, 1924.

CENTRAL ELECTRIC STATIONS, 1923

The report on the seventh census of the central electric station industry of Canada is of increased interest on account of important activities during the past months.

The first world power conference was held in London, England, during July, 1924, when Canada was ably represented by authorities on the different phases of power generation. The conference allowed of an interchange of ideas on water-power development and transmission, uses, etc., of electricity, and will undoubtedly be of considerable advantage to the central electric station industry, especially in Canada, where the industry is playing such an important part in the industrial and economic development of the country.

There are now four provincial commissions engaged in developing, purchasing, distributing and selling electric energy, and public ownership of this industry is growing rapidly (see Table 1). Considerable interest was aroused over this aspect of the industry by the Public Ownership Conference during September, 1923, in Toronto, the headquarters of the Ontario Hydro-Electric Power Commission, which has jurisdiction over the largest existing public-ownership enterprise of its kind.

Another incident of importance to the industry was the formation in 1924 of the Joint Board of Engineers by Canada and the United States to investigate further the costs, etc., of the St. Lawrence Waterways which in addition to navigation works, will include hydro-electric works for the development of between 1,500,000 horse-power and 2,000,000 horse-power. If it is carried through, it will be one of the largest developments in the world, and will undoubtedly give a great impetus to industries in the adjacent provinces and states.

According to returns made under the Electricity and Fluid Exportation Act, central electric stations exported 1,344,199,267 k.w. hours during 1923, which was 16.6 per cent of the total output of all stations. Three stations on the Niagara river exported 878,335,200 k.w. hours, or 65 per cent of the total quantity exported, and one station on the St. Lawrence exported 30 per cent of the total. A complete list of all companies exporting electric energy to the United States is shown below. Practically the only electricity imported is at Sarnia, Ontario, where the St. Clair Tunnel Company imports some for operation of their locomotives and shops and a small quantity for sale.

K.W. HOURS EXPORTED TO THE UNITED STATES, CALENDAR YEAR 1923

——	Exported	Total Generated
	k.w. hours	k.w. hours
Maine and New Brunswick Electric Power Co.	10,209,784	10,634,050
Sherbrooke Railway and Power Co.	42,495	7,393,900
Cedar Rapids Manufacturing and Power Co.	405,524,000	739,830,000
Ontario Power Co.	332,866,100	859,981,900
Toronto Power Co.	193,009,750	727,702,990
Canadian Niagara Power Co.	~352,459,350	577,567,000
Ontario and Minnesota Power Co.	~ 10,305,200	23,914,214
Western Canada Power Co.	38,450,560	129,548,600
West Kootenay Power and Light Co.	554,900	193,222,500
British Columbia Electric Railway Co.	717,128	149,787,764
Total	1,344,199,267	3,419,582,918

Approximately 60 per cent of the population of Canada is in the provinces of Ontario and Quebec, and in these provinces is invested over 80 per cent of the capital of Canada's industries. The industries of these provinces are dependent entirely on electric power and imported coal and by far the greater part of the coal is from other countries, which adversely affects Canada's trade balance.

Since practically all the electrical energy generated by central electric stations in Ontario and Quebec is hydro-electric, the saving in the consumption of foreign coal is large. The central electric station industry is not the sole factor in the industrial development in these provinces, but it has played an important part and its importance continues to increase throughout the Dominion.

The inclusion of the Queenston power plant of the Ontario Hydro-Electric Power Commission for the first time in the 1922 Census, also the completion of several large developments in Ontario, Quebec, British Columbia, Manitoba, New Brunswick and Nova Scotia created a large increase in capital and installed power in 1922 as compared with 1921, and consequently a comparison between 1923 and 1922 data in this respect is not so favourable, the increase in capital being only 2 per cent, or $13,403,831, the increase in the industry in Ontario accounting for over $12,500,000 of this. This does not mean, however, that the industry was stagnant in the other provinces. In New Brunswick the capital invested in central electric stations was almost doubled, mainly by the inclusion in the Census of the works of the New Brunswick Power Commission. The decrease in capital in the province of Quebec, amounting close to $5,000,000 was a readjustment in the capital reported, not in an actual decrease in plant.

Since the 1922 census the Ontario Hydro-Electric Power Commission took over the entire plant of the Toronto Power Company. On this account it is not possible to make direct comparisons between the increase in commercial and municipal stations in Ontario or in the Dominion as a whole. In the other provinces, however, there were no such transfers, so that the data for 1923 and 1922 are comparable.

For census purposes a central electric station has been considered as any municipality, company or other organization selling electricity. The municipalities in Ontario buying electric energy from the provincial commission and selling it to the consumers have been considered as central electric stations, but such conditions did not exist to anywhere the same extent in the other provinces, and where large distributing companies sold direct to consumers in several municipalities each company was considered as only one station and each municipality so served was not counted as a station. Although the treatment was correct according to the definition adopted, it led to misunderstandings, and consequently the table 3 dealing with stations has been revised.

STATIONS (*Table 3*).—The first part of table 3 is purely a table of electric power plants, each power plant being counted, no matter how operated, i.e., two or more power plants under one management were each counted as one power plant. The table also shows the number of organizations operating in each province. It will be noted that over 80 per cent of the municipalities buying power for redistribution were in Ontario, the operation of the provincial commission being mainly responsible for this. The lower part of the table shows the cities, towns and villages served by central electric stations and the population of such municipalities. These population data are only approximate, as many villages are unincorporated and the population had to be secured from other sources than the official population census. The populations also do not include the rural populations on the outskirts of cities nor the populations

throughout the rural districts which are served by central electric stations. The census of population includes as the rural, all population outside the borders of the cities, and it is not possible to segregate that part which has electric service. The only exception to this was South Vancouver and Point Grey in British Columbia, which had populations aggregating over 45,000 but were unincorporated. It will not be correct therefore to divide these populations by the number of domestic light customers shown in table 9 to secure the number of persons per hundred buying electricity, although such computations will show in a rough way the density of service in the municipalities served in the various provinces. It will be noted that of the 300 municipalities served by fuel stations, 108 are in Saskatchewan and 60 in Alberta. In these provinces there are a great many small plants with internal combustion engines as the primary power and in Saskatchewan there is no water power at all used in this industry.

CAPITAL (*Table 4*).—The subdivisions of capital have been changed, showing the capital for generation, transmission, distribution and general, which is considered a more logical division for this industry than that used in previous reports. It is difficult, however, for some of the stations to make such a division accurately, and care, therefore, should be used when using these subdivisions. The averages of capital per horse-power for primary power are the total capital divided by the total power in main plants, and by the total primary power including the auxiliary equipment. The average capital per horse-power of all equipment showed a decrease for Canada of $10, the average for Ontario being less by $20, which was partially accounted for by additional wheels being installed in the Queenston plant of the Ontario Hydro-Electric Power Commission: there were only three wheels included in the 1922 census, and two additional wheels were added in 1923, increasing the horse-power by 110,000. There was also 10,000 horse-power added in Northern Ontario. The heavy expenditure for the Queenston plant was included in the 1922 report, so that while the installation of additional wheels increased the capital, it did not increase it in the same ratio as the increase in horse-power, and this will be further emphasized in the census for 1924, when 2 more wheels were installed. In Quebec the difference was $13 per horse-power, due to the decrease above noted in the capital and a net increase in installations of 29,283 horse-power. The Montreal Light, Heat and Power Company installed new wheels aggregating 22,600 horse-power and the Ottawa and Hull Power Company installed a new wheel with a capacity of 7,500 horse-power. The large increase in New Brunswick of $45 per horse-power was due principally to the initial developments of the New Brunswick Power Commission. With the installation of additional wheels, this average will also be decreased as was the case in Ontario.

REVENUES (*Table 5*).—The gross revenues are the total of the gross revenues reported by each individual station and include considerable duplications where power passes through two or three organizations before it reaches the consumers. The table has, therefore, been altered to show also the net revenues or the gross revenues less the amounts paid by Central Electric Stations to other Central Electric Stations for power, the remainder being the revenues received from consumers. In making a comparison as between provinces, it is clearly seen that only the net revenues are comparable, as in Ontario, for example, over 35 per cent of the gross revenues represents amounts paid for electric energy interchanged between central electric stations, whereas in Saskatchewan the amount paid for power interchanged between stations was negligible. The average net revenues are the net revenues of both generating and non-generating stations divided by the primary and secondary power as indicated.

At the foot of the table is shown the average net revenue of all stations and of generating stations per k.w. hour generated. The difference, of course, is the revenue of the non-generating stations which purchase their power from the generating stations. These average revenues include service charges, meter rentals and all other items entering into the monthly bills. It must also be understood that these net revneues include all line, transformer and other losses and are therefore somewhat below the average price per k.w. hour paid by the consumer. The nature of the industry or the manner in which electric energy is used has a great deal to do with these averages, since the price per k.w. hour charged for lighting service is generally at a higher rate than for power service. Consumers of large blocks of power invariably are able to secure a price much below small power consumers and very much below the lighting rate, expecially if they use the power at off-peak-load periods. The statistics, however, do not segregate the power used for lighting services, so that it is impossible to make comparisons as between municipalities or provinces except on the total consumption. When making comparisons of any kind such factors as nature of consumers, the source of energy, whether from hydro-electric or fuel stations, the number of lighting customers, and all such factors must be considered.

Free Service (*Table 6*).—The commercial stations have estimated at current rates the value of the electric energy supplied to municipalities for lighting parks, public buildings, etc., for which no direct recompense is received. Previous reports have shown similar amounts from municipal stations, but since with municipal stations such amounts were largely a matter of book-keeping, and should properly be credited to the lighting department, the report this year includes such amounts with the revenues of municipal stations.

Expenses (*Table 7*).—The only item in this table needing explanation is that of cost of power, which, as stated above, is the amount paid by central electric stations to other central electric stations for electrical energy and it is these amounts which have been deducted from the gross revenue to obtain the net revenue.

Employees (*Table 8*).—With straight generating and distributing companies it is a simple matter to report the number of employees, but with municipal stations, where an official is employed only part time in the lighting plant, and with industries which only incidentally sell electric energy, it is difficult to accurately allocate employees to this industry. The data are valuable however, to make comparisons from year to year to show the growth of employment in the industry.

Customers (*Table 9*).—The increase in the total number of customers of central electric stations in Canada was 59,000, or 5 per cent, the increase in Ontario being 32,274, and in Quebec, 10,225. The large increase in Ontario was made up of 28,373 domestic lighting customers, 3,901 commercial light and power customers; in previous years the power customers and commercial light customers were included under the head "Commercial Customers." On account of the transfer of the customers of the Toronto and Niagara Power Company to the municipal systems, it is impossible to show the actual growth in the number of municipal and commercial customers in Ontario. At the foot of this table the averages of the number of domestic light customers per 100 population are based on the domestic light customers and the estimated populations for each province.

Pole Line Mileage (*Table 10*).—Distribution pole line mileage is credited with all pole line mileage between generating stations and consumers where the power is not stepped up for transmission but transmitted at the generated

voltage, and it also includes all pole lines carrying both primary and secondary circuits. The growth of the pole line mileage is a fair indication of the steady advancement of the service into new territories. The increase in the total pole line mileage in Canada over 1922 was 4 per cent; in New Brunswick the increase was 14 per cent, jumping from 614 to 844 miles, and in Ontario it increased 630 miles or 6.3 per cent.

EQUIPMENT (*Tables 11, 12, 13 and 14*).—All steam engines and internal combustion engines in hydro-electric plants are considered as auxiliary. In a few cases, however, the steam equipment is of greater capacity than the hydro-electric equipment, and also in some plants the steam equipment operates continuously more as a complement to the hydro-electric equipment than as a supplement. In other stations the steam equipment is only operated to take care of peak loads, daily and seasonal, or in case of a shortage of power. In still others it is idle throughout the year and held strictly in reserve. There are a few stations buying their entire supply of electric energy, holding in reserve steam equipment, and also six stations buying practically all their supply but generating small quantities with their reserve equipment. All this equipment, however, is classed as auxiliary equipment.

Main plant equipment includes only water wheels and turbines in hydro-electric stations and the dynamos driven by them, but in the fuel stations it includes all the equipment, although in some fuel stations units are held in reserve.

Table 11 shows auxiliary and main plant equipment added together, and tables 12 and 13 show the auxiliary and main plant equipment separately. Table 14 shows the main plant equipment graded according to the manufacturers' rating and shows in which provinces the various sized units are located. The large D.C. dynamos throughout Canada are used almost exclusively for street railway operation.

ELECTRIC ENERGY (*Table 15*).—As previously explained, the k.w. hours generated by non-generating stations are the small quantities occasionally generated by equipment held in reserve by stations which purchase practically all of their supply, except for the municipal plant at Windsor, Ontario, which buys the greater part of its electricity from the provincial commission, but also generates current continuously throughout the year by using the exhaust steam from a salt plant.

The k.w. hours are metered at the power-house, and therefore include all line and transformer losses. The ratio of output to maximum capacity is the total k.w. hours generated divided by the product of 8,760 hours and the K.V.A. capacity of all dynamos in the generating stations, including not only the main plant dynamos, but also the auxiliary dynamos. Including the auxiliary equipment lowers somewhat the average output of the dynamos actually in use, but in some stations large quantities of power are generated by the auxiliary equipment and it was considered more conservative to include them and decrease the average than to exclude them and boost the average. In view of the large variation in the load of central electric stations not only throughout the day but throughout the year, an average ratio of output to maximum capacity of 50 to 55 per cent such as existed in the hydro-electric stations in Quebec and Ontario, is an exceedingly high ratio, and of course it is possible only with a large number of customers using power more or less continuously and with large hydro-electric stations. The ratio shows a very considerable increase; for all of Canada and for all classes of stations it increased from 42.1 per cent in 1922 to 47 per cent. In 1922 the highest ratio existing was 48.1 in commercial hydro-electric stations in Ontario, and in 1923

it jumped to 55.3 per cent in municipal hydro-electric stations in Ontario. The average k.w. hour per K.V.A. is the k.w. hours generated divided by the K.V.A. capacity of the total dynamo equipment.

FUEL (*Table 16*).—This table includes fuel used only in the generation of power for sale, used both in fuel stations and by the auxiliary equipment in hydro-electric stations. Natural gas is used in Alberta not only in internal combustion engines, but also under boilers. The low price of coal used in Alberta is due to a large percentage of it being screenings from the local mines.

Table 1—Comparative Summary, 1923-1919
Tableau 1—Résumé comparatif, 1923-1919

Principal Data by Class of Station — Données principales par classes d'usines		1923	1922	1921	1920	1919	Per cent increase 1923 over 1919 — Pourcentage d'augmentation de 1923 sur 1919
Electric Power Plants—	**Usines génératrices—**						
Total	**Total**	**532**	**522**	**510**	**506**	**493**	**7·9**
Hydraulic	Hydrauliques	269	269	259	258	272	-1·1
Fuel	A combustible	263	253	251	248	221	19·0
Commercial	Commerciales	335	326	317	321	306	8·7
Municipal	Municipales	197	196	193	185	187	5·3
Capital—	**Capitaux—**						
Total	**Total**	**581,472,583**	**568,068,752**	**484,669,451**	**448,273,642**	**416,512,010**	**39·6**
Commercial	Commerciales	307,046,240	326,448,922	327,439,827	311,160,342	287,558,443	6·8
Municipal	Municipales	274,426,343	241,619,830	157,229,624	137,113,300	128,953,567	112·8
Generating	Productrices	489,085,939	484,635,750	410,382,619	380,372,831	365,389,364	33·9
Non-generating	Non productrices	92,386,644	83,433,002	74,286,832	67,900,811	51,122,646	80·7
Revenue—	**Recettes—**						
Total	**Total**	**91,141,296**	**82,328,866**	**73,376,580**	**65,705,060**	**57,853,392**	**57·5**
Commercial	Commerciales	44,539,654	44,776,945	42,713,327	39,901,747	35,552,867	25·2
Municipal	Municipales	46,601,642	37,551,921	30,663,253	25,800,313	22,300,525	108·9
Generating	Productrices	62,304,186	56,385,731	52,446,929	48,042,642	45,420,566	37·2
Non-generating	Non productrices	28,837,110	25,943,135	20,930,651	17,662,418	12,432,826	131·9
Expenses—	**Dépenses—**						
Total	**Total**	**54,968,077**	**49,962,644**	**47,044,503**	**45,100,946**	**34,341,923**	**60·1**
Commercial	Commerciales	24,357,223	22,988,298	24,943,355	24,692,105	19,201,892	26·8
Municipal	Municipales	30,610,854	26,974,346	22,101,148	20,408,841	15,140,031	102·2
Generating	Productrices	32,472,739	29,331,675	29,389,443	29,684,712	24,281,570	33·7
Non generating	Non productrices	22,495,338	20,630,969	17,655,060	15,416,234	10,060,353	123·6
Pole Line Mileage—	**Lignes sur poteaux—**						
Total	**Total**	**23,560**	**22,669**	**21,714**	**20,879**	**20,466**	**15·1**
Commercial	Commerciales	11,146	11,123	10,987	10,721	10,784	3·4
Municipal	Municipales	12,414	11,546	10,727	10,158	9,682	28·2
Generating	Productrices	14,405	13,927	13,460	13,651	14,111	2·1
Non-generating	Non productrices	9,155	8,742	8,254	7,228	6,355	44·1
Customers—	**Abonnés—**						
Total	**Total**	**1,112,547**	**1,053,545**	**973,212**	**894,158**	–	–
Domestic Light	Eclairage domestique	920,223	889,346	830,062	764,907	–	–
Commercial Light	Eclairage commercial	159,929	164,199	143,150	129,251	–	–
Power	Force motrice	32,395					
Comm. stations	Commerciales	496,591	476,285	466,235	437,672	–	–
Muncipal stations	Municipales	615,956	577,260	506,977	456,486	–	–
Generating	Productrices	547,928	533,923	531,643	504,026	–	–
Non-generating	Non productrices	564,619	519,622	441,569	390,132	–	–
Electric Energy Generated—	**Energie électrique produite—**						
Total kilowatt hours (thousands)	**K.W. heures produit (milles)**	***8,099,102**	***6,740,750**	**5,614,132**	**5,894,867**	**5,497,204**	**47·3**
Commercial	Commerciales	5,074,120	5,119,676	4,316,272	4,456,428	4,191,223	21·1
Municipal	Municipales	3,025,072	1,621,074	1,297,860	1,438,439	1,305,981	131·6
Equipment in generating stations (main Plant only).							
Machinerie dans les usines productrices (Machines des usines principales)							
Total **primary power**	**H.P.**	**2,423,845**	**2,258,398**	**1,977,857**	**1,897,024**	**1,907,135**	**27·0**
Total pour motrice primaire							
Water-wheels and turbines	No.	641	629	604	594	610	5·0
Turbines et roues hydrauliques	H.P.	2,282,547	2,112,289	1,826,357	1,754,130	1,736,981	31·4
Steam reciprocating engines	No.	159	175	187	196	198	−19·6
Machines à vapeur	H.P.	37,116	40,484	45,450	49,430	53,068	−30·1
Steam turbines	No.	38	41	43	37	38	–
Turbines à vapeur	H.P.	87,767	89,545	90,705	80,750	102,865	−14·7
Internal combustion engines	No.	262	225	203	179	136	92·6
Moteurs à gaz et à pétrole	H.P.	16,415	16,080	15,345	12,714	14,221	15·4
Total in commercial stations	H.P.	1,451,498	1,565,229	1,443,533	1,415,488	1,428,918	1·6
Total dans les usines commerciales							
Total in municipal stations	H.P.	972,347	693,169	534,324	481,536	478,217	103·3
Total dans les usines municipales							
Total secondary power	**K.V.A.**	**1,861,845**	**1,736,199**	**1,475,610**	**1,451,829**	**1,487,790**	**25·1**
Total force motrice secondaire							
Dynamos A.C.	No.	860	857	841	817	836	2·9
Dynamos C.A.	K.V.A.	1,852,396	1,725,831	1,464,022	1,439,937	1,474,969	25·6
Dynamos D.C.	No.	208	181	172	165	128	62·5
Dynamos C.D.	K.W.	9,449	10,368	11,588	11,892	12,821	−26·3
Total in commercial staions		1,140,945	1,210,947	1,086,128	1,078,611	1,112,494	2·6
Total dans les usines commerciales	K.V.A.						
Total in municipal stations	K.V.A.	720,900	525,252	389,482	373,218	375,296	92·1
Total dans les usines municipales							

*Estimates for stations not reporting output included in 1922 and 1923.
*Estimation pour usines ne faisant pas rapport de leur production donnée pour 1922 et 1923.

Table 2—Summary of Principal Data 1923

—	Total		Commercial — Commerciales		Municipal — Municipales	
	1923	1922	1923	1922	1923	1922
	1	2	3	4	5	6
Total Number of Electric Power Plants	**532**	**522**	**335**	**326**	**197**	**196**
No. of hydraulic plants	269	269	194	196	75	73
No. of fuel plants	263	253	141	130	122	123
Total capital	**581,472,583**	**568,068,752**	**307,046,240**	**326,448,922**	**274,426,343**	**241,619,830**
Lands, buildings, equipment, etc.	520,945,570	508,050,328	271,776,655	280,149,777	249,168,915	227,900,551
Materials on hand, cash trading accounts etc.	60,527,013	60,018,424	35,269,585	46,299,145	25,257,428	13,719,279
Total Gross Revenue from Sale of Electric Energy	**91,141,296**	**82,328,866**	**44,539,654**	**44,776,945**	**46,601,642**	**37,551,921**
For lighting purposes	33,187,276	34,698,501	14,714,521	14,806,089	18,472,755	16,894,412
For all other purposes	57,954,020	50,630,365	29,825,133	29,970,856	28,128,887	20,659,509
Net revenue	67,496,893	62,173,179	37,040,835	37,894,341	30,456,058	24,278,838
Free Service (Value at Commercial Rates)	**34,490**	**277,039**	**34,490**	**37,661**	.....	**239,378**
Total Operating Expenses	**54,968,077**	**49,962,644**	**24,357,223**	**22,988,298**	**30,610,854**	**26,971,346**
Salaries and wages	14,784,643	14,495,250	6,500,590	6,551,984	8,283,448	7,944,266
Fuel	2,638,888	2,676,556	1,319,985	1,270,063	1,318,903	1,405,493
Cost of power	23,644,403	20,155,687	7,498,819	6,882,604	16,145,584	13,273,083
Miscellaneous	13,900,748	12,635,151	9,037,829	8,283,647	4,862,919	4,351,504
Total Number of Employees	**11,994**	**10,684**	**5,949**	**4,994**	**6,045**	**5,690**
Total Mileage of Pole Lines	**23,560**	**22,669**	**11,146**	**11,123**	**12,414**	**11,546**
For transmission	8,406	8,296	4,361	4,479	4,045	3,817
For distribution	15,154	14,373	6,785	6,644	8,369	7,729
Total Number of Customers	**1,112,547**	**1,053,545**	**496,591**	**476,285**	**615,956**	**577,260**
Domestic light	920,223	889,346	409,337	408,755	510,886	480,591
Commercial light	159,929	164,199	72,229	67,530	87,700	96,669
Power	32,395	–	15,025	–	17,370	–
Total K.W. hrs. generated (thousands)	**8,699,192**	**6,748,750**	**5,674,120**	**5,119,676**	**3,025,072**	**1,621,074**

Total Power Equipment (excluding Auxiliary Plant Equipment)

	Total		Commercial — Commerciales		Municipal — Municipales	
	1923	1922	1923	1922	1923	1922
	1	2	3	4	5	6
Total Primary Power H.P.	**2,423,845**	**2,258,398**	**1,451,498**	**1,565,229**	**972,347**	**693,169**
Water Wheels and turbines No.	641	629	470	470	171	159
H.P.	2,282,547	2,112,289	1,419,838	1,531,847	862,709	580,442
Steam reciprocating engines No.	159	175	76	85	83	90
H.P.	37,116	40,484	16,668	17,823	20,448	22,661
Steam turbines No.	38	41	12	14	26	27
H.P.	87,767	89,545	10,259	11,434	77,508	78,111
Gas and oil engines No.	262	225	150	118	112	107
H.P.	16,415	16,080	4,733	4,125	11,682	11,955
Total Secondary Power K.V.A.	**1,861,845**	**1,736,199**	**1,140,945**	**1,210,947**	**720,900**	**525,252**
Dynamos, A.C. No.	860	857	512	520	348	337
K.V.A.	1,852,396	1,725,831	1,134,744	1,204,624	717,652	521,207
Dynamos, D.C. No.	208	181	165	138	43	43
K.W.	9,449	10,368	6,201	6,323	3,248	4,045

* Less than 0·1 per cent.

Tableau 2—Résumé comparatif des données principales, 1923-1922

Generating — Productrices		Non-Generating — Non-productrices		Per Cent of Column 1 — Pour cent de la 1ère col.				
1923	1921	1923	1922	Commerciales 1922	Municipales 1923	Generat. Prod. 1923	Non Gen. Non-prod. 1923	
7	8	9	10	11	12	13	14	
532	522	–	–	63·0	37·0	100·0	–	**Nombre d'usines génératrices**
267	269	–	–	72·1	27·9	100·0	–	Nombre d'usines hydrauliques.
263	253	–	–	53·6	46·4	100·0	–	Nombre d'usines à combustible
489,085,939	**484,635,750**	**92,386,644**	**83,433,002**	**52·8**	**47·2**	**84·1**	**15·9**	**Total des capitaux**
452,146,638	437,584,232	68,798,902	70,166,096	52·2	47·8	86·8	13·2	Terrains, bâtiments, aménagements, etc.
36,939,271	47,051,518	23,587,742	12,966,906	58·3	41·7	61·0	39·0	Matières premières en stock, fonds en caisse, créances à recouvrer, etc.
64,780,162	**56,385,731**	**26,361,131**	**25,943,135**	**48·9**	**51·1**	**71·1**	**28·9**	**Total des rec. prod. par l'élec., vendue**
26,748,806	16,249,651	6,438,470	15,448,850	44·3	55·7	80·6	19·4	Pour éclairage.
38,031,356	40,136,080	19,922,664	10,494,285	51·5	48·5	65·6	34·4	Pour tout autres usages.
52,681,003	48,102,823	14,815,890	14,270,456	54·9	45·1	78·0	22·0	Revenu net
31,318	**199,249**	**3,172**	**86,790**	–	–	**90·8**	**9·2**	**Serv. gratuit (val. au prix du commerce**
32,472,739	**29,331,675**	**22,495,338**	**20,630,969**	**44·3**	**55·7**	**59·1**	**40·9**	**Total des dépenses d'exploitation**
8,746,298	8,468,338	6,037,740	6,026,912	44·0	56·0	59·2	40·8	Traitements, appoint. et salaires
2,622,624	2,553,589	17,264	122,067	50·0	50·0	99·4	0·6	Combustible
9,623,183	8,282,908	14,021,220	11,872,779	31·7	68·3	40·7	59·3	Achat de force motrice électrique
11,180,634	10,026,840	2,420,114	2,608,314	65·0	35·0	82·6	17·4	Dépenses diverses
6,545	**6,237**	**4,548**	**4,449**	**45·5**	**54·5**	**59·0**	**41·0**	**Nombre total du personnel**
14,405	**13,927**	**9,155**	**8,742**	**47·3**	**52·7**	**61·1**	**38·9**	**Long. en milles des lignes sur poteaux**
7,364	7,068	1,042	1,228	51·9	48·1	87·6	12·4	De transmission
7,041	6,859	8,113	7,514	44·8	55·2	46·5	53·5	De distribution
547,928	**533,923**	**564,619**	**519,622**	**44·6**	**55·4**	**49·2**	**50·8**	**Nombre total des abonnés des usines**
456,969	465,251	463,254	424,095	44·5	55·5	49·7	50·3	Eclairage, commerçants
75,337	68,672	84,592	95,527	45·2	54·8	47·1	52·9	Eclairage, particuliers
15,622	–	16,773	–	46·4	53·6	48·2	51·8	Force motrice
8,094,171	**6,727,674**	**5,021**	**13,076**	**62·7**	**37·3**	**100·0**	*	**Total des kilowatt-heures produits (milliers)**

Etat de la machinerie (à l'exclusion de celles des usines auxiliaires)								Total Power Equipment in Auxiliary Plants — Machines des usines auxiliaires		
Per Cent of Columns 1 & 2 — Pourcent des col. 1 et 2				Per Cent of Totals of Columns 3, 4, 5 & 6 Pourcent des col. 3, 4, 5 et 6						
Commercial		Municipal		Commercial		Municipal				
1923	1922	1923	1922	1923	1922	1923	1922	1923	1922	
7	8	9	10	11	12	13	14	15	16	
59·9	**69·3**	**40·1**	**30·7**	**100·0**	**100·0**	**100·0**	**100·0**	**149,572**	**150,257**	**Total, force motrice primaire, H.P.**
73·3	74·7	26·7	25·3	–	–	–	–	–	–	Turbines et roues hydrauliques nomb.
62·2	72·5	37·8	27·5	97·8	97·9	88·7	83·7	–	–	H.P.
47·8	48·6	52·2	51·4	–	–	–	–	44	49	Machines à vapeur.....nomb.
44·9	44·0	55·1	56·0	01·1	01·1	2·1	3·3	19·686	20,476	H.P.
31·6	34·1	68·4	65·9	–	–	–	–	31	31	Turbines à vapeur.....nomb.
11·7	12·8	88·3	87·2	00·8	00·7	8·0	11·3	129,110	129,110	H.P.
57·3	52·4	42·7	47·6	–	–	–	–	7	7	Moteurs à gaz et à pétrole.....nomb.
28·8	25·7	71·2	74·3	00·3	00·3	1·2	1·7	776	671	H.P.
61·3	**69·7**	**38·7**	**30·3**	**100·0**	**100·0**	**100·0**	**100·0**	**121,832**	**122,214**	**Total, force motrice secondaire K.V.A.**
59·5	60·7	40·5	39·3	–	–	–	–	68	72	Dynamos C.A.....nomb.
61·3	69·8	38·7	30·2	99·5	99·5	99·5	99·2	120,152	120,534	K.V.A.
79·3	76·2	20·7	23·8	–	–	–	–	5	5	Dynamos C.D.....nomb.
65·6	61·0	34·4	39·0	0·5	0·5	0·5	0·8	1,680	1,680	K.W.

* Less than 1 per cent.
* Moins que 1 pour cent.

Table 3—Electric Power Plants—Municipalities served 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Number Power Generating Stations	**532**	**60**	**41**	**26**	**26**	**38**
Per cent of total for Canada	100·00	11·28	7·7	4·89	4·89	7·14
Commercial	335	31	26	11	19	21
Hydraulic	194	4	20	2	7	8
Fuel	141	27	6	9	12	13
Municipal	197	29	15	15	7	17
Hydraulic	75	–	8	2	3	10
Fuel	122	29	7	13	4	7
With water wheels and turbines only	234	3	21	1	8	16
With water wheels, turbines and fuel auxiliary	35	1	7	3	2	2
With steam engines only	87	27	8	10	7	12
With steam turbines only	8	–	–	–	1	3
With gas or oil engines only	159	21	5	12	5	2
With both steam engines and turbines	1	4	–	–	1	2
With both steam and gas or oil engines	8	3	–	–	2	1
With both steam turbines and gas or oil engines	1	1	–	–	–	–
With alternating current dynamos only	399	39	37	15	19	33
With direct current dynamos only	127	19	4	11	6	4
With both alternating and direct current dynamos	6	2	–	–	1	1
Commercial organizations	**370**	**37**	**23**	**14**	**23**	**28**
Number generating power	298	30	18	11	19	19
Number buying power for redistribution	74	7	5	3	4	14
Municipalities	**478**	**33**	**25**	**21**	**11**	**22**
Number generating power	170	29	15	14	7	16
Number buying power for redistribution	308	4	10	7	4	6
Cities, Towns and Villages served						
No.	1,146	64	59	44	41	76
Population	4,449,221	192,905	304,421	254,776	130,980	247,534
Ratio of total population (per cent)	49·00	30·00	58·00	40·00	33·00	46·00
By commercial organizations—						
No.	619	35	33	19	24	44
Population	1,893,588	22,277	236,776	40,943	54,453	118,627
By municipal systems—						
No.	517	29	26	24	16	32
Population	1,972,831	107,323	67,645	34,746	29,359	128,907
By both—						
No.	10	1	–	1	1	–
Population	582,802	63,305	–	179,087	47,166	–
By Hydraulic Stations—						
No.	843	3	45	23	17	36
Population	3,724,804	1,315	287,506	234,872	31,419	101,167
By Fuel Stations—						
No.	300	60	14	21	23	40
Population	613,946	128,285	16,916	19,904	52,395	146,367
By both Hydro and Fuel—						
No.	2	1	–	–	1	–
Population	110,471	63,305	–	–	47,166	–

Table 4—Capital, 1923

Total Capital	**581,472,583**	**14,113,699**	**49,242,66[illegible]**	**21,654,138**	**8,521,312**	**7,885,7[illegible]**
Per cent total for Canada	100·00	2·43	8·47	4·13	1·48	1·35
Generation	330,226,843	8,362,446	27,576,868	8,702,102	5,692,196	5,170,013
Transmission	75,885,243	1,438,477	6,488,10[illegible]	3,609,72[illegible]	1,310,59[illegible]	771,839
Distribution	110,167,412	3,506,853	10,905,80[illegible]	9,570,398	1,071,837	1,539,601
General	65,193,085	805,329	4,271,28[illegible]	2,151,99[illegible]	510,685	403,498
Total Capital in Commercial Stations	**307,016,210**	**6,297,818**	**46,262,248**	**7,937,115**	**4,552,479**	**4,271,518**
Non-generating	22,887,780	75,427	9,080,966	544,873	32,923	1,952,177
Generating	284,158,460	6,222,391	37,181,282	7,392,242	4,519,556	2,319,341
Hydraulic	277,693,999	5,436,238	37,120,492	7,341,40[illegible]	1,725,927	680,136
Fuel	6,464,461	786,153	60,790	50,836	2,793,629	1,639,205
Total Capital in Municipal Stations	**274,426,343**	**7,815,281**	**2,979,821**	**16,097,623**	**4,038,833**	**3,614,215**
Non-generating	69,498,864	36,000	613,557	2,355,610	501,958	146,266
Generating	204,927,479	7,779,281	2,366,264	13,741,413	3,934,775	3,467,979
Hydraulic	186,477,936	–	1,930,461	13,259,150	3,689,621	2,914,998
Fuel	18,449,543	7,779,281	435,803	482,263	254,154	552,981
Total Capital in Non-Generating Stations	**92,386,644**	**111,427**	**9,694,523**	**2,900,483**	**136,981**	**2,098,443**
Total Capital in Generating Stations	**489,085,939**	**14,001,672**	**39,547,546**	**21,133,655**	**8,454,331**	**5,787,320**
Hydraulic	464,171,935	5,436,238	39,050,953	20,600,556	5,415,548	3,595,134
Fuel	24,914,004	8,565,434	496,593	533,099	3,017,783	2,192,186
Average per H.P. of primary power	**240**	**160**	**213**	**280**	**255**	**275**
Average per H.P. including aux. equip	**226**	**155**	**191**	**230**	**248**	**210**
Average per K.V.A. of dynamo capacity	**312**	**206**	**326**	**318**	**340**	**344**
Average per K.V.A. including aux. equip	**293**	**200**	**287**	**279**	**332**	**255**

Tableau 3—Usines génératrices—Municipalités desservies, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
119	**11**	**102**	**107**	**2**	**Nombre d'usines génératrices.**
22·37	2·07	19·17	20·11	·37	Pourcentage dans chaque province.
74	9	82	60	2	Usines commerciales.
68	7	77	–	1	Hydrauliques.
6	2	5	60	1	A combustible.
45	2	20	47	–	Usines municipales.
37	–	15	–	–	Hydrauliques.
8	2	5	47	–	A combustible.
95	5	84	–	1	Avec roues et turbines hydrauliques seulement.
10	2	8	–	–	Avec roues et turbines hydrauliques plus usines auxiliaires.
8	–	4	10	1	Avec machines à vapeur seulement.
–	–	–	4	–	Avec turbines à vapeur seulement.
6	2	6	91	–	Avec moteur à gaz ou à pétrole seulement.
–	–	–	2	–	Avec machines et turbines à vapeur à la fois.
–	2	–	–	–	Avec machines à vapeur, à gaz et à pétrole.
–	–	–	–	–	Avec turbines à vapeur et moteur à gaz et à pétrole
104	9	93	49	1	Avec dynamos à courant alternatif seulement.
15	2	7	58	1	Avec dynamos à courant direct seulement.
–	–	2	–	–	Avec dynamos à courant alternatif et direct.
74	**10**	**93**	**60**	**3**	**Usines commerciales.**
[illegible]	9	65	60	2	Nombre d'usines génératrices.
11	1	28	–	1	Nombre d'usines achetant de l'électricité pour la revendre.
234	**2**	**41**	**49**	–	**Municipalités—**
24	2	17	46	–	Nombre d'usines génératrices.
250	–	24	3	–	Nombre d'usines achetant de l'électricité pour la revendre.
					Cités, villes et villages desservis—
407	14	331	108	2	Nombre.
1,772,183	22,839	1,361,516	160,292	1,775	Population.
59·00	26·00	56·00	20·00	54·00	Ratio de population totale.
					Par des usines commerciales.
108	12	283	59	2	Nombre.
185,298	18,522	1,100,063	24,852	1,775	Population.
					Par des usines municipales.
292	2	48	49	–	Nombre.
1,293,641	4,317	171,453	135,440	–	Population.
					Par usines commerciales et municipales.
7	–	–	–	–	Nombre.
293,244	–	–	–	–	Population.
					Par usines hydrauliques.
390	10	319	–	1	Nombre.
1,756,886	5,641	1,305,027	–	975	Population.
					Par usines à combustible.
17	4	12	108	1	Nombre.
15,297	17,198	56,489	160,292	800	Population.
					Par usines hydrauliques et à combustible.
–	–	–	–	–	Nombre.
–	–	–	–	–	Population.

Tableau 4—Capitaux, 1923

305,298,863	**506,089**	**162,161,163**	**8,203,088**	**1,436,999**	**Total des capitaux.**
52·50	·09	27·89	1·41	·25	Pourcentage dans chaque province.
177,001,098	342,740	91,174,401	5,114,040	1,093,139	Génération.
41,710,081	9,000	20,395,602	19,143	132,663	Transmission.
56,314,296	123,580	24,397,267	2,710,089	27,777	Distribution.
30,273,388	30,769	26,193,893	362,816	183,420	Généralités.
78,923,081	**436,526**	**156,255,679**	**672,777**	**1,436,999**	**Total des capitaux dans les usines commerciales.**
2,884,652	5,000	8,097,845	–	213,917	Non-productrices.
76,038,429	431,526	148,157,834	672,777	1,223,082	Productrices.
76,005,252	72,992	148,098,319	–	1,213,237	Hydrauliques.
33,177	358,534	59,515	672,777	9,845	A combustible.
226,375,782	**69,563**	**5,905,484**	**7,530,311**	**–**	**Total des capitaux dans les usines municipales.**
65,317,548	–	901,218	24,607	–	Non-productrices.
161,058,234	69,563	5,004,266	7,505,704	–	Productrices.
160,895,198	–	3,797,508	–	–	Hydrauliques.
163,036	69,563	1,206,758	7,505,704	–	A combustible.
68,202,290	**5,000**	**8,999,063**	**24,607**	**213,917**	**Total des capitaux dans les usines non productrices.**
237,096,663	**591,089**	**153,162,100**	**8,178,481**	**1,223,082**	**Total des capitaux dans les usines productrices.**
236,900,450	72,992	151,895,827	–	1,213,237	Hydrauliques.
196,213	428,097	1,266,273	8,178,481	9,845	A combustible.
278	**279**	**206**	**164**	**143**	**Moyenne par H.P. de la machinerie d'énergie primaire.**
262	**269**	**198**	**164**	**141**	**Moyenne par H.P. y compris machinerie auxiliaire.**
362	**333**	**260**	**189**	**238**	**Moyenne par K.V.A. de la capacité des dynamos.**
340	**333**	**250**	**189**	**233**	**Moyenne par K.V.A. y compris machinerie auxiliaire.**

Table 5—Revenue, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
GROSS REVENUES						
Gross Revenue from Sale of Electric Energy.	**91,141,296**	**3,067,003**	**7,972,397**	**3,647,361**	**1,471,940**	**2,499,333**
Per cent of total for Canada	100·00	3·37	8·75	4·00	1·62	2·74
For lighting purposes	33,187,276	1,957,041	3,539,691	2,604,571	833,823	1,570,765
For all other purposes	57,954,020	1,109,962	4,432,706	1,042,790	638,117	928,568
Gross Revenue of Commercial Stations	**44,539,654**	**755,948**	**7,038,169**	**1,487,174**	**1,133,769**	**1,900,840**
Non-generating	8,596,602	65,984	2,950,031	143,400	16,362	979,458
Generating	35,943,052	689,964	4,088,138	1,343,774	1,117,407	921,382
Hydraulic	33,656,548	440,559	4,056,724	1,321,074	345,737	114,117
Fuel	2,286,504	249,405	31,414	22,700	771,670	807,265
Gross Revenue of municipal stations	**46,601,642**	**2,311,055**	**934,228**	**2,160,187**	**338,171**	**598,493**
Non-generating	20,240,508	32,041	342,363	290,767	43,713	66,368
Generating	26,361,134	2,279,014	591,865	1,869,420	294,458	532,125
Hydraulic	20,582,945	–	432,409	1,659,817	215,108	326,728
Fuel	5,778,189	2,279,014	159,456	209,603	79,350	205,397
Gross Revenue of non-generating stations	**28,837,110**	**98,025**	**3,292,394**	**434,167**	**60,075**	**1,045,826**
Gross Revenue of generating stations	**62,304,186**	**2,968,978**	**4,680,003**	**3,213,194**	**1,411,865**	**1,453,507**
Hydraulic	54,239,493	440,559	4,489,133	2,980,891	560,845	440,845
Fuel	8,064,693	2,528,419	190,870	232,303	851,020	1,012,662
***NET REVENUES**						
Net revenue from sale of electric energy	**67,496,893**	**2,827,322**	**6,240,022**	**3,292,859**	**1,333,247**	**2,084,781**
Net revenue of commercial stations	**37,040,835**	**736,509**	**5,432,496**	**1,252,477**	**1,055,916**	**1,517,610**
Net revenue of municipal stations	**30,456,058**	**2,090,813**	**807,526**	**2,040,382**	**277,331**	**567,171**
Net revenue of non-generating stations	**14,815,890**	**60,046**	**2,163,357**	**253,190**	**37,147**	**710,110**
Net revenue of generating stations	**52,681,003**	**2,767,276**	**4,076,665**	**3,010,669**	**1,296,100**	**1,374,671**
Average net revenue per H.P. of primary power.	**27·85**	**31·96**	**27·01**	**35·68**	**39·64**	**72·76**
Average net revenue per H.P. in main and auxiliary plants.	**26·22**	**31·14**	**24·17**	**31·47**	**38·41**	**55·64**
Average net revenue per K.V.A. of dynamo capacity.	**36·25**	**41·25**	**41·35**	**43·56**	**52·81**	**90·91**
Average net revenue per K.V.A. in main and auxiliary plants.	**34·03**	**40·02**	**36·33**	**38·23**	**51·59**	**67·51**
Average net revenue per K.W. hour						
of all stations	·83	2·32	1·08	1·06	3·58	4·98
of generating stations	·65	2·27	·71	·98	3·45	3·29

*Gross Revenues less cost of power.

Table 6—Free Service, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Estimated Value	**34,490**	**2,203**	**2,451**	**39**	**979**	**379**
Per cent of total for Canada	100·00	6·39	7·11	·11	2·84	1·10
Commercial Stations	**34,490**	**2,203**	**2,451**	**39**	**979**	**379**
Non-generating	3,172	900	1,540	–	10	–
Generating	31,318	1,303	911	39	969	379
Hydraulic	27,808	–	36	–	525	–
Fuel	3,510	1,303	875	39	444	379

Tableau 5—Recettes, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
					RECETTES BRUTES
46,167,893	**124,408**	**23,399,206**	**2,672,406**	**119,349**	**Recettes brutes provenant de la vente d'électricité.**
50·65	·14	25·67	2·93	·13	Pourcentage dans chaque province.
13,048,627	107,348	7,609,201	1,877,572	38,037	Pour l'éclairage
33,119,266	17,060	15,790,005	794,834	80,712	Pour tous autres usages.
9,715,329	**97,709**	**22,020,023**	**271,344**	**119,349**	**Recettes brutes des usines commerciales**
1,724,424	738	2,684,107	–	32,098	Non productrices
7,990,905	96,971	19,335,916	271,344	87,251	Productrices
7,975,847	11,137	19,312,306	–	79,047	Hydrauliques
15,058	85,834	23,610	271,344	8,204	A combustible
36,452,564	**26,699**	**1,379,183**	**2,401,062**	–	**Recettes brutes des usines municipales**
19,062,061	–	382,620	20,575	–	Non productrices
17,390,503	26,699	996,563	2,380,487	–	Productrices
17,304,532	–	644,351	–	–	Hydrauliques
85,971	26,699	352,212	2,380,487	–	A combustible
29,786,485	**738**	**3,064,727**	**20,575**	**32,098**	**Recettes brutes des usines non génératrices**
25,381,408	**123,670**	**20,332,479**	**2,651,831**	**87,251**	**Recettes brutes des usines génératrices**
25,280,379	11,137	19,956,657	–	79,047	**Hydrauliques**
101,029	112,533	375,822	2,651,831	8,204	A combustible
					RECETTES NETTES*
29,553,906	**124,039**	**19,275,047**	**2,660,179**	**105,491**	**Recettes nettes provenant de vente d'électricité**
8,378,781	**97,340**	**18,192,871**	**271,344**	**105,491**	**Recettes nettes des usines commerciales**
21,175,125	**26,699**	**1,082,176**	**2,388,835**	–	**Recettes nettes des usines municipales**
9,935,092	**369**	**1,630,991**	**8,348**	**18,240**	**Recettes nettes des usines non génératrices**
19,618,814	**123,670**	**17,644,056**	**2,651,831**	**87,251**	**Recettes nettes des usines génératrices**
26·87	**68·30**	**24·46**	**53·24**	**10·49**	**Moy. des recettes nette, par h.p. de machinerie primaire**
25·36	**65·91**	**23·50**	**53·24**	**10·32**	**Moy. des recettes nette par h.p. des usines principales et auxiliaires**
35·00	**81·60**	**30·92**	**61·20**	**17·49**	**Moy. des recettes nette par k.v.a. de la capac. des dynamos**
32·92	**81·60**	**29·68**	**61·20**	**17·07**	**Moy. des recettes nette k.v.a. des usines principales et auxiliaires**
					Moyenne des recettes nettes par k.w. heure
·72	8·67	·68	4·43	·93	De toutes les usines
·45	8·64	·63	4·41	·77	Des usines génératrices

*Recettes Brutes moins coût de l'électricité achetée.

Tableau 6—Service gratuit, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
17,912	–	**10,107**	**420**	–	**Valeur estimative totale**
51·93	–	29·30	1·22	–	Pourcentage dans chaque province
17,912	–	**10,107**	**420**	–	**Usines commerciales**
12	–	710	–	–	Non productrices
17,900	–	9,397	420	–	Productrices
17,900	–	9,347	–	–	Hydrauliques
–	–	50	420	–	A combustibles

Table 7—Expenses, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Expenses	**54,968,677**	**1,828,845**	**4,025,297**	**1,950,580**	**791,249**	**1,687,586**
Per cent of total for Canada	100·00	3·33	7·32	3·55	1·44	3·07
Salaries and wages	14,784,038	765,765	1,322,680	899,175	266,472	533,506
Fuel	2,638,888	463,900	199,152	192,736	209,647	335,285
Miscellaneous	13,900,748	359,499	771,090	504,167	176,437	404,243
Cost of power	23,644,403	239,681	1,732,375	354,502	138,693	414,552
Total for Commercial Stations	**24,357,223**	**419,816**	**3,570,533**	**889,360**	**641,982**	**1,362,881**
Salaries and wages	6,500,590	210,919	1,111,735	356,497	216,192	400,888
Fuel	1,319,985	95,337	146,552	122,146	185,412	269,682
Miscellaneous	9,037,829	94,121	706,573	176,020	162,525	309,081
Cost of power	7,498,819	19,439	1,605,673	234,697	77,853	383,230
Non-generating stations	5,927,881	33,432	1,843,695	90,164	15,642	589,238
Generating stations	18,429,342	386,384	1,726,838	799,196	626,340	773,643
Hydraulic stations	16,658,411	161,406	1,703,996	777,926	153,838	70,219
Fuel stations	1,770,931	224,978	22,842	21,270	472,502	703,424
Total for Municipal Stations	**30,610,854**	**1,409,629**	**454,764**	**1,061,220**	**149,267**	**324,704**
Salaries and wages	8,283,448	554,846	210,945	542,678	50,280	132,[illegible]
Fuel	1,318,903	368,563	52,600	70,590	24,235	65,[illegible]
Miscellaneous	4,862,919	265,378	64,517	328,147	13,912	95,[illegible]
Cost of power	16,145,584	220,242	126,702	119,805	60,840	31,[illegible]
Non-generating stations	16,567,457	27,644	181,717	237,225	26,973	51,[illegible]
Generating stations	14,043,397	1,381,985	273,047	823,995	122,294	273,011
Hydraulic stations	10,335,601	–	170,764	659,719	73,306	102,432
Fuel stations	3,707,796	1,381,385	102,283	164,276	48,988	170,579
Total Expenses for Non-Generating Stations.	**22,495,338**	**61,676**	**2,025,412**	**327,389**	**42,615**	**640,932**
Total Expenses for Generating Stations	**32,472,739**	**1,767,769**	**1,999,885**	**1,623,191**	**748,634**	**1,046,654**
Hydraulic stations	26,994,012	161,406	1,874,760	1,437,645	227,144	172,651
Fuel stations	5,478,727	1,606,363	125,125	185,546	521,490	874,003

Table 8—Employees, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Number of Persons Employed	**11,094**	**518**	**835**	**618**	**247**	**46[illegible]**
Per cent of total for Canada	100·00	4·67	7·53	5·57	2·23	4·1[illegible]
Officers, superintendents, etc.	974	40	57	40	52	56
Clerks, other salaried employees	3,924	144	301	271	49	113
Employees on wages	6,196	334	477	307	146	296
Total Employees in Commercial Stations	**5,049**	**160**	**682**	**244**	**196**	**342**
Non-generating	936	22	373	6	8	128
Generating	4,113	138	309	238	188	214
Hydraulic	3,613	71	296	229	51	44
Fuel	500	67	13	9	137	170
Total Employees in Municipal Stations	**6,045**	**358**	**153**	**374**	**51**	**123**
Non-generating	3,613	5	34	45	10	11
Generating	2,432	353	119	329	41	112
Hydraulic	1,479	–	84	284	26	64
Fuel	953	353	35	45	15	48
Total Employees in Non-Generating Stations.	**4,549**	**27**	**407**	**51**	**18**	**139**
Total Employees in Generating Stations	**6,545**	**491**	**428**	**567**	**229**	**326**
Hydraulic	5,092	71	380	513	77	108
Fuel	1,453	420	48	54	152	218

Tableau 7—Dépenses, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
29,463,767	**97,983**	**13,337,731**	**1,715,130**	**69,909**	**Total des dépenses**
53·60	·18	24·26	3·12	·13	Pourcentage dans chaque province
7,365,368	29,723	2,965,254	604,455	31,640	Traitements, appointements et salaires
383,478	36,515	95,171	718,503	4,501	Combustible
5,100,934	31,376	6,153,147	379,945	19,910	Dépenses diverses
16,613,987	369	4,124,159	12,227	13,858	Achat d'énergie électrique
4,676,874	**78,573**	**12,440,055**	**207,240**	**69,909**	**Total pour les usines commerciales**
1,399,076	23,920	2,682,609	67,114	31,640	Traitements, appointements et salaires
332,853	27,261	32,022	104,216	4,501	Combustible
1,608,397	27,020	5,898,272	35,910	19,010	Dépenses diverses
1,336,548	369	3,827,152	–	13,858	Achat d'énergie électrique
1,327,801	406	2,004,066	–	23,437	Usines non productrices
3,349,073	78,167	10,435,989	207,240	46,472	Usines productrices
3,337,504	4,952	10,414,138	–	34,432	Usines hydrauliques
11,569	73,215	21,851	207,240	12,040	Usines à combustible
24,786,893	**19,410**	**897,676**	**1,507,890**	**–**	**Total pour les usines municipales**
5,366,292	5,863	282,845	537,341	–	Traitements, appointements et salaires
50,625	9,251	63,149	614,287	–	Combustible
3,492,537	4,356	254,875	344,035	–	Dépenses diverses
16,277,439	–	297,007	12,227	–	Achat d'énergie électrique
14,780,190	–	245,941	16,073	–	Usines non productrices
9,006,703	19,410	651,735	1,491,817	–	Usines productrices
8,938,991	–	390,389	–	–	Usines hydrauliques
67,712	19,410	261,346	1,491,817	–	Usines à combustible
17,107,991	**406**	**2,250,007**	**16,073**	**23,437**	**Total des dépenses pour les usines non productrices**
12,355,776	**97,577**	**11,087,724**	**1,699,057**	**46,472**	**Total des dépenses pour les usines productrices**
12,276,495	4,952	10,804,527	–	34,432	Usines hydrauliques
79,281	92,625	283,197	1,699,057	12,040	Usines à combustible

Tableau 8—Personnel, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
5,435	**32**	**2,495**	**434**	**15**	**Total du personnel occupé**
48·99	·29	22·49	3·91	·13	Pourcentage dans chaque province
457	8	210	49	5	Administrateurs, directeurs, etc.
2,064	4	879	102	–	Commis et tous employés des bureaux
2,917	20	1,406	283	10	Ouvriers et journaliers
1,057	**25**	**2,256**	**72**	**15**	**Personnel des usines commerciales**
91	–	306	–	2	Non productrices
966	25	1,950	72	13	Productrices
963	8	1,941	–	10	Hydrauliques
3	17	9	72	3	A combustible
4,378	**7**	**239**	**362**	**–**	**Personnel des usines municipales**
3,448	–	54	6	–	Non productrices
930	7	185	356	–	Productrices
906	–	115	–	–	Hydrauliques
24	7	70	356	–	A combustible
3,539	**–**	**360**	**6**	**2**	**Total du personnel des usines non productrices**
1,896	**32**	**2,135**	**428**	**13**	**Total du personnel des usines productrices**
1,869	8	2,056	–	10	Hydrauliques
27	24	79	428	3	A combustible

Table 9—Number of Customers, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Number of Customers	**1,112,547**	**54,167**	**105,172**	**75,751**	**23,250**	**38,379**
Per cent of total for Canada	100·00	4·87	9·45	6·81	2·09	3·45
Domestic light	920,223	44,610	85,713	60,811	17,809	29,792
Commercial light	159,929	7,794	16,542	12,657	4,799	7,372
Power	32,395	1,763	2,917	2,283	642	1,215
Total Number of Customers of Commercial Stations.	**496,591**	**8,504**	**85,359**	**26,957**	**18,918**	**28,978**
Non-generating	132,954	1,336	62,831	4,744	478	13,984
Generating	363,637	7,168	22,528	22,213	18,440	14,994
Hydraulic	321,834	2,183	21,919	21,932	3,793	2,036
Fuel	41,803	4,985	609	281	14,647	12,958
Total Number of Customers of Municipal Stations.	**615,956**	**45,663**	**19,813**	**48,794**	**4,332**	**9,401**
Non-generating	431,665	899	9,447	3,675	1,064	1,707
Generating	184,291	44,764	10,366	45,119	3,268	7,694
Hydraulic	78,288	–	6,646	41,538	1,505	2,841
Fuel	106,003	44,764	3,720	3,581	1,763	4,853
Total Number of Customers of Non-Generating Stations.	**564,619**	**2,235**	**72,278**	**8,419**	**1,542**	**15,691**
Total Number of Customers of Generating Stations.	**547,928**	**51,932**	**32,894**	**67,332**	**21,708**	**22,688**
Hydraulic	400,122	2,183	28,565	63,470	5,298	4,897
Fuel	147,806	49,749	4,329	3,862	16,410	17,791
Average Number of Domestic Light Customers per 100 of Population.	**10·13**	**7·18**	**15·76**	**9·54**	**4·50**	**5·60**

Table 10—Pole Line Mileage, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Pole Line Mileage	**23,560**	**994**	**3,128**	**1,485**	**844**	**909**
Per cent of total for Canada	100·00	4·22	13·28	6·30	3·58	3·86
For transmission	8,406	179	1,006	420	277	186
For distribution	15,154	815	2,122	1,065	567	723
Total Pole Line Mileage—Commercial Stations.	**11,146**	**301**	**2,611**	**703**	**507**	**662**
Non-generating	3,105	30	1,319	141	30	224
Generating	8,041	271	1,292	562	477	438
Hydraulic	7,036	149	1,274	547	130	100
Fuel	1,005	122	18	15	347	326
Total Pole Line Mileage—Municipal Stations.	**12,414**	**693**	**517**	**782**	**337**	**257**
Non-generating	6,050	19	199	216	39	44
Generating	6,364	674	318	566	298	213
Hydraulic	4,760	–	206	495	261	112
Fuel	1,604	674	112	71	37	101
Total Pole Line Mileage—Non-Generating Stations.	**9,155**	**49**	**1,518**	**357**	**69**	**270**
Total Pole Line Mileage—Generating Stations.	**14,405**	**945**	**1,610**	**1,128**	**775**	**639**
Hydraulic	11,796	149	1,480	1,042	391	212
Fuel	2,609	796	130	86	384	427

Tableau 9—Abonnés, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
473,843	**3,617**	**296,823**	**41,069**	**476**	**Nombre d'abonnés**
42·59	·33	26·68	3·69	·04	Pourcentage du total pour le Canada
387,811	3,051	258,954	31,805	350	Eclairage, particuliers
72,277	508	30,200	7,667	113	Eclairage, commerçants
13,755	58	8,152	1,597	13	Force motrice
60,381	**3,022**	**258,954**	**5,042**	**476**	**Nombre total des abonnés des usines commerciales**
13,359	32	35,847	–	343	Non productrices
47,022	2,990	223,107	5,042	133	Productrices
46,832	654	222,482	–	3	Hydrauliques
190	2,336	625	5,042	130	A combustible
413,462	**595**	**37,869**	**36,027**	**–**	**Nombre total des abonnés des usines municipales**
401,863	–	12,554	456	–	Non productrices
11,599	595	25,315	35,571	–	Productrices
10,008	–	15,730	–	–	Hydrauliques
1,591	595	9,585	35,571	–	A combustible
415,222	**32**	**48,401**	**456**	**343**	**Nombre total des abonnés des usines non productrices**
58,621	**3,585**	**248,422**	**40,613**	**133**	**Nombre total des abonnés des usines productrices**
56,840	654	238,212	–	3	Hydrauliques
1,781	2,931	10,210	40,613	130	A combustible
12·85	**3·47**	**10·62**	**3·89**	**9·72**	**Moyenne des consommateurs d'éclairage électrique par 100 habitants**

Tableau 10—Longueur (en milles) des lignes sur poteaux, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
10,674	**74**	**4,721**	**662**	**69**	**Longueur totale, en milles, des lignes sur poteaux**
45·31	·31	20·04	2·81	·29	Pourcentage dans chaque province
7,891	7	1,938	14	59	Pour la transmission
2,783	67	2,783	648	10	Pour la distribution
4,909	61	4,196	137	69	**Pour le service des usines commerciales**
284	9	1,080	–	6	Non productrices
4,625	52	3,116	137	63	Productrices
4,638	36	3,101	–	61	Hydrauliques
7	16	15	137	2	A combustible
8,765	**13**	**525**	**525**	**–**	**Pour le service des usines municipales**
5,305	–	215	13	–	Non productrices
3,460	13	310	512	–	Productrices
3,431	–	255	–	–	Hydrauliques
29	13	55	512	–	A combustible
5,569	**9**	**1,295**	**13**	**6**	**Pour le service des usines non productrices**
5,105	**65**	**3,426**	**649**	**63**	**Pour le service des usines productrices**
5,069	36	3,356	–	61	Hydrauliques
36	29	70	649	2	A combustible

Table 11—Equipment, 1923

TOTAL EQUIPMENT INCLUDING AUXILIARY PLANT EQUIPMENT

—		Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Primary Power	**H.P.**	**2,573,412**	**90,803**	**258,170**	**104,641**	**34,708**	**37,472**
Per cent of total for Canada		100·00	3·53	10·03	4·07	1·35	1·46
Water-wheels and turbines	No.	641	14	56	19	21	24
Total capacity	H.P.	2,282,547	32,560	228,286	89,625	22,120	16,289
Steam engines	No.	203	52	16	20	19	32
Total capacity	H.P.	56,802	14,288	2,484	5,831	6,100	9,178
Steam turbines	No.	69	14	9	2	5	10
Total capacity	H.P.	216,877	41,650	25,500	8,000	5,075	11,545
Gas and oil engines	No.	269	51	12	18	10	6
Total capacity	H.P.	17,191	2,305	1,900	1,185	1,413	460
Total Dynamo Capacity	**K.V.A.**	**1,983,677**	**70,648**	**171,781**	**86,127**	**25,845**	**30,880**
Per cent of total for Canada		100·00	3·56	8·66	4·34	1·30	1·56
Dynamos, A.C.	No.	928	81	90	44	45	63
Capacity	K.V.A.	1,972,548	67,638	171,441	85,841	24,984	29,075
Dynamos, D.C.	No.	213	45	5	16	8	12
Capacity	K.W.	11,129	3,010	340	286	861	1,805
Commercial Stations							
Total Primary Power	**H.P.**	**1,566,775**	**38,525**	**242,875**	**33,972**	**21,333**	**21,355**
Water-wheels and turbines	No.	476	14	45	7	15	[illegible]
Total capacity	H.P.	1,419,838	32,560	218,191	22,400	10,240	[illegible]
Steam engines	No.	102	17	8	8	16	[illegible]
Total capacity	H.P.	29,399	4,280	1,094	3,501	5,685	[illegible]
Steam turbines	No.	36	2	7	2	5	7
Total capacity	H.P.	112,619	2,000	23,500	8,000	5,075	[illegible]
Gas and oil engines	No.	153	37	3	5	5	[illegible]
Total capacity	H.P.	4,919	685	99	71	363	[illegible]
Total Dynamo Capacity	**K.V.A.**	**1,237,180**	**27,825**	**161,281**	**26,315**	**15,421**	[illegible]
Dynamos A.C.	No.	355	33	59	13	30	[illegible]
Capacity	K.V.A.	1,230,549	27,635	160,861	26,175	14,560	15,900
Dynamos D.C.	No.	168	34	5	10	8	12
Capacity	K.W.	6,631	190	340	140	861	1,805
Municipal Stations							
Total Primary Power	**H.P.**	**1,006,642**	**51,278**	**15,295**	**70,669**	**13,375**	**16,117**
Water-wheels and turbines	No.	171	–	11	12	6	14
Total capacity	H.P.	862,709	–	10,095	67,225	11,910	13,774
Steam engines	No.	101	35	8	12	3	7
Total capacity	H.P.	27,403	10,008	1,390	2,330	415	1,328
Steam turbines	No.	33	12	2	–	–	3
Total capacity	H.P.	104,258	39,650	2,000	–	–	745
Gas and oil engines	No.	116	14	9	13	5	3
Total capacity	H.P.	12,272	1,620	1,810	1,114	1,050	270
Total Dynamo Capacity	**K.V.A.**	**746,497**	**42,823**	**10,580**	**59,812**	**10,424**	**13,175**
Dynamos A.C.	No.	373	48	31	31	15	28
Capacity	K.V.A.	741,999	40,003	10,580	59,666	10,424	13,175
Dynamos D.C.	No.	45	11	–	6	–	–
Capacity	K.W.	4,498	2,820	–	146	–	–

Table 12—Auxiliary Plant Equipment, 1923

Total Primary Power	**H.P.**	**149,572**	**2,350**	**27,140**	**12,346**	**1,075**	**8,820**
Per cent of total for Canada		100·00	1·57	18·14	8·25	0·72	5·90
Steam reciprocating engines	No.	44	2	5	5	4	4
Total capacity	H.P.	19,686	1,250	1,290	4,106	1,075	2,040
Steam turbines	No.	31	1	9	2	–	2
Total capacity	H.P.	129,110	1,000	25,500	8,000	–	6,700
Gas and oil engines	No.	7	1	2	2	–	1
Total capacity	H.P.	776	100	350	240	–	80
Total Secondary Power	**K.V.A.**	**121,832**	**2,100**	**20,865**	**10,525**	**597**	**7,947**
Per cent of total for Canada		100·00	1·72	17·13	8·64	0·49	6·52
Dynamos A.C.	No.	68	4	17	9	3	7
Total capacity	K.V.A.	120,152	2,100	20,865	10,525	597	7,947
Dynamos D.C.	No.	5	–	–	–	–	–
Total capacity	K.W.	1,680	–	–	–	–	–
Commercial Stations							
Total Primary Power	**H.P.**	**115,277**	**2,350**	**23,950**	**11,206**	**700**	**8,820**
Steam reciprocating engines	No.	26	2	1	3	2	4
Total capacity	H.P.	12,731	1,250	450	3,206	700	2,040
Steam turbines	No.	24	1	7	2	–	2
Total Capacity	H.P.	102,360	1,000	23,500	8,000	–	6,700
Gas and oil engines	No.	3	1	–	–	–	1
Total capacity	H.P.	186	100	–	–	–	80
Total Secondary Power	**K.V.A.**	**96,235**	**2,100**	**18,265**	**9,750**	**375**	**7,947**
Dynamos A. C.	No.	43	4	8	5	1	7
Total capacity	K.V.A.	95,805	2,100	18,265	9,750	375	7,947
Dynamos D.C.	No.	3	–	–	–	–	–
Total capacity	K.W.	430	–	–	–	–	–
Municipal Stations							
Total Primary Power	**H.P.**	**34,205**	–	**3,190**	**1,140**	**375**	–
Steam reciprocating engines	No.	18	–	4	2	2	–
Total capacity	H.P.	6,955	–	840	900	375	–
Steam turbines	No.	7	–	2	–	–	–
Total capacity	H.P.	26,750	–	2,000	–	–	–
Gas and oil engines	No.	4	–	2	2	–	–
Total capacity	H.P.	590	–	350	240	–	–
Total Secondary Power	**K.V.A.**	**25,597**	–	**2,600**	**775**	**222**	–
Dynamos A.C.	No.	25	–	9	4	2	–
Total capacity	K.V.A.	24,347	–	2,600	775	222	–
Dynamos D.C.	No.	2	–	–	–	–	–
Total capacity	K.W.	1,250	–	–	–	–	–

Tableau 11—Machinerie, 1923

TOTAL DE LA MACHINERIE, Y COMPRIS CELLE DES USINES AUXILIAIRES

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—	
1,165,329	**1,882**	**820,228**	**49,964**	**10,220**	**Total, force motrice primaire**	**H.P.**
45·28	0·07	31·87	1·94	0·40	Pourcentage dans chaque province.	
282	8	215	–	2	Turbines et roues hydrauliques	Nomb.
1,098,302	279	785,086	–	10,000	Capacité totale	H.P.
22	3	19	19	1	Machines à vapeur	Nomb.
6,255	560	7,265	4,781	60	Capacité totale	H.P.
9	–	7	12	1	Turbines à vapeur	Nomb.
60,250	–	27,500	37,197	160	Capacité totale	H.P.
10	8	10	144	–	Moteurs à gaz et à pétrole	Nomb.
522	1,043	377	7,986	–	Capacité totale	H.P.
897,598	**1,520**	**649,629**	**43,469**	**6,180**	**Machinerie développant la force motrice secondaire**	
45·25	0·08	32·75	2·19	0·31	Pourcentage dans chaque province	
288	14	217	83	3	Dynamos, C.A.	Nomb.
895,564	1,509	648,035	42,311	6,150	Capacité totale	K.V.A.
20	2	14	89	2	Dynamos, C.D.	Nomb.
2,034	11	1,594	1,158	30	Capacité totale	K.W.
					Usines commerciales	
392,164	**1,532**	**800,553**	**3,246**	**10,220**	**Total, force motrice primaire**	**H.P.**
178	8	191	–	2	Turbines et roues hydrauliques	Nomb.
355,222	279	768,461	–	10,000	Capacité totale	H.P.
8	2	11	6	1	Machines à vapeur	Nomb.
1,360	410	4,425	734	60	Capacité totale	H.P.
4	–	7	1	1	Turbines à vapeur	Nomb.
35,500	–	27,500	84	160	Capacité totale	H.P.
3	6	6	85	–	Moteurs à gaz et à pétrole	Nomb.
82	843	167	2,428	–	Capacité totale	H.P.
343,959	**1,180**	**635,285**	**2,109**	**6,180**	**Machinerie développant la force motrice secondaire**	
167	11	183	21	2	Dynamos, C.A.	Nomb.
343,197	1,169	633,703	1,199	6,150	Capacité totale	K.V.A.
14	2	12	69	2	Dynamos, C.D.	Nomb.
762	11	1,582	910	30	Capacité totale	K.W.
					Usines municipales	
773,163	**350**	**19,675**	**46,718**	–	**Total force motrice primaire**	**H.P.**
104	–	24	–	–	Turbines et roues hydrauliques	Nomb.
743,080	–	16,625	–	–	Capacité totale	H.P.
14	1	8	13	–	Machines à vapeur	Nomb.
4,895	150	2,840	4,047	–	Capacité totale	H.P.
5	–	–	11	–	Turbines à vapeur	Nomb.
24,750	–	–	37,113	–	Capacité totale	H.P.
7	2	4	50	–	Moteurs à gaz et à pétrole	Nomb.
440	200	210	5,558	–	Capacité totale	H.P.
553,639	**340**	**14,344**	**41,360**	–	**Machinerie développant la force motrice secondaire**	
121	3	34	62	–	Dynamos, C.A.	Nomb.
552,367	340	14,332	41,112	–	Capacité totale	K.V.A.
6	–	2	20	–	Dynamos, C.D.	Nomb.
1,272	–	12	248	–	Capacité totale	K.W.

Tableau 12—Machines des usines auxiliaires, 1923

65,340	**66**	**32,275**	–	**160**	**Total, force motrice primaire**	**H.P.**
43·69	0·04	21·58	–	0·11	Pourcentage dans chaque province	
13	1	10	–	–	Machines à vapeur	Nomb.
5,090	60	4,775	–	–	Capacité totale	H.P.
9	–	7	–	1	Turbines à vapeur	Nomb.
60,250	–	27,500	–	160	Capacité totale	H.P.
–	1	–	–	–	Moteurs à gaz et à pétrole	Nomb.
–	6	–	–	–	Capacité totale	H.P.
53,328	–	**26,320**	–	**150**	**Machinerie développant la force motrice secondaire**	
43·77	–	21·60	–	0·13	Pourcentage dans chaque province	
16	–	11	–	1	Dynamos, C.A.	Nomb.
51,928	–	26,040	–	150	Capacité totale	K.V.A.
3	–	2	–	–	Dynamos, C.D.	Nomb.
1,400	–	280	–	–	Capacité totale	K.W.
					Usines commerciales	
36,390	**66**	**31,635**	–	**160**	**Total force motrice primaire**	**H.P.**
5	1	8	–	–	Machines à vapeur	Nomb.
890	60	4,135	–	–	Capacité totale	H.P.
4	–	7	–	1	Turbines à vapeur	Nomb.
35,500	–	27,500	–	160	Capacité totale	H.P.
–	1	–	–	–	Moteurs à gaz et à pétrole	Nomb.
–	6	–	–	–	Capacité totale	H.P.
31,328	–	**26,320**	–	**150**	**Machinerie développant la force motrice secondaire**	
6	–	11	–	1	Dynamos, C.A.	Nomb.
31,178	–	26,040	–	150	Capacité totale	K.V.A.
1	–	2	–	–	Dynamos, C.D.	Nomb.
150	–	280	–	–	Capacité totale	K.W.
					Usines municipales	
28,950	–	**640**	–	–	**Total force motrice primaire**	**H.P.**
8	–	2	–	–	Machines à vapeur	Nomb.
4,200	–	640	–	–	Capacité totale	H.P.
5	–	–	–	–	Turbines à vapeur	Nomb.
24,750	–	–	–	–	Capacité totale	H.P.
–	–	–	–	–	Moteurs à gaz et à pétrole	Nomb.
–	–	–	–	–	Capacité totale	H.P.
22,000	–	–	–	–	**Machinerie développant la force motrice secondaire**	
10	–	–	–	–	Dynamos, C.A.	Nomb.
20,750	–	–	–	–	Capacité totale	K.V.A.
2	–	–	–	–	Dynamos, C.D.	Nomb.
1,250	–	–	–	–	Capacité totale	K.W.

Table 13—Main Plant Equipment, 1923

—		Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
Total Primary Power	**H.P.**	**2,423,845**	**88,453**	**231,030**	**92,295**	**33,633**	**28,652**
Per cent of total for Canada		100·00	3·65	9·53	3·81	1·39	1·18
Water-wheel and turbines	No.	641	14	56	19	21	24
Total capacity	H.P.	2,282,547	32,560	228,286	89,625	22,120	16,289
Steam reciprocating engines	No.	159	50	11	15	15	28
Total capacity	H.P.	37,116	13,038	1,194	1,725	5,025	7,138
Steam turbines	No.	38	13	–	–	5	8
Total capacity	H.P.	87,767	40,650	–	–	5,075	4,845
Gas and oil engines	No.	262	50	10	16	10	5
Total capacity	H.P.	16,415	2,205	1,550	945	1,413	380
Total Dynamo Capacity	**K.V.A.**	**1,861,845**	**68,548**	**150,916**	**75,602**	**25,248**	**22,933**
Per cent of total for Canada		100·00	3·68	8·10	4·06	1·36	1·23
Dynamos, A.C.	No.	860	77	73	35	42	56
Total capacity	K.V.A.	1,852,396	65,538	150,576	75,316	24,387	21,128
Dynamos, D.C.	No.	20[illegible]	45	5	16	8	12
Total capacity	K.W.	9,149	3,010	340	286	861	1,805
Commercial Stations							
Total Primary Power	**H.P.**	**1,451,498**	**37,175**	**218,925**	**22,766**	**20,633**	**12,535**
Per cent of total for Canada		100·00	2·56	15·08	1·57	1·42	0·86
Water-wheels and turbines	No.	470	14	45	7	15	10
Total capacity	H.P.	1,419,838	32,560	218,191	22,400	10,210	2,5[illegible]
Steam reciprocating engines	No.	76	15	7	5	14	24
Total capacity	H.P.	16,668	3,030	644	295	4,985	5,810
Steam turbines	No.	12	1	–	–	5	5
Total capacity	H.P.	10,259	1,000	–	–	5,075	4,100
Gas and oil engines	No.	150	36	3	5	5	2
Total capacity	H.P.	4,733	585	90	71	363	110
Total Dynamo Capacity	**K.V.A.**	**1,140,945**	**25,725**	**142,936**	**16,565**	**15,046**	**9,758**
Per cent of total for Canada		100·00	2·26	12·53	1·45	1·32	0·86
Dynamos, A.C.	No.	512	29	51	8	29	28
Total capacity	K.V.A.	1,134,744	25,535	142,596	16,425	14,185	7,953
Dynamos, D.C.	No.	165	34	5	10	8	12
Total capacity	K.W.	6,201	190	340	140	861	1,805
Municipal Stations							
Total Primary Power	**H.P.**	**972,347**	**51,278**	**12,105**	**69,529**	**13,000**	**16,117**
Per cent of total for Canada		100·00	5·27	1·24	7·15	1·34	1·66
Water-wheels and turbines	No.	171	–	11	12	6	14
Total capacity	H.P.	862,709	–	10,095	67,225	11,910	13,774
Steam reciprocating engines	No.	83	35	4	10	1	7
Total capacity	H.P.	20,448	10,008	550	1,430	40	1,328
Steam turbines	No.	26	12	–	–	–	3
Total capacity	H.P.	77,508	39,650	–	–	–	745
Gas and oil engines	No.	112	14	7	11	5	3
Total capacity	H.P.	11,682	1,620	1,460	874	1,050	270
Total Dynamo Capacity	**K.V.A.**	**720,900**	**42,823**	**7,980**	**59,037**	**10,202**	**13,175**
Per cent of total for Canada		100·00	5·94	1·10	8·19	1·41	1·83
Dynamos, A. C.	No.	348	48	22	27	13	28
Total capacity	K.V.A.	717,652	40,003	7,980	58,891	10,202	13,175
Dynamos, D.C.	No.	43	11	–	6	–	–
Total capacity	K.W.	3,248	2,820	–	146	–	–
Hydraulic Stations							
Total Dynamo Capacity	**K.V.A.**	**1,746,673**	**22,350**	**148,612**	**73,662**	**17,198**	**13,910**
Per cent of total for Canada		100·00	1·28	8·51	4·22	0·98	0·80
Dynamos, A. C.	No.	593	10	56	19	18	26
Total capacity	K.V.A.	1,744,802	22,350	148,542	73,662	17,138	13,910
Dynamos, D.C.	No.	20	–	2	–	2	–
Total capacity	K.W.	1,871	–	70	–	60	–
Fuel Stations							
Total Dynamo Capacity	**K.V.A.**	**115,172**	**46,198**	**2,304**	**1,940**	**8,650**	**9,022**
Per cent of total for Canada		100·00	40·11	2·00	1·69	6·99	7·83
Dynamos, A. C.	No.	267	67	17	16	24	30
Total capacity	K.V.A.	107,594	43,188	2,034	1,654	7,249	7,218
Dynamos, D.C.	No.	188	45	3	16	6	12
Total capacity	K.W.	7,578	3,010	270	286	801	1,805

Tableau 13—Machines des usines principales, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—	
1,099,989	**1,816**	**787,953**	**49,964**	**10,060**	**Machinerie fournissant la force motrice primaire**	**H.P.**
45·38	0·08	32·51	2·06	0·41	Pourcentage dans chaque province.	
282	8	215	–	2	Turbines et roues hydrauliques	Nomb.
1,098,302	279	785,086	–	10,000	Capacité totale	H.P.
9	2	9	19	1	Machines à vapeur	Nomb.
1,165	500	2,490	4,781	60	Capacité totale	H.P.
–	–	–	12	–	Turbines à vapeur	Nomb.
–	–	–	37,197	–	Capacité totale	H.P.
10	7	10	144	–	Moteurs à gaz et à pétrole	Nomb.
522	1,037	377	7,986	–	Capacité totale	H.P.
844,270	**1,520**	**623,309**	**43,469**	**6,030**	**Capacité totale de l'ensemble des dynamos**	**K.V.A.**
45·35	0·08	33·49	2·33	0·32	Pourcentage dans chaque province.	
272	14	206	83	2	Dynamos, C.A.	Nomb.
843,636	1,509	621,995	42,311	6,000	Capacité totale	K.V.A.
17	2	12	89	2	Dynamos, C.D.	Nomb.
634	11	1,314	1,158	30	Capacité totale	K.W.
					Usines commerciales	
355,774	**1,466**	**768,918**	**3,216**	**10,060**	**Machinerie fournissant la force motrice primaire**	**H.P.**
24·51	0·10	52·98	0·23	0·69	Pourcentage dans chaque province	
178	8	191	–	2	Turbines et roues hydrauliques	Nomb.
355,222	279	768,461	–	10,000	Capacité totale	H.P.
3	1	3	6	1	Machines à vapeur	Nomb.
470	350	290	734	60	Capacité totale	H.P.
–	–	–	1	–	Turbines à vapeur	Nomb.
–	–	–	84	–	Capacité totale	H.P.
3	5	6	85	–	Moteurs à gaz et à pétrole	Nomb.
82	837	167	2,428	–	Capacité totale	H.P.
312,631	**1,180**	**608,965**	**2,109**	**6,030**	**Capacité totale de l'ensemble des dynamos**	**K.V.A.**
27·40	0·10	53·37	0·18	0·53	Pourcentage dans chaque province.	
161	11	172	21	2	Dynamos, C.A.	Nomb.
312,019	1,169	607,663	1,199	6,000	Capacité totale	K.V.A.
13	2	10	69	2	Dynamos, C.D.	Nomb.
612	11	1,302	910	30	Capacité totale	K.W.
					Usines municipales	
744,215	**350**	**19,035**	**46,718**	–	**Machinerie fournissant la force motrice primaire**	**H.P.**
76·54	0·03	1·96	4·81	–	Pourcentage dans chaque province	Nomb.
104	–	24	–	–	Turbines et roues hudrauliques	Nomb.
743,080	–	16,625	–	–	Capacité totale	H.P.
6	1	6	13	–	Machines à vapeur	Nomb.
695	150	2,200	4,047	–	Capacité totale	H.P.
–	–	–	11	–	Turbines à vapeur	Nomb.
–	–	–	37,113	–	Capacité totale	H.P.
7	2	4	59	–	Moteurs à gaz et à pétrole	Nomb.
440	200	210	5,558	–	Capacité totale	H.P.
831,639	**340**	**14,344**	**41,360**	–	**Capacité totale de l'ensemble des dynamos**	**K.V.A.**
73·75	0·05	1·99	5·74	–	Pourcentage dans chaque province	
111	3	34	62	–	Dynamos, C.A.	Nomb.
831,617	340	14,332	41,112	–	Capacité totale	K.V.A.
4	–	2	20	–	Dynamos, C.D.	Nomb.
22	–	12	248	–	Capacité totale	K.W.
					Les usines hydrauliques	
843,264	**332**	**621,345**	–	**6,000**	**Capacité totale de l'ensemble des dynamos**	**K.V.A.**
48·28	0·02	35·57	–	0·34	Pourcentage dans chaque province	
262	6	194	–	2	Dynamos, C.A.	Nomb.
842,816	324	620,060	–	6,000	Capacité totale	K.V.A.
8	1	7	–	–	Dynamos, C.D.	Nomb.
448	8	1,285	–	–	Capacité totale	K.W.
					Les usines à combustible	
1,006	**1,188**	**1,964**	**43,469**	**30**	**Capacité totale de l'ensemble des dynamos**	**K.V.A.**
0·87	1·03	1·71	37·74	0·03	Pourcentage dans chaque province	
10	8	12	83	–	Dynamos, C.A.	Nomb.
820	1,185	1,935	42,311	–	Capacité totale	K.V.A.
9	1	5	89	2	Dynamos, C.D.	Nomb.
186	3	29	1,158	30	Capacité totale	K.W.

Table 14—Main Plant Equipment Classified, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba
Primary Power—Force motrice primaire	**2,423,845**	**88,453**	**231,030**	**92,295**
Water-wheels and turbines—Roues hydrauliques et turbines—				
Total.....No.	641	14	56	19
Total H.P.	2,282,547	32,560	228,286	89,625
Under—Au-dessous de 500 H.P.....No.	220	8	13	1
Total H.P.	38,131	060	2,350	125
500-2,000 H.P.....No.	194	-	19	2
Total H.P.	210,531	-	21,336	1,000
2,000- 5,000 H.P.....No.	83	2	7	2
Total H.P.	241,185	8,000	21,600	6,400
5,000-10,000 H.P.....No.	57	4	6	14
Total H.P.	366,200	23,600	46,000	82,100
10,000-15,000 H.P.....No.	54	-	11	-
Total H.P.	627,000	-	137,000	-
15,000-55,000 H.P.....No.	33	-	-	-
Total H.P.	799,500	-	-	-
Steam Engines and Turbines—Machines et turbines à vapeur—				
Total.....No.	197	63	11	15
Total H.P.	124,883	53,688	1,194	1,725
Steam Reciprocating Engines—Machines à vapeur—				
Total.....No.	159	50	11	15
Total H.P.	37,116	13,038	1,194	1,725
Under—Au-dessous de 500 H.P.....No.	143	42	11	15
Total H.P.	23,996	6,468	1,194	1,725
500 up.....No.	16	8	-	-
Total H.P.	13,120	6,570	-	-
Steam Turbines—Turbines à vapeur—				
Total.....No.	38	13	-	-
Total H.P.	87,767	40,650	-	-
Under—Au-dessous de 500 H.P.....No.	6	-	-	-
Total H.P.	1,100	-	-	-
500- 2,000 H.P.....No.	12	3	-	-
Total H.P.	10,898	3,000	-	-
2,000- 5,000 H.P.....No.	15	7	-	-
Total H.P.	43,160	18,450	-	-
5,000-10,000 H.P.....No.	5	3	-	-
Total H.P.....	32,600	19,200	-	-
Gas and Oil Engines—Moteurs à gaz et à pétrole—				
Total .....No.	262	50	10	16
Total H.P.	16,415	2,205	1,550	945
Secondary Power—Force motrice secondaire				
Dynamos A.C. and D.C.-C.A. et C.D.....Total .....No.	**1,068**	**122**	**78**	**51**
Total K.V.A.	**1,861,845**	**68,548**	**150,916**	**75,602**
Dynamos A.C.—C.A.....Total.....No.	860	77	73	35
Total K.V.A	1,852,396	65,538	150,576	75,3[illegible]
Under—Au-dessous de 200 K.V.A.....No.	304	47	25	14
Total K.V.A	28,317	4,119	2,557	1,2[illegible]
200- 500 K.V.A.....No.	126	9	11	4
Total K.V.A.	38,146	2,706	4,056	1,357
500- 1,000 K.V.A.....No.	136	4	10	-
Total K.V.A.	99,104	2,838	8,438	-
1,000- 5,000 K.V.A.....No.	179	14	12	10
Total K.V.A.	407,567	38,375	24,275	34,350
5,000-10,000 K.V.A.....No.	66	3	15	5
Total K.V.A.	487,062	17,500	111,250	38,250
10,000-15,000 K.V.A.....No.	49	-	-	-
Total K.V.A.	792,200	-	-	-
Dynamos D.C.—C.D.....Total.....No.	208	45	5	16
Total K.W.	9,449	3,010	340	286
Under—Au-dessous de 200 K.W.....No.	193	40	4	16
Total K.W.	3,349	360	140	286
200- 500 K.W.....No.	10	2	1	-
Total K.W.	3,000	800	200	-
500-1,000 K.W.....Total.....No.	5	3	-	-
Total K.W	3,100	1,850	-	-

Tableau 14—Machines des usines principales classifiés, 1923

New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse	Ontario	Prince Edward Is. — Ile du Prince-Edouard	Quebec	Saskatchewan	Yukon	Commercial — Commerciales	Municipal — Municipales
33,633	**28,652**	**1,099,989**	**1,816**	**787,953**	**49,964**	**10,060**	**1,451,498**	**972,347**
21	24	282	8	215	-	2	470	171
22,120	16,289	1,098,302	279	785,086	-	10,000	1,419,838	862,709
13	17	77	8	83	-	-	173	47
2,720	3,019	14,072	279	14,606	-	-	28,377	9,754
2	5	110	-	56	-	-	130	64
1,500	6,370	117,720	-	62,605	-	-	139,336	71,195
6	2	38	-	26	-	-	71	12
17,900	6,900	107,760	-	72,625	-	-	206,025	35,160
-	-	14	-	17	-	2	41	16
-	-	84,550	-	119,950	-	10,000	272,300	93,900
-	-	24	-	19	-	-	41	13
-	-	283,700	-	206,300	-	-	464,800	162,200
-	-	19	-	14	-	-	14	19
-	-	490,500	-	309,000	-	-	309,000	490,500
20	36	9	2	9	31	1	88	109
33,100	11,983	1,165	500	2,490	41,978	60	26,927	97,956
15	28	9	2	9	19	1	76	83
4,625	7,138	1,165	500	2,490	4,781	60	16,668	20,448
12	26	9	2	8	17	1	70	73
2,125	6,038	1,165	500	1,790	2,931	60	12,118	11,878
3	2	-	-	1	2	-	6	10
2,900	1,100	-	-	700	1,850	-	4,550	8,570
5	8	-	-	-	12	-	12	26
5,075	4,845	-	-	-	37,197	-	10,259	77,508
1	4	-	-	-	1	-	3	3
250	775	-	-	-	84	-	364	745
3	4	-	-	-	2	-	8	4
1,825	4,070	-	-	-	2,003	-	6,895	4,003
1	-	-	-	-	7	-	1	14
3,000	-	-	-	-	21,710	-	3,000	40,160
-	-	-	-	-	2	-	-	5
-	-	-	-	-	13,400	-	-	32,600
10	5	10	7	10	144	-	150	112
1,413	380	522	1,037	377	7,986	-	4,733	11,682
50	**68**	**289**	**16**	**218**	**172**	**4**	**677**	**391**
25,248	22,933	844,270	1,520	623,309	43,469	6,030	1,140,945	720,900
42	56	272	14	206	83	2	512	348
24,387	21,128	843,636	1,509	621,995	42,311	6,000	1,134,744	717,652
19	33	40	12	50	64	-	143	161
2,362	3,336	4,157	1,009	5,152	4,396	-	12,870	15,447
12	12	42	2	28	5	-	76	50
3,625	3,467	12,631	500	8,151	1,523	-	22,449	15,697
4	5	68	-	41	4	-	92	44
2,450	3,325	49,789	-	29,872	2,392	-	66,800	32,304
7	6	73	-	47	8	2	129	50
15,950	11,000	150,197	-	105,920	21,500	6,000	288,825	118,742
-	-	30	-	10	2	-	37	29
-	-	245,662	-	61,900	12,500	-	267,800	219,262
-	-	19	-	30	-	-	35	14
-	-	381,200	-	411,000	-	-	476,060	316,200
8	12	17	2	12	89	2	165	43
861	1,805	634	11	1,314	1,158	30	6,201	3,248
7	7	17	2	9	89	2	155	38
211	405	634	11	114	1,158	30	2,751	598
-	5	-	-	2	-	-	8	2
-	1,400	-	-	600	-	-	2,200	800
1	-	-	-	1	-	-	2	3
650	-	-	-	600	-	-	1,250	1,850

Table 15—Electric Energy Generated, 1923

—	Canada	Alberta	British Columbia — Colombie Britannique	Manitoba	New Brunswick — Nouveau-Brunswick	Nova Scotia — Nouvelle-Ecosse
ALL STATIONS						
Total K.W. Hours Generated..(thousands)	**8,099,192**	**122,113**	**577,240**	**309,461**	**37,521**	**41,848**
Per cent of total for Canada.....	100·00	1·51	7·13	3·82	0·46	0·52
K.W. hours Generated by Non-Generating Stations .....(thousands)	5,021	55	–	–	–	28
K.W. Hours Generated by Generating Stations.....(thousands)	8,094,171	122,058	577,240	309,461	37,521	41,820
K.V.A. Capacity of Generating Stations.....	1,965,923	70,573	171,156	85,515	25,623	23,340
Ratio of output to maximum capacity (per cent)	47·0	19·7	38·5	41·3	16·7	20·5
Average K.W. hours per K.V.A.....	4,117	1,730	3,373	3,619	1,464	1,792
Commercial Stations						
Total						
K.W. hours generated.....(thousands)	5,073,956	69,064	560,122	142,924	29,784	17,[illegible]
K.V.A. Capacity.....	1,224,135	27,750	161,201	26,315	15,421	10,[illegible]
Ratio of output to maximum Capacity (p.c.)	47·3	28·4	39·7	62·0	22·0	19·[illegible]
Average K.W. hours per K.V.A.....	4,145	2,489	3,475	5,431	1,931	1,713
Hydraulic						
K.W. hours Generated.....(thousands)	5,036,892	66,243	559,634	142,763	14,579	2,423
K.V.A. Capacity.....	1,201,950	24,375	160,482	26,100	8,210	3,048
Ratio of output of maximum Capacity (p.c.)	47·8	31·0	39·8	62·4	20·27	9·1
Average K.W. hours per K.V.A.....	4,191	2,718	3,487	5,470	1,776	795
Fuel						
K.W. hours Generated.....(thousands)	37,064	2,821	488	161	15,205	15,041
K.V.A. Capacity.....	22,185	3,375	719	215	7,211	7,117
Ratio of output of maximum Capacity (p.c.)	19·1	9·5	7·8	8·6	24·1	24·1
Average K.W. hours per K.V.A.....	1,670	836	679	749	2,109	2,113
Municipal Stations						
Total						
K.W. hours Generated.....(thousands)	3,020,215	52,994	17,118	166,537	7,737	24,356
K.V.A. Capacity.....	741,788	42,823	9,955	59,200	10,202	13,175
Ratio of output of maximum Capacity (p.c.)	46·5	14·1	19·6	32·1	8·7	21·1
Average K.W. hours per K.V.A.....	4,072	1,238	1,720	2,813	758	1,849
Hydraulic						
K.W. hours Generated.....(thousands)	2,899,256	–	15,013	164,833	6,439	22,055
K.V.A. Capacity.....	648,801	–	8,370	57,475	9,363	11,[illegible]
Ratio of output of maximum Capacity (p.c.)	51·0	–	20·5	32·7	7·8	[illegible]
Average K.W. hours per K.V.A.....	4,469	–	1,794	2,868	687	1,[illegible]
Fuel						
K.W. hours Generated.....(thousands)	120,959	52,994	2,105	1,704	1,298	2,301
K.V.A. Capacity.....	92,987	42,823	1,585	1,725	839	1,906
Ratio of output of maximum Capacity (p.c.)	14·9	14·1	15·2	11·3	17·7	13·8
Average K.W. hours per K.V.A.....	1,301	1,238	1,328	988	1,547	1,207
Total Hydraulic						
K.W. hours Generated.....(thousands)	7,936,148	66,243	574,647	307,596	21,018	24,473
K.V.A. Capacity.....	1,850,751	24,375	168,852	83,575	17,573	14,317
Ratio of output of maximum Capacity (p.c.)	48·9	31·0	38·8	42·0	13·7	19·5
Average K.W. hours per K.V.A.....	4,288	2,718	3,403	3,680	1,196	1,710
Total Fuel						
K.W. hours Generated.....(thousands)	158,023	55,815	2,593	1,865	16,503	17,342
K.V.A. Capacity.....	115,172	46,198	2,304	1,940	8,050	9,023
Ratio of output of maximum Capacity (p.c.)	15·7	13·8	12·8	10·9	23·4	21·9
Average K.W. hours per K.V.A.....	1,372	1,208	1,125	961	2,050	1,922

Tableau 15—Energie électrique produite, 1923

Ontario	Prince Edward Is. — Ile du Prince Edouard	Quebec	Saskatchewan	Yukon	—
					TOUTES USINES
4,121,733	**1,431**	**2,816,397**	**60,090**	**11,358**	**Total K.W. heures produits** (milliers)
50·86	0·02	34·80	0·74	0·14	Pourcentage du total pour le Canada
4,857	–	77	–	4	K.W. heures produits par les usines non génératrices. (milliers)
4,116,876	1,431	2,816,320	60,090	11,354	K.W. heures produits par les usines génératrices (milliers
894,348	1,520	644,349	43,469	6,030	Capacité des usines génératrices en K.V.A.
52·5	10·7	49·9	15·8	21·5	Proportion de la production à la capacité (p.c.)
4,603	941	4,371	1,382	1,883	Moyenne des K.W. heures par K.V.A.
					Usines commerciales
					Total
1,452,992	1,259	2,788,332	1,361	11,354	K.W. heures produits (milliers)
343,959	1,180	630,005	2,109	6,030	Capacité en K.V.A.
48·2	12·2	50·5	7·4	21·5	Proportion de la production à la capacité (p.c.)
4,222	1,067	4,426	645	1,883	Moyenne des K.W. heures par K.V.A.
					Hydrauliques
1,451,858	85	2,787,991	–	11,316	W.K. heures produits (milliers)
343,670	332	629,733	–	6,000	Capacité en K.V.A.
48·2	2·9	50·5	–	21·5	Proportion de la production à la capacité (p.c.)
4,225	256	4,427	–	1,886	Moyenne des K.W. heures par K.V.A.
					A combustible
434	1,174	341	1,361	38	K.W. heures produits (milliers)
289	848	272	2,109	30	Capacité en K.V.A.
17·1	15·8	14·3	7·4	14·5	Proportion de la production à la capacité (p.c.)
1,502	1,384	1,254	645	1,266	Moyenne des K.W. heures par K.V.A.
					Usines municipales
					Total
2,664,584	172	27,988	58,729	–	K.W. heures produits (milliers)
550,389	340	14,344	41,360	–	Capacité en K.V.A.
55·3	5·8	22·3	16·2	–	Proportion de la production à la capacité (p.c.)
4,841	506	1,951	1,420	–	Moyenne dos K.W. heures par K.V.A.
					Hydrauliques
2,663,834	–	27,082	–	–	K.W. heures produits (milliers).
549,672	–	12,652	–	–	Capacité en K.V.A.
55·3	–	24·4	–	–	Proportion de la production à la capacité (p.c.)
4,846	–	2,141	–		Moyenne des K.W. heures par K.V.A.
					A combustible
750	172	906	58,729	–	K.W. heures produits (milliers)
717	340	1,692	41,360	–	Capacité en K.V.A.
11·9	5·8	6·1	16·2	–	Proportion de la production à la capacité (p.c.)
1,046	506	535	1,420	–	Moyenne des K.W. heures par K.V.A.
					Total hydrauliques
4,115,692	85	2,815,073	–	11,316	K.W. heures produits (milliers)
893,342	332	642,385	–	6,000	Capacité en K.V.A.
52·6	2·9	50·0	–	21·5	Proportion de la production à la capacité (p.c.)
4,607	256	4,382	–	1,886	Moyenne des K.W. heures par K.V.A.
					Total à combustible
1,184	1,346	1,247	60,090	38	K.W. heures produits (milliers)
1,006	1,188	1,964	43,469	30	Capacité en K.V.A.
13·4	12·9	7·2	15·8	14·5	Proportion de la production à la capacité (p.c.)
1,177	1,133	635	1,382	1,266	Moyenne des K.W. heures par K.V.A.

Table 16—Fuel, 1923

Tableau 16—Combustible, 1923

Province	Coal — Charbon		Coke — Coke		Gasoline and Coal Oil — Gazoline et huile de charbon		Fuel Oil — Pétrole	
	Quantity — Quantité	Value — Valeur	Quantity — Quantité	Value — Valeur	Quantity — Quantité	Value — Valeur	Quantity — Quantité	Value — Valeur
	ton — tonnes	$	ton — tonnes	$	gal. — gal.	$	gal. — gal.	$
Canada	**474,560**	**2,207,071**	**51**	**760**	**276,100**	**73,512**	**2,968,713**	**270,882**
Alberta	183,002	439,116	-	-	44,502	13,630	12,864	3,290
British Columbia	7,674	46,478	-	-	44,396	1,973	2,199,132	149,443
Manitoba	23,220	147,078	-	-	21,108	4,769	99,416	18,312
New Brunswick	26,914	195,172	-	-	2,910	949	92,615	12,826
Nova Scotia	60,682	321,207	50	752	1,192	859	47,442	7,585
Ontario	50,608	370,274	-	-	6,773	1,758	2,029	1,735
Prince Edward Island	2,996	33,976	-	-	890	245	15,988	1,793
Quebec	8,474	83,122	-	-	6,907	2,394	19,016	4,088
Saskatchewan	110,990	570,648	1	8	147,422	46,935	480,211	71,816
Yukon	-	-	-	-	-	-	-	-

Province	Wood — Bois		Gas — Gaz		Other Fuel — Autre combustible	Total
	Quantity — Quantité	Value — Valeur	Quantity — Quantité	Value — Valeur	Value — Valeur	Value — Valeur
	cord — corde	$	1,000 cu. ft. — 1,000 pd cu.	$	$	$
Canada	**15,058**	**69,575**	**454,316**	**7,763**	**9,325**	**2,638,888**
Alberta	1	4	454,316	7,763	97	463,900
British Columbia	600	1,258	-	-	-	199,152
Manitoba	4,251	22,304	-	-	273	192,736
New Brunswick	200	600	-	-	100	209,647
Nova Scotia	666	2,674	-	-	2,208	335,285
Ontario	1,996	9,721	-	-	-	383,478
Prince Edward Island	120	480	-	-	15	36,515
Quebec	55	255	-	-	5,314	95,171
Saskatchewan	6,645	27,778	-	-	1,318	718,503
Yukon	524	4,501	-	-	-	4,501

CANADA

BUREAU FÉDÉRAL DE LA STATISTIQUE

RECENSEMENT INDUSTRIEL, 1923

Usines Électriques Centrales du Canada

(Préparé en collaboration avec la Division des Forces Hydrauliques du Dominion du ministère de l'Intérieur, et avec le concours de la Commission Hydro-électrique d'Ontario, la Commission des Eaux Courantes de Québec, la Commission de l'Énergie Électrique du Nouveau-Brunswick, la Commission de la Force Motrice de la Nouvelle-Écosse et la Commission de la Force Motrice du Manitoba)

Publié par ordre de l'hon. Thos. A. Low, M.P., Ministre du Commerce

OTTAWA
F. A. ACLAND
IMPRIMEUR DE SA TRÈS EXCELLENTE MAJESTÉ LE ROI
1925

Prix, 25 cents