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CENTRAL ELECTRIC STATION INDUSTRY, 1946

For the purpose of the annual census, central electric stations are defined as companies, municipalities, or individuals selling or distributing electric energy, whether generated by themselves or purchased for resale. The stations are divided into two classes according to ownership, viz., (a) commercial, those operated by companies or individuals and (b) municipal, those operated by municipal, provincial or federal governments. The stations are also divided according to operation into (a) generating, those stations generating power which they sell (many of them also purchase power to supplement their own output), and (b) non-generating, those stations which purchase all the power they sell. In this last class there were 12 stations which were holding generating equipment classed as auxiliary plant equipment. Eight of them purchased all their electric energy and the remaining four generated only 1,035,000 kilowatt hours. This explains the rather anomalous item in table 12 showing the output of non-generating stations.

Included in these statistics are those of a few stations engaged primarily in other industries, such as mining, manufacturing of pulp and paper, etc., which sell surplus power. For such plants the statistics pertaining to the central electric station phase of the industry have been segregated as far as possible.

Stations are allowed to file returns for their fiscal years which are not calendar years in all cases. Consequently the output as recorded in this annual report will not coincide with the output of the twelve calendar months shown in the monthly reports. The various data, however, in the annual reports are for comparable periods.

Primary power produced for use in Canada (including all line losses) increased from 50,853,713,000 kilowatt hours in 1945 to 51,197,596,000 kilowatt hours, or by 1.1 per cent, but the consumption of secondary power rose from 6,645,824,000 to 8,067,487,000 kilowatt hours in 1946, or by 21.4 p.c.

Secondary power is off-peak and surplus power delivered as it is available. It is subject to interruption or variation daily and seasonally, and consequently is sold at relatively low rates. The stations endeavour to keep their customers advised as much in advance as possible of interruptions or reductions, which are due to variations in water supply and in the demands of customers for primary power.

Primary power, also known in the industry as firm power, is power delivered as and when demanded or required by the customer. Stations must be ready to deliver power to primary power customers up to the rate contracted for, whenever the customer requires it, and consequently must have sufficient capacity to

take care of all such demands. In practice, all customers on a system do not require their maximum deliveries at the same time and generally there is a considerable difference hourly and daily in the rate at which the power plant must operate to produce the power as required. Most of the secondary power is sold to pulp and paper mills for the production of low pressure steam where short interruptions of the electric energy for the boilers can be tolerated without much inconvenience.

According to monthly reports, the consumption of primary power continued to decline up to and including August, 1946, but from then on increases were recorded. Deliveries of secondary power were considerably greater in 1946 than in 1945 but began to register declines in 1947 which have been continued to date. The cumulative total for the first eight months of 1948 was 1,809,996,000 kilowatt hours of secondary consumption against 4,318,656,000 in the same months of 1947 and 5,558,354,000 in a similar period of 1946. During 1946 the pulp and paper industry again became the largest user of electrical energy, accounting for 26.3 p.c. of the total production. The aluminium industry, which is included in the metal, smelting and refining class, was also a major consumer; approximately ten kilowatt hours of energy is required to produce one pound of aluminium.

The production of electric energy for secondary use each month is shown below:

SECONDARY POWER FOR USE IN CANADA
(Thousands of Kilowatt Hours)

Month	1939	1944	1945	1946
January	607,070	152,158	545,019	680,016
February	605,257	146,975	506,380	645,940
March	619,756	167,028	618,420	728,074
April	527,079	162,288	674,256	755,281
May	578,058	319,574	623,467	758,487
June	526,652	265,938	560,619	679,995
July	488,165	126,536	491,774	669,444
August	505,652	208,721	481,841	661,116
September	590,900	201,485	450,404	589,653
October	684,433	267,605	545,700	641,481
November	685,441	347,940	574,349	649,611
December	615,246	398,093	573,415	628,389
TOTAL	7,053,709	2,745,121	6,645,824	8,067,487

For the following table data for the 7 groups were taken from the industrial census reports of the industries and consumption for other industries was computed by deduction, and consequently is only approximately correct.

CONSUMPTION OF ELECTRIC ENERGY, 1946
(Thousands of Kilowatt Hours)

Industries	Central Electric Station Power Purchased				Power Generated by the Industries for own use
	Power and Light	Other Purposes	Total Central Electric Stn. Power	P.C. of Total Production	
Pulp and Paper	6,233,218	4,964,528	11,197,746	26.82	2,163,387
Ferro-Alloys	15,687	524,708	540,395	1.29	-
Abrasives	21,463	719,203	740,666	1.77	-
Electro-Chemicals	305,856	1,247,469	1,553,325	3.72	92,385
Metal, Smelting & Refining	807,740	5,290,493	6,098,233	14.61	11,190
Steel Furnaces	48,934	241,758	290,692	.70	49,398
Other Manufacturing	4,375,380	454,439	4,829,819	11.57	397,902
Total Manufactures ..	11,808,278	13,442,598	25,250,876	60.49	2,714,262
Other Industries			9,027,958	21.63	
Domestic Service (Residential)			3,881,677	9.30	
Commercial Lighting			1,840,496	4.41	
Street Lighting			223,000	0.55	
Free Service			55,475	0.13	
Exports to U.S.A. (net)			2,481,631	5.95	
Losses			3,815,220	9.14	
TOTAL OUTPUT OF CENTRAL ELECTRIC STATIONS					
Plus Imports (9,527 M.kw.hrs.)			41,746,514	100.00	

Electricity is exported from Canada only by licence granted by the Electricity and Gas Inspection Services of the Department of Trade and Commerce, and the same branch of the Department has jurisdiction over the export duty which has been imposed since April 1, 1925. During the calendar year ended December 31, 1946, the export duty amounted to \$626,342.63. The rate is three one-hundredths of one cent per kilowatt hour on electric energy exported.

Below is a table showing the quantities of power exported for the calendar year 1946. The data for this table were compiled from the annual reports of the Director of the Electricity and Gas Inspection Services.

KILOWATT HOURS EXPORTED TO THE UNITED STATES
(Calendar Years 1945 and 1946)

Company	Exported	Exported
	1945	1946
	Kw. Hrs.	Kw. Hrs.
Hydro Electric Power Commission of Ontario	394,245,000	394,200,000
" " " " " (surplus) - Niagara	954,911,061	850,952,549
" " " " " " - Cornwall	165,819,000	127,867,000
Quebec Hydro Commission	618,842,478	614,992,847
Canadian Niagara Power Company, Ltd.	322,722,441	324,484,986
" " " " " (surplus)	99,409,843	93,806,074
Ontario and Minnesota Power Company	38,365,000	32,073,000
Maine and New Brunswick Electric Power Company	40,384,249	33,876,359
British Columbia Electric Railway Company, Ltd.	273,050	323,260
Northport Power and Light Company	15,206	20,619
Southern Canada Power Company	2,462,695	2,703,079
Canadian Cottons, Ltd.	2,708,400	2,868,000
Northern British Columbia Power Company	12,170	33,120
Fraser Companies, Ltd.	4,574,000	1,288,000
Detroit and Windsor Subway Company	291,800	328,100
Manitoba Power Commission	1,598,840	1,813,740
TOTAL	2,646,435,233	2,481,630,753

Of the total output of 41,736,987,000 kilowatt hours, 40,692,395,000 kilowatt hours, or 97.5 per cent, was produced by water power, whereas only 943,788,000 hours were produced by plants using only thermal engines and 100,804,000 kilowatt hours were produced by thermal auxiliary equipment in hydraulic plants and in non-generating plants.

Total hydraulic installations in all industries in Canada at the close of 1946, including active and inactive plants, as compiled by the Dominion Water and Power Bureau was 10,312,123 horse power. The available and developed water power in each province is shown below.

POTENTIAL AND DEVELOPED WATER POWER IN CANADA

Province	Available 24 hour Power at 80% Efficiency		Turbine Installation December 31	
	At Ordinary Minimum Flow	At Ordinary Six Months Flow	1946	1947
Prince Edward Island ...	H. P.	H. P.	H. P.	H. P.
Prince Edward Island ...	3,000	5,300	2,617	2,617
Nova Scotia	20,800	128,300	133,384	133,384
New Brunswick	68,600	169,100	133,347	133,347
Quebec	8,459,000	13,064,000	5,848,572	5,878,872
Ontario	5,407,200	7,261,400	2,679,740	2,749,740
Manitoba	3,309,000	5,344,500	446,825	458,825
Saskatchewan	542,000	1,082,000	90,835	90,835
Alberta	507,800	1,258,000	93,060	106,560
British Columbia	7,023,000	10,998,000	864,024	917,024
Yukon and Northwest Territories ..	382,500	813,500	19,719	19,719
CANADA	25,722,900	40,124,100	10,312,123	10,490,923

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 have not yet been recorded which will increase the totals. With the construction of storage basins and other regulating works these potential power figures will be further increased. It is common practice, and feasible in most developments, to install equipment with capacity considerably greater than the theoretical continuous power of the water fall and on this basis it is estimated that the maximum installation capacity of the recorded water-powers of Canada is 52,000,000 horse power.

TABLE 1 - (Page 14) - COMPARATIVE SUMMARY, 1937-1946

In the period from 1937 to 1946 revenues of central electric stations have risen from \$143,546,643 to \$226,096,273 or by 57.5 p.c., while electric energy generated advanced from 27,687,645,000 kilowatt hours to 41,736,987,000 or by 50.7 p.c. The number of domestic customers, including farm service, rose over 604,000 in the decade to 2,104,549 and average consumption increased considerably along with the installation of electrical appliances.

Revenues from domestic or residential use rose from \$55,735,696 in 1945 to \$62,820,120 in 1946 or by 12.7 p.c., from commercial lighting \$32,911,620 to \$37,204,822 and from street lighting from \$5,029,181 to \$5,261,115. Small power users paid \$11,322,392 in 1946 compared with \$10,947,854 one year earlier while large power customers, such as paper mills and smelters, contributed \$119,561,915 as against \$110,481,122, up 8 p.e.r down 0.9 p.c.
~~109,487,824~~

Reported expenses, which include only four items - wages, power purchased, fuel and taxes, increased from \$135,104,091 in 1945 to \$150,750,488. Wages rose from \$39,521,365 to \$46,422,998 with an increase of 5,294 employees, taxes were \$22,169,479 against \$19,125,746 in 1945, cost of purchased power (interchanged between stations) advanced from \$71,358,219 to \$76,572,805 while fuel costs were up nearly \$487,000 at \$5,585,206 for 1946.

Pole line mileage increased considerably during the year at 89,231 miles compared with 83,178 miles in 1945 and with wooden pole mileage advancing from 74,477 miles to 80,759. Customers numbered 2,476,830 in 1946, which was double the number twenty years previous and 143,600 above 1945. Domestic or residential service customers, including farms, represented 2,104,549 or 85 p.c. of the national total. The farm customers added during the year aggregated 18,194 with the total 148,272, an increase of 14 p.c. against an advance of 5.3 p.c. in other domestic service customers.

Total production of all stations amounted to 41,736,987,000 kilowatt hours, of which 2,481,651,000 or 5.9 p.c. was exported to the United States. Imports from Boulder Dam by British Columbia stations totalled 8,651,000 kilowatt hours during 1946 while total imports were 9,527,000 kilowatt hours. Commercial stations generated 26,997,716,000 kilowatt hours during the year or 64.7 p.c. of the total for Canada while municipal stations contributed 14,739,271,000 kilowatt hours or 35.3 p.c.

However, municipal stations purchased considerable of the output of commercial stations at wholesale and distributed it to their widespread customers. This is particularly true of Western Quebec where commercial stations deliver a large part of their production to the Ontario Hydro Commission's system. Revenues of municipal stations were \$117,427,501 in 1946 compared with \$108,668,772 for commercial stations and the municipal group had twice as many customers as the commercial.

The total capacity of primary equipment in main plants registered a small increase over 1945 rising from 9,666,947 to 9,825,459 horse power. Primary here signifies water wheels and turbines, steam and internal combustion engines used to operate generators which in turn are classed as secondary power equipment.

TABLE 2 - (Page 16) - DOMESTIC SERVICE, 1937-1946

This table illustrates the steady growth in the number of domestic customers, total consumption, revenue, average consumption per customer and in the annual average bill over the period from 1937 to 1946, for Canada and in each province. Contrasting with these advances in the industry is the noteworthy decrease in revenue per kilowatt hour - a unique exception in an era of rising prices. This is confirmed by the annual index numbers of cost of electricity for domestic service which dropped from 96.9 in 1937 on the 1935-39 base of 100 to 91.6 in 1946. Similarly, rates for like amounts of commercial and small power for a representative city registered decreases from 1937 to 1946 of about 8 p.c. despite increased taxes.

In all provinces the number of domestic customers, including farms, increased considerably during the period, the percentage gains ranging from 33 p.c. in Ontario to 62 p.c. in New Brunswick. The rate of consumption also rose steadily in each province with the largest relative advances in the Maritimes and Quebec. Revenues increased by 60 p.c. or \$23,567,000 to \$62,820,120 with every province registering improvement. The average annual consumption per customer varied widely between provinces, Manitoba leading with a 1946 average of 4,433 kilowatt hours due in part to water heaters and New Brunswick

recorded the smallest consumption at 761 kilowatt hours. Ontario averaged 2,587 kilowatt hours against 1,011 in Quebec and 1,300 in British Columbia.

In the face of rising consumption the annual average bills have shown relatively small changes over the past ten years. The 1946 average for Canada stood at \$29.85 compared with \$26.17 in 1937, an increase of only 14.1 p.c., whereas consumption jumped over 90 p.c. Bills ranged from \$22.71 in Quebec to \$45.36 in Manitoba with Ontario at \$30.01. Prince Edward Island, Saskatchewan and Alberta bills were partly affected by the higher costs of thermal generation, whereas the Manitoba average reflects the widespread use of flat rate water heaters. The bills exclude federal, provincial or municipal taxes on electricity purchased.

Domestic service is discussed further under Table 4 and elsewhere in this report on pages 12, 13, etc.

TABLE 3 - (Page 18) - POWER PLANTS

Generating stations are the individual power plants of the central electric organizations or stations. Each building housing power producing machinery is counted as a generating station. The commercial organizations are companies or individuals selling electric energy and the municipal group includes urban and rural municipalities, provincial commissions, etc. selling power. Those generating power may operate from one to several power plants each, sometimes sited at different falls or rapids on the same river as the Gatineau, Ottawa, etc. The largest system is the Ontario Hydro-Electric Power Commission which operated 52 hydraulic plants and owned one steam auxiliary plants in 1946. The auxiliary or stand-by plants are thermal power equipment belonging to hydraulic systems or non-generating systems and are not included above as generating stations.

Of the 600 plants operated during 1946, 305 were hydraulic, principally in Ontario, Quebec and British Columbia, while 295 were thermal situated mainly in Saskatchewan and Alberta. However, the hydraulic stations generated nearly 98 p.c. of the power produced in Canada during the year.

TABLE 4 - (Pages 20-21) - REVENUES

Central electric stations report a division of customers, consumption and revenue according to the following headings: (1) farm service, (2) domestic service, which includes lighting and all other residential uses, (3) commercial light, (4) power, small, 50 kw. and under, (5) power, large, over 50 kw., (6) beginning in 1946, power, municipal, mainly used in water pumping stations, (7) sales to distributing companies, and (8) street lighting; also, the quantity of electricity supplied free to public buildings, company towns, etc.

The revenue is the gross revenue less cost of power, or is the revenue received from the consumers, except where power is purchased by a station in one province from a station in another province, the cost of such power is not deducted in computing provincial data, but is deducted in computing the Dominion totals. In reports prior to 1932 this exception was not made and consequently the revenues of Ontario, New Brunswick and Alberta, which purchased power from other provinces, were lower than they should have been.

The average revenues per kilowatt hour sold are affected by many factors and are not always indicative of the relative costs for similar services. The averages for domestic services and for commercial lighting are for more or less identical services for each station, but even here the use of electric stoves, flat rate water heaters, the source of supply, the firm power load, the market for off-peak and surplus power, and the cost of generation, transmission, and distribution all affect the rates. Domestic service data are discussed further at the end of the report. As might be expected, Quebec stations with their enormous sales to pulp and paper mills, aluminium plants, wholesale to Ontario, etc., showed a smaller proportion of revenue from domestic service than any other stations, although greater in dollars than those in other provinces except Ontario. In computing the average total revenue per kilowatt hour all line losses were included, but for domestic service and farm services, for commercial light, etc., line losses were not included, the consumptions for these services being measured at the consumers' meters. The average revenue per kilowatt hour consumed for each province is the revenue received from ultimate consumers within each province plus revenue received for power exported from the province, divided by the total kilowatt hours so sold including all line losses. The average revenues per kilowatt hour for domestic service are affected by the consumption per customer and by the relative quantities used for lighting, cooking and water heaters; often different rates apply to these different services. In most municipalities when the consumption increases the average cost per kilowatt hour to the consumer decreases. Also, where flat rates apply to water heaters the average cost per kilowatt hour for all domestic services is reduced and as the number of flat rate heaters is increased the average for the municipality or province is decreased if not offset by increases in rates elsewhere. The

average revenue of 1.62 cents per kilowatt hour for all domestic service, or 1.58 cents with farm services excluded, compares with an average of 3.22 cents in the United States, or double the Canadian figure. Over 68 p.c. of U.S. generation is by steam compared with about 2 p.c. in Canada. The average revenues per horse power and per kilovolt ampere are affected by the classes of service and their relative importance in each province. Quebec stations sell large quantities of power to Ontario distributors. The Quebec stations are credited with the wholesale revenue and the Ontario stations with the retail revenue from this power. In computing the averages for Ontario stations the equipment capacities shown in table 12 were increased one horse power for each 4,576 kilowatt hours imported from Quebec stations and one kilovolt ampere for each 6,136 kilowatt hours imported. This is only an estimate of the equipment and was based on the Ontario Hydro-Electric Power Commission's contracts with Quebec companies which call for 88 kilowatt hours per week for each horse power purchased. It is quite probable this output is a little too high for all the power imported from Quebec, and consequently the divisors are too small and the average revenues are too high. It is not likely the errors are large and the adjusted averages are more nearly comparable with the averages for the other provinces than the unadjusted averages as shown in reports previous to 1936. The imports into New Brunswick and Alberta are relatively so small that their effects on the averages would be negligible.

The Federal sales tax on domestic service bills has been treated by practically all central electric stations as a tax on the consumer and was not included in either revenues or expenses. The Act placed the tax on the producer or importer, but a subsequent Order in Council allowed the producer or importer to increase the charge to the consumer by the amount of the tax irrespective of any agreements, charters, etc. Only a few stations absorbed this tax, most of them passed it on to the consumer. Also provincial and municipal taxes on domestic bills, where imposed, have not been included as either revenue or expenses. The 8 p.c. Federal tax was removed November 17, 1947. Quebec (2 p.c.) and Saskatchewan impose a provincial tax in addition to a few municipalities levying a municipal tax on domestic consumers.

TABLE 5 - (Pages 22-23) - Expenses

This table includes only the four expense items, (1) salaries and wages, (2) fuel, (3) taxes and (4) cost of purchased power. The last is an intra-industry expense and might be omitted from the expenses of the industry as a whole. It shows, however, the extent of purchases of power by the different groups of stations. The cost of power item includes the cost to municipalities receiving their supply from provincial commissions as well as the interchange of power between generating stations and also between generating and non-generating. As explained above, the sales taxes on domestic bills have not been included in the taxes given in this table.

To supplement Table 5, the details of taxes reported by commercial and municipal stations are presented below. Only in the few cases where the station absorbed the sales taxes are such taxes included. Water rentals also are excluded. The Federal unemployment insurance tax did not apply generally to utility employees until September 1, 1943, and apparently some stations still did not include the employer payments as a Dominion tax in 1946. Similarly all stations did not include under taxes, the federal and provincial taxes on gasoline used by their vehicles, etc. It is common practice to treat sales tax as part of the cost of the commodity. The Dominion tax included income and excess profits tax, tax on exports of electricity, and the two mentioned above. The greater part of the municipal tax paid by municipal stations, was tax payments continued by the Ontario Hydro-Electric Commission on plants acquired from commercial stations, and in Quebec export taxes and other taxes paid by the Quebec Hydro-Electric Commission principally to the City of Montreal. In addition, the Quebec Commission contributed \$2,800,000 to the provincial Education Fund, which item was not reported as a tax. Total taxes reported by the industry during 1946, including contribution of Quebec Hydro, were nearly \$25 millions.

REPORTED TAXES, 1946

Province	Commercial Stations				Municipal Stations			
	Municipal	Provincial	Dominion	Total	Municipal	Provincial	Dominion	Total
P. E. Island	\$ 20,501	\$ 1,294	\$ 55,904	\$ 75,499	\$ -	\$ -	\$ -	\$ -
Nova Scotia	277,781	10,336	613,735	901,852	54,273	1,972	9,499	65,744
New Brunswick	64,256	15,528	133,260	213,044	159	280	-	439
Quebec	2,283,030	1,356,774	6,854,130	10,493,934	756,064	x 660,980	188,203	1,605,247
Ontario	434,560	4,287	1,569,486	2,008,333	462,593	46,547	456,123	965,263
Manitoba	147,416	4,064	7,581	159,061	112,642	-	4	112,646
Saskatchewan	110,713	188	280,864	391,765	68,830	78	229	69,137
Alberta	50,091	3,264	703,404	756,759	216,918	-	100,122	317,040
British Columbia ...)	376,206	217,459	3,415,539	4,009,004	24,712	-	-	24,712
Yukon & N.W.T.)								
Total	3,764,354	1,613,194	13,631,703	19,009,251	1,696,191	709,857	754,180	3,160,228
Total-Commercial Stns.	3,764,354	1,613,194	13,631,703	19,009,251				
" Municipal "	1,696,191	x 709,857	754,180	3,160,228				
Total	5,460,545	x2,323,051	14,385,883	22,169,479				

x - Does not include \$2,800,000 contribution to Education Fund by Quebec Hydro.

TABLE 6 (Pages 24-25) - EMPLOYEES

There was an increase of 3,294 employees during the year with all provinces reporting heavier employment. The total at 24,577 included 10,249 in commercial and 14,328 employees in municipal stations. Some 18,164 were engaged in generating stations and 6,413 in non-generating or distributive organizations. Over 80 p.c. of employees worked 44 hours or more per week with the greatest percentage at 48 hours.

On a provincial basis, 40.6 p.c. were employed in Ontario, 26.9 p.c. of the national total in Quebec, 8.6 p.c. in British Columbia, 14.6 p.c. on the Prairies and 9.3 p.c. in the Maritimes. Some 7,851 employees were on salaries while 16,726 were on wages. Among the generating stations, hydraulic operations required 15,643 employees, while fuel stations producing but 2.3 p.c. of the electric energy generated during 1946 employed 2,521 employees.

TABLE 7 (Pages 26-27) - CUSTOMERS

As outlined under Table 4, stations report a segregation of customers into seven classes, but in the past many stations included farm customers with domestic customers, and in the Bureau's reports all customers in these two classes were combined under "Domestic Customers". Below is a table giving the farm customers as reported, together with the respective consumptions and revenues received from them. Such revenues do not include taxes paid by the consumer as previously explained. Due to the increasing activity in rural electrification, it is probable that current data are more comprehensive than previously reported. Installations were extended to some 18,200 new farm customers during 1946, and the total at 148,272 was up 14 p.c. over 1945 compared with an increase of 5.3 p.c. or 98,995 in residential urban service. The two services are combined under "Domestic" in tables 2, 4, 7 and 12 as in previous years for comparative purposes. The relatively large number of farm customers and low average revenue per kilowatt hour in Ontario reflects the assistance given by the Ontario Government to this class of service. Farm customers in Ontario include only farms, whereas in years previous to 1945 rural customers in hamlets were also included. With over 725,000 rural farms in Canada, the total of 148,272 farm customers indicates that about a fifth enjoy the benefits of electrification.

FARM SERVICE, 1946

Province	Number of Customers	Kilowatt Hours	Revenue	Kw. Hrs. per Customer	(1) Average Annual Bill	(1) Revenue per Kw. Hr.	P.C. of Dominion Farm Service Consumption
			\$		\$	\$	%
Prince Edward Island	2,341	1,488,552	95,543	636	40.81	6.4	0.64
Nova Scotia	9,767	5,842,970	271,449	598	27.79	4.6	2.53
New Brunswick	8,858	2,709,262	207,927	306	23.47	7.7	1.17
Quebec	44,680	28,678,547	1,046,962	642	23.43	3.7	12.41
Ontario	75,011	180,883,529	5,150,560	2,411	42.00	1.7	78.51
Manitoba	2,511	2,488,630	105,466	1,077	45.64	4.2	1.08
Saskatchewan	486	456,671	38,743	940	79.72	8.5	0.20
Alberta	1,391	2,437,475	142,552	1,752	102.48	5.8	1.06
British Columbia	3,427	6,012,294	162,399	1,754	47.39	2.7	2.60
Canada	148,272	230,997,930	5,221,601	1,558	35.22	2.3	100.00

(1) Federal, Provincial and Municipal taxes on the electricity purchased are not included.

TABLE 8 - POLE LINE MILEAGE - (Pages 28-29)

Transmission and distribution lines are combined in this table and a division has been made showing the mileage of steel towers and poles, wooden poles, concrete poles, and submarine and underground cables. The last includes systems in cities and lines laid in trenches along the roadside serving rural customers. The steel towers and steel poles are used almost exclusively for high voltage transmission lines and only Quebec, Ontario and Manitoba have extensive mileage.

TABLES 9 - 10 - 11 - EQUIPMENT - (Pages 28-33)

The equipment of the power houses has been divided into two classes, main plant and auxiliary, or standby equipment. The auxiliary plant equipment includes all steam engines and turbines and internal combustion engines and dynamos driven by them in hydro-electric stations and all the equipment in non-generating stations. All other equipment is classed as main plant equipment and includes water wheels and turbines and generators driven by them in hydro-electric stations and all equipment in plants using thermal equipment only. It is quite possible that some of the fuel stations have equipment held as standby equipment for use only in emergencies or for occasional peaks and also that some hydraulic stations have hydraulic equipment similarly held, but it is all classified as main plant equipment. Although a few of the hydro-electric stations use their steam equipment during periods of low water and during periods of heavy demand, the greater part of it is held strictly in reserve for emergencies, only 99,769,000 kilowatt hours being generated during the year by this auxiliary equipment. Table 13 has been omitted from the current report as little change occurred from 1945.

TABLE 12 - ELECTRIC ENERGY GENERATED (Pages 34-35)

The electric energy generated is the output at the power plants less power used for the operation of the plants, and consequently includes all transformer and line losses entailed in delivering power to the consumers. The Kv.A. capacities shown were the rated dynamo capacities at the close of the year of both main and auxiliary plant of generating stations. The ratios indicate the relative position of the supply to the demand on a kilowatt

hour basis. This ratio is affected by other factors; one is the relationship of installed capacity to water available for hydraulic plants. This changes from month to month and from year to year and another factor is the production and sale of secondary power. A market for secondary power makes possible a greater production of kilowatt hours per unit of capacity than a market of firm power for the same installation. A few stations have found a market for their off-peak and surplus power by selling it for use in electric boilers and this class of sale grew quite rapidly, especially up to 1937. After the outbreak of the war the supply of surplus power was greatly reduced and with war industries working twenty four hours per day, the supply of off-peak power was also considerably curtailed so that sales of secondary power showed a steady decrease up to the middle of 1943. However, they then began to increase and continued the upward trend throughout 1944, 1945 and 1946. Subsequent to August, 1946, declining amounts of secondary power were available and production, as reported monthly, dropped from 9,141,804,000 in 1946 to 6,233,503,000 kilowatt hours in 1947.

TABLE 13 - FUEL (Pages 36-37)

Fuel used was principally local coal, oil and manufactured gas with stations in Nova Scotia and Saskatchewan the largest users. The value of Canadian bituminous coal was 51 p.c. of the total; lignite coal accounted for 9 per cent, fuel oil and diesel oil for 32 p.c. and gasoline, gas, wood, etc., accounted for the remainder.

DOMESTIC SERVICE

In the following table data on domestic customers are brought together and analysed. As might be expected the provinces with relatively high percentages of rural populations, Prince Edward Island, Saskatchewan and Alberta, show the lowest number of customers per 100 population. The average cost per kilowatt hour is greatly affected by the nature of the use. Manitoba's low unit cost and high average consumption are influenced by flat rate water heaters and extensive use for cooking in Winnipeg; these induce high consumption per customer. There was also a large number of flat rate water heaters in Ontario. Also, where hydro-electric power is plentiful the rates are generally low and the average consumption high. The very low percentage of total power used by domestic customers in Quebec is affected by large exports to Ontario and heavy consumption by pulp and paper, aluminium and other electric metallurgical plants.

Domestic customers in Ontario used 58.4 per cent of the total power used by all domestic customers in Canada but the population of this province was under a third of the total for the Dominion.

The average bills do not include federal, provincial and municipal sales taxes paid by the consumers.

(1) DOMESTIC SERVICE

1946

Province	Number of Customers		Average Bill for Year	Average per Kilowatt Hour	Average Annual Consumption		Consumption by Domestic Service	
	Total	Per 100 Population			Per Customer	Per Capita	P.C. of total Provincial Consumption	P.C. of Dominion Dom. Service Consumption
P. E. Island	6,882	7.32	\$39.83	4.56	874	64	56.0	0.2
Nova Scotia	89,484	14.62	\$29.75	3.22	924	135	14.0	2.1
New Brunswick	67,479	14.06	\$30.77	4.04	761	107	9.1	1.3
Quebec	590,125	16.28	\$22.71	2.25	1,011	164	3.2	15.4
Ontario	876,761	21.58	\$30.01	1.16	2,587	555	16.8	58.4
Manitoba	103,204	14.20	\$45.36	1.02	4,433	629	19.2	11.8
Saskatchewan	67,356	8.08	\$43.66	4.29	1,018	82	25.3	1.8
Alberta	92,461	11.51	\$34.25	4.18	819	94	12.6	1.9
B.C. & Yukon & N.W.T.	210,817	20.53	\$34.66	2.67	1,300	267	9.4	7.1
Canada	2,104,549	17.10	\$29.85	1.62	1,844	315	9.9	100.0

(1) Includes Farm Customers.

T A B L E S

	<u>Page</u>
1. COMPARATIVE SUMMARY, 1937-1946	14
2. DOMESTIC SERVICE, 1937-1946	16
3. ELECTRIC POWER PLANTS, 1946	18
4. REVENUE, 1946	20
5. EXPENSES - WAGES - FUEL - TAXES - COST OF POWER, 1946	22
6. EMPLOYEES, 1946	24
7. NUMBER OF CUSTOMERS, 1946	26
8. POLE LINE MILEAGE, 1946	28
9. AUXILIARY PLANT EQUIPMENT, 1946	28
10. TOTAL EQUIPMENT, 1946	30
11. MAIN PLANT EQUIPMENT, 1946	32
12. ELECTRIC ENERGY GENERATED, 1946	34
13. FUEL, 1946	36

T A B L E A U X

1. SOMMAIRE COMPARATIF, 1937-1946	14
2. SERVICE DOMESTIQUE, 1937-1946	16
3. USINES GENERATRICES, 1946	18
4. RECETTES, 1946	20
5. DEPENSES - GAGES - COMBUSTIBLE - TAXES - ACHAT D'ENERGIE ELECTRIQUE, 1946	22
6. EMPLOYES, 1946	24
7. NOMBRE D'USAGERS, 1946	26
8. LONGUEUR (EN MILLES) DES LIGNES SUR POTEAUX, 1946	28
9. OUTILLAGE AUXILIAIRE, 1946	28
10. OUTILLAGE GLOBAL, 1946	30
11. OUTILLAGE DES USINES PRINCIPALES, 1946	32
12. ENERGIE ELECTRIQUE GENEREE, 1946	34
13. COMBUSTIBLE, 1946	36

TABLE 1 - COMPARATIVE SUMMARY, 1937-1946

PRINCIPAL DATA BY CLASS OF STATION	1946	1945	1944	1943	1942
ELECTRIC POWER PLANTS					
Total	600	600	626	622	616
Hydraulic	305	302	320	322	320
Fuel	295	298	306	300	296
Commercial	397	392	424	425	428
Municipal	203	208	202	197	188
CAPITAL					
Total	Data not collected in 1944, 1945 and 1946		1,778,224,640	1,747,891,798	
Commercial	1,149,225,710		1,127,978,352		
Municipal	628,998,950		619,915,466		
Generating	1,584,624,501		1,559,495,388		
Non-generating	195,600,159		188,596,410		
REVENUE (1)					
Total	226,096,275	215,105,473	215,246,391	204,801,508	203,835,365
Commercial	108,668,772	101,672,511	104,986,252	124,730,993	124,611,713
Municipal	117,427,501	113,432,962	110,260,159	80,070,515	79,225,652
Generating	192,214,412	185,227,685	185,574,224	175,217,757	175,916,640
Non-generating	35,881,861	51,877,788	29,672,167	29,583,751	29,918,725
EXPENSES (2)					
Total	150,750,488	155,104,091	151,289,947	155,555,469	152,581,418
Commercial	66,789,794	60,893,580	60,470,374	72,579,621	71,153,382
Municipal	83,960,694	74,210,511	70,819,575	62,975,848	61,448,056
Generating	95,125,303	85,336,610	79,913,486	81,500,674	80,171,586
Non-generating	55,625,185	51,767,481	51,576,451	54,054,795	52,409,652
POLE LINE MILEAGE					
Total	89,231	85,178	80,075	78,063	77,909
Commercial	35,184	31,117	30,877	32,085	31,847
Municipal	56,047	52,061	49,198	45,978	46,062
Generating	71,936	66,694	65,665	61,710	61,927
Non-generating	17,295	16,484	16,408	16,355	15,982
CUSTOMERS					
Total	2,476,830	2,335,230	2,238,025	(4) 2,164,861	2,125,304
Domestic service (3)	2,104,549	1,987,360	1,906,452	(4) 1,848,080	1,805,708
Commercial light	306,592	285,402	275,451	259,640	264,706
Power (small)	50,254	46,955	45,284	44,948	44,813
Power (large)	11,846	10,955	10,376	9,772	9,673
Power (municipal)	887	—	—	—	—
Street lighting	2,702	2,558	2,460	2,421	2,404
Commercial stations	826,091	766,554	753,259	(4) 1,005,516	985,059
Municipal stations	1,650,759	1,566,878	1,484,784	1,159,545	1,140,245
Generating stations	1,554,765	1,256,095	1,195,778	1,129,272	1,105,559
Non-generating stations	1,122,067	1,077,135	1,042,245	(4) 1,055,589	1,021,765
ELECTRIC ENERGY GENERATED					
Total Kilowatt Hours (thousands)	41,736,987	40,130,054	40,598,779	40,479,595	37,855,179
Commercial	26,997,716	25,550,857	25,688,580	31,082,239	28,177,587
Municipal	14,739,271	14,599,197	14,910,199	9,397,554	9,177,792
Exports to the United States ... (thousands) ... Kw.h.	2,481,631	2,646,455	2,585,311	2,545,058	2,455,739
Imports from the United States .. (thousands) ... Kw.h.	9,527	15,916	14,097	599	594
EQUIPMENT IN GENERATING STATIONS (Main Plant Only)					
Total Primary Power	H.P.	9,825,459	9,666,947	9,713,791	9,802,794
Total in commercial stations	H.P.	6,501,996	6,294,121	6,375,523	7,239,936
Total in municipal stations	H.P.	3,523,463	3,372,826	3,540,268	2,362,858
Total Secondary Power	Kv.A.	8,162,896	8,035,767	8,073,864	7,982,027
Total in commercial stations	Kv.A.	5,233,480	5,227,057	5,290,874	6,074,895
Total in municipal stations	Kv.A.	2,929,416	2,808,730	2,782,990	1,907,132
AUXILIARY PLANT EQUIPMENT					
Primary power	H.P.	176,253	173,312	185,117	194,822
Secondary power	Kv.A.	149,462	146,556	157,866	166,010

(1) Cost of power interchanged between stations excluded from revenue of purchasing stations (see page 7).

(2) Includes wages, cost of power, fuel and taxes, but not other expenses.

(3) Farm service is included with domestic service.

(4) Revised in 1944 report.

TABLEAU 1 - SOMMAIRE COMPARATIF, 1937-1946

1941	1940	1939	1938	1937	DONNEES PRINCIPALES PAR CLASSES D'USINES
607 515 294 424 183	602 515 289 421 181	611 515 298 427 184	589 515 276 406 183	568 514 254 389 179	<u>USINES ELECTRIQUES</u> <u>Total</u> Hydrauliques A combustible Commerciales Municipales
1,641,460,451 1,054,714,025 586,748,428 1,459,900,540 181,559,911	1,615,458,140 1,049,506,904 565,951,236 1,440,026,870 175,411,270	1,564,605,211 1,014,704,665 549,898,546 1,396,858,821 167,764,290	1,545,416,592 1,002,891,485 542,525,107 1,377,120,289 168,296,505	1,497,330,251 878,850,158 517,380,072 1,537,599,685 159,950,556	<u>CAPITAL</u> <u>Total</u> Commerciales Municipales Génératrices Non-génératrices
186,018,040 111,851,778 74,166,262 157,285,409 28,734,631	166,228,773 99,887,052 66,341,721 159,673,592 26,555,581	151,880,969 92,535,049 59,545,920 127,463,222 24,597,747	144,331,627 87,697,078 56,634,549 120,784,859 25,546,668	143,546,645 85,263,008 56,265,655 120,465,135 25,081,508	<u>RECETTES (1)</u> <u>Total</u> Commerciales Municipales Génératrices Non-génératrices
117,758,977 60,561,621 57,197,556 69,148,515 48,610,464	105,044,158 51,890,160 55,055,998 60,752,761 44,291,387	91,882,372 42,471,554 49,510,958 51,570,157 40,412,255	87,564,540 41,067,998 46,296,342 48,946,422 38,417,818	84,185,082 41,132,931 43,052,151 46,114,640 38,070,442	<u>DEPENSES (2)</u> <u>Total</u> Commerciales Municipales Génératrices Non-génératrices
77,255 51,442 45,811 61,495 15,756	75,050 30,935 44,117 59,676 15,374	72,132 30,288 41,844 57,084 15,048	66,877 29,555 37,622 52,375 14,604	65,035 28,552 34,703 48,866 14,169	<u>LIGNES SUR POTEAUX</u> <u>Total</u> Commerciales Municipales Génératrices Non-génératrices
2,061,270 1,755,917 268,977 44,071 9,934	2,006,508 1,686,388 265,175 43,158 9,490	1,941,683 1,625,672 262,590 43,896 9,267	1,875,621 1,559,394 258,893 41,999 10,152	1,605,995 1,500,128 252,305 41,415 10,066	<u>ABONNES</u> <u>Total</u> Service domestique (5) Eclairage commercial Force motrice (petite) Force motrice (grosse) Energie (municipale) Eclairage des rues
2,571	2,517	2,258	2,183	2,081	
954,906 1,126,564 1,079,253 1,002,037	926,093 1,088,415 1,052,425 982,075	889,418 859,506 1,014,115 945,596	859,506 872,284 954,787 918,824	853,711 872,284 916,648 889,547	Usines commerciales Usines municipales Usines génératrices Usines non-génératrices
33,317,663 24,795,715 8,525,946	30,109,283 22,287,270 7,822,013	28,358,050 21,290,930 7,047,100	26,154,160 19,488,325 6,665,837	27,687,645 20,515,627 7,372,018	<u>ENERGIE ELECTRIQUE</u> <u>Total Kw. heures générées (milliers)</u> Commercial Municipale
2,354,229	2,132,129	1,908,756	1,822,108	1,843,227	Exportations d'électricité aux Etats-Unis (milliers) Kw.h.
670	655	666	624	1,517	Importations d'électricité des Etats-Unis (milliers) Kw.h.
8,157,585 5,917,160 2,240,425	7,835,867 5,708,684 2,227,203	7,607,122 5,385,632 2,221,490	7,478,876 5,300,185 2,176,795	7,342,085 5,205,529 2,138,556	<u>MACHINERIE DANS LES USINES GENERATRICES</u> (Usines principales seulement) Total force motrice primaire H.P. Total dans les usines commerciales H.P. Total dans les usines municipales H.P. Total force motrice secondaire ... Kv.A. Total dans les usines commerciales Kv.A. Total dans les usines municipales Kv.A.
194,651 166,021	194,914 166,567	194,139 165,785	195,628 166,660	197,350 167,839	<u>OUTILLAGE D'USINES AUXILIAIRES</u> Force motrice primaire H.P. Force motrice secondaire Kv.A.

(1) Le coût de l'énergie échangée entre stations est exclu du revenu des stations en faisant l'achat (Voir p. 7).

(2) Incluent gages, coût de l'énergie, combustible et taxes, mais non les autres dépenses.

(3) L'éclairage des fermes est inclus dans l'éclairage domestique.

(4) Révisé en 1944.

TABLE 2 - DOMESTIC SERVICE, 1937 - 1948

Year Année	Number of Customers Nombre d'usagers	Kilowatt Hours Consumed Kilowatt heures consommées	Revenue Recettes	Kw. Hours per Customer Consommation moyenne annuelle par usager	Average Annual Bill Compte moyen de l'année	Revenue per Kilowatt Hour Moyenne par kilowatt heure
	(000)	\$	kw. hrs.	\$	\$	\$
CANADA						
1937	1,500,128	2,007,453	59,255,155	1,558	26.17	1.96
1938	1,559,394	2,172,500	41,302,107	1,595	26.49	1.90
1939	1,623,672	2,510,891	45,793,482	1,423	26.97	1.90
1940	1,686,388	2,436,572	46,444,557	1,445	27.54	1.91
1941	1,755,917	2,582,405	46,685,162	1,471	27.75	1.89
1942	1,803,708	2,716,895	50,706,757	1,506	28.11	1.87
1943	1,852,367	2,845,612	51,307,761	1,555	27.70	1.80
1944	1,906,452	3,046,980	55,511,353	1,598	27.96	1.75
1945	1,987,360	3,355,497	55,755,696	1,695	28.05	1.66
1946	2,104,549	3,881,677	62,820,120	1,844	29.85	1.62
Change (Changement) 1937 - 1946						
Amount (Volume) Per cent (p.c.)	604,421 40.29	1,874,244 95.37	25,568,987 60.04	506 57.82	5.68 14.06	- 0.34 -17.55
PRINCE EDWARD ISLAND						
1937	4,545	2,252	152,660	491	35.59	6.04
1938	4,799	2,579	150,994	557	31.46	5.85
1939	5,087	2,908	165,226	574	32.21	5.61
1940	5,227	3,076	172,645	588	33.03	5.61
1941	5,531	3,485	185,090	630	33.10	5.26
1942	5,606	5,580	196,446	639	35.04	5.49
1943	5,715	5,895	217,914	682	38.15	5.59
1944	6,105	4,579	230,596	750	37.78	5.04
1945	6,387	5,217	258,558	817	37.35	4.57
1946	6,882	6,017	274,082	874	39.83	4.58
Change (Changement) 1937 - 1946						
Amount (Volume) Per cent (p.c.)	2,337 51.42	5,785 169.58	121,422 79.54	585 78.00	6.24 18.57	- 2.28 -55.55
NOVA SCOTIA						
1937	58,165	51,692	1,555,298	545	26.40	4.84
1938	58,556	55,307	1,595,086	605	27.24	4.52
1939	62,034	59,084	1,709,507	650	27.56	4.37
1940	65,790	45,277	1,877,812	658	28.54	4.34
1941	69,997	48,357	2,065,057	691	29.50	4.27
1942	72,582	50,877	2,166,648	715	29.85	4.18
1943	75,957	57,324	2,156,852	755	28.40	5.78
1944	79,904	63,516	2,439,703	795	30.55	5.84
1945	84,011	70,099	2,286,358	854	27.21	5.26
1946	89,484	82,696	2,560,287	924	29.73	5.22
Change (Changement) 1937 - 1946						
Amount (Volume) Per cent (p.c.)	51,519 55.85	51,004 160.94	1,124,989 75.27	379 69.54	5.55 12.61	- 1.62 -55.47
NEW BRUNSWICK						
1937	41,604	23,488	1,117,955	565	26.87	4.76
1938	43,556	25,367	1,232,957	582	28.51	4.86
1939	46,485	26,989	1,307,772	581	29.15	4.85
1940	50,681	29,588	1,415,237	580	27.88	4.61
1941	52,831	31,254	1,435,015	591	27.16	4.59
1942	54,529	34,696	1,563,554	636	28.87	4.51
1943	56,239	55,294	1,661,550	628	29.54	4.71
1944	58,860	59,441	1,767,380	670	30.05	4.48
1945	62,175	45,958	1,885,574	759	30.29	4.10
1946	67,479	51,577	2,076,400	761	30.77	4.04
Change (Changement) 1937 - 1946						
Amount (Volume) Per cent (p.c.)	25,875 62.19	27,889 118.74	958,447 85.75	196 54.69	5.30 14.51	- 0.72 -15.13
QUEBEC						
1937	407,155	265,405	8,108,948	652	19.92	5.06
1938	421,178	287,107	8,669,054	682	20.58	5.02
1939	434,825	311,420	9,167,584	716	21.08	5.94
1940	451,791	324,052	9,634,398	717	21.52	5.97
1941	475,547	342,627	10,100,500	724	21.55	5.95
1942	488,014	368,173	10,785,887	754	22.10	2.93
1943	507,765	398,505	10,791,660	784	21.25	2.71
1944	530,396	446,142	11,304,901	841	21.51	2.53
1945	558,865	507,274	11,925,494	908	21.54	2.55
1946	590,125	596,695	15,401,463	1,011	22.71	2.25
Change (Changement) 1937 - 1946						
Amount (Volume) Per cent (p.c.)	182,970 44.94	351,288 124.82	5,292,517 85.27	359 55.06	2.79 14.01	- 0.61 -26.47

TABLEAU 2- SERVICE DOMESTIQUE, 1937 - 1946

Year Année	Number of Customers Nombre d'usagers	Kilowatt Hours Consumed Kilowatt heures consommées	Revenue Recettes	Kw. Hours per Customer Consommation moyenne annuelle par usager	Average Annual Bill Compte moyen de l'année	Revenue per Kilowatt Hour Moyenne par kilowatt heure
				(\$000)	\$	\$
ONTARIO	1937	660,262	1,174,558	17,718,464	1,779	26.84
	1938	691,498	1,285,568	18,456,575	1,859	26.69
	1939	719,871	1,374,525	19,657,558	1,909	27.31
	1940	745,396	1,459,255	20,928,097	1,958	28.08
	1941	772,155	1,546,189	21,980,031	2,002	28.47
	1942	787,721	1,623,780	22,807,897	2,061	28.95
	1945	801,450	1,682,562	25,000,644	2,099	28.70
	1944	813,356	1,787,359	23,259,991	2,198	28.57
	1945	839,968	1,965,045	23,699,446	2,357	28.21
	1946	876,781	2,269,006	26,514,250	2,587	30.01
Change (Changement) 1937 - 1946		216,499	1,094,648	8,595,795	808	5.17
Amount (Volume) Per cent (p.c.)		32.79	95.21	48.51	45.42	11.61
MANITOBA	1937	76,516	305,271	3,122,597	3,965	40.61
	1938	77,762	311,795	5,223,605	4,010	41.45
	1939	81,091	320,827	5,311,662	3,956	40.84
	1940	85,404	330,269	5,423,512	3,980	41.04
	1941	85,106	343,041	3,472,277	4,051	40.80
	1942	87,615	355,928	3,570,492	4,062	40.75
	1943	88,528	374,169	3,712,551	4,228	41.93
	1944	92,073	389,865	3,871,419	4,254	42.05
	1945	94,673	416,499	4,237,484	4,599	44.76
	1946	103,204	457,464	4,680,655	4,453	45.36
Change (Changement) 1937 - 1946		26,688	154,195	1,558,456	470	4.55
Amount (Volume) Per cent (p.c.)		34.88	50.84	49.91	11.86	11.15
SASKATCHEWAN	1937	46,630	37,234	1,852,505	798	59.75
	1938	48,060	52,077	1,903,751	815	59.61
	1939	49,980	41,198	2,004,435	824	40.10
	1940	51,425	43,406	2,095,205	844	40.70
	1941	52,695	45,448	2,173,255	862	41.24
	1942	54,132	46,858	2,173,896	866	40.16
	1943	55,500	48,996	2,257,865	885	40.68
	1944	58,089	52,724	2,397,702	908	41.28
	1945	61,285	58,402	2,565,796	955	41.87
	1946	67,536	68,530	2,940,185	1,018	43.66
Change (Changement) 1937 - 1946		20,706	51,296	1,087,662	220	5.95
Amount (Volume) Per cent (p.c.)		44.40	84.05	58.71	27.57	9.89
ALBERTA	1937	61,121	35,539	1,865,520	578	30.52
	1938	63,030	58,089	1,985,226	604	31.46
	1939	68,287	42,210	2,145,093	616	31.42
	1940	69,397	45,110	2,275,091	650	32.78
	1941	72,422	47,572	2,393,189	657	35.05
	1942	74,614	49,080	2,593,073	656	31.99
	1943	77,610	52,100	2,514,031	670	32.31
	1944	81,652	56,977	2,898,155	698	33.04
	1945	87,005	65,962	2,932,410	755	33.70
	1946	92,461	75,756	3,166,731	819	34.25
Change (Changement) 1937 - 1946		51,540	40,417	1,301,211	241	3.75
Amount (Volume) Per cent (p.c.)		51.28	114.57	69.75	41.70	12.22
BRITISH COLUMBIA	1937	144,130	134,414	5,779,392	933	26.22
	1938	150,955	147,615	4,086,919	978	27.07
	1939	156,052	151,930	4,526,747	974	27.73
	1940	163,277	158,761	4,626,562	972	28.54
	1941	171,635	174,454	4,880,946	1,016	28.44
	1942	178,585	182,914	5,049,084	1,024	28.26
	1943	179,136	190,967	4,994,894	1,066	27.88
	1944	186,019	208,377	5,361,506	1,109	28.82
	1945	192,991	235,043	5,966,796	1,218	30.92
	1946	210,617	274,188	7,305,880	1,300	34.66
Change (Changement) 1937 - 1946		68,687	139,724	3,526,488	367	8.44
Amount (Volume) Per cent (p.c.)		46.27	103.96	93.51	59.34	32.19

TABLE 3 - ELECTRIC POWER PLANTS, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick
<u>Total number of generating stations</u>	600	9	45	15
Per cent of total for Canada	100.00	1.50	7.50	2.50
<u>COMMERCIAL</u>	397	8	18	8
Hydraulic	183	4	11	5
Fuel	214	4	7	3
<u>MUNICIPAL</u>	203	1	27	7
Hydraulic	122	-	21	3
Fuel	81	1	6	4
With water wheels and turbines	304	4	32	8
With steam engines only	15	-	-	1
With steam turbines only	23	1	7	1
With gas or oil engines only	254	4	5	4
With both steam engines and turbines	4	-	1	1
With both steam and gas or oil engines	--	-	-	-
With alternating current dynamos only	372	8	45	14
With direct current dynamos only	119	-	-	1
With both alternating and direct current dynamos ..	8	-	-	-
<u>COMMERCIAL ORGANIZATIONS</u>	x 361	7	16	15
Number generating power	265	5	10	7
Number buying power for redistribution	108	2	6	8
<u>MUNICIPALITIES</u>	x 468	1	23	9
Number generating power	84	1	8	5
Number buying power for redistribution	389	-	15	6
<u>AUXILIARY PLANTS</u>	54	1	4	3
To hydraulic stations	42	1	1	-
To non-generating stations	12	-	3	5

X - Organizations operating in two or more provinces are shown under provinces, but are included in total as only one organization..

TABLEAU 3 - USINES GENERATRICES, 1946

Québec	Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia and Yukon	
98	118	17	143	77	78	<u>Nombre d'usines génératrices</u>
16.33	19.67	2.83	23.83	12.84	13.00	Pourcentage du total pour le Canada
74	48	11	107	69	54	<u>COMMERCIALES</u>
72	45	4	-	4	58	Hydrauliques
2	3	7	107	65	16	A combustible
24	70	6	36	8	24	<u>MUNICIPALES</u>
21	65	2	-	-	12	Hydrauliques
3	7	4	36	8	12	A combustible
95	107	6	-	4	50	Avec roues et turbines hydrauliques
1	3	1	-	5	4	Avec machines à vapeur seulement
1	-	-	5	5	3	Avec turbines à vapeur seulement
5	8	10	137	62	21	Avec moteurs à gaz ou à pétrole seulement
-	-	-	1	1	-	Avec machines et turbines à vapeur à la fois
-	-	-	-	-	-	Avec machines à vapeur à gaz et à pétrole
97	117	17	56	45	75	Avec dynamos à courant alternatif seulement
1	1	-	85	27	4	Avec dynamos à courant direct seulement
-	-	-	2	5	1	Avec dynamos à courant alternatif et direct
60	61	14	89	63	48	<u>USINES COMMERCIALES</u>
54	38	8	87	51	30	Nombre d'usines génératrices
26	28	6	2	12	18	Nombre d'usines achetant de l'électricité pour la revendre
54	352	7	52	15	20	<u>MUNICIPALITES</u>
15	13	3	24	8	9	Nombre d'usines génératrices
19	319	4	8	7	11	Nombre d'usines achetant de l'électricité pour la revendre
11	6	1	-	8	20	<u>USINES AUXILIAIRES</u>
10	5	1	-	8	16	Aux usines hydrauliques
1	1	-	-	-	4	Aux usines non-génératrices

X - Les compagnies exploitant des usines dans deux ou plusieurs provinces sont inscrites au chapitre des provinces, mais n'apparaissent qu'une fois dans le total

TABLE 4 - REVENUE, 1946 (1)

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
<u>REVENUE FROM SALE OF ELECTRIC ENERGY</u>	\$ 226,096,273	\$ 561,904	\$ 8,480,811	\$ 5,743,824	\$ 84,894,929
For domestic service	62,820,120	274,082	2,860,287	2,078,400	15,401,465
For commercial light	57,204,822	182,545	1,529,662	1,022,380	10,144,505
For power (small)	11,322,592	45,590	1,063,430	451,091	2,756,846
For power (large)	105,495,981	52,040	2,991,064	1,949,452	56,540,241
For power (municipal)	5,991,845	7,024	30,452	88,509	858,372
For street lighting	5,261,115	20,725	205,916	155,992	1,213,504
<u>REVENUE OF COMMERCIAL STATIONS</u>	108,668,772	426,858	5,932,830	2,936,534	56,735,273
Non-generating	9,602,647	1,268	700,147	530,980	166,108
Generating	99,066,125	425,590	5,232,683	2,405,344	56,569,165
Hydraulic	69,548,005	19,240	1,215,855	1,694,981	56,525,754
Fuel	9,518,122	406,350	4,018,828	710,563	45,411
<u>REVENUE OF MUNICIPAL STATIONS</u>	117,427,501	154,946	2,547,981	2,807,500	28,159,656
Non-generating	24,279,214	-	560,587	546,141	720,556
Generating	93,148,287	154,946	2,167,594	2,261,559	27,439,120
Hydraulic	62,371,987	-	1,765,515	103,680	27,317,988
Fuel	10,776,500	154,946	404,079	2,157,679	121,152
Revenue of non-generating stations	55,881,861	1,268	1,080,754	1,077,121	886,644
Revenue of generating stations	192,214,412	560,558	7,400,077	4,666,703	84,008,265
Revenue of hydraulic stations	171,919,990	19,240	2,977,170	1,798,661	63,845,742
Revenue of fuel stations	20,294,422	541,296	4,422,907	2,868,042	164,545
Average revenue per H.P. of primary power	25.01	60.85	41.48	58.26	15.73
Average revenue per H.P. in main and auxiliary plants	22.61	59.96	41.05	57.40	15.82
Average revenue per Kv.A. of dynamo capacity	27.70	80.89	49.76	44.64	16.58
Average revenue per Kv.A. in main and auxiliary plants	27.20	80.34	49.24	45.72	18.44
Average revenue per kilowatt hour consumed Cents	0.54	5.36	1.44	0.96	0.38
Average revenue per domestic service customer	29.85	39.83	29.75	30.77	22.71
Average revenue per commercial light customer	121.55	124.52	119.79	128.17	125.24
Average revenue per small power customer	225.50	381.45	384.60	381.43	251.74
Average revenue per large power customer	10,076.15	5,340.00	14,682.08	15,352.41	29,541.07
Average revenue per kilowatt hour - domestic and farm service Cents	1.62	4.56	5.22	4.04	2.25
Average revenue per kilowatt hour - commercial light ..Cents	2.02	5.84	5.25	2.91	2.21

/ Affected by power purchased from other province.

X Adjusted for power purchased from Quebec plants.

(1) Gross revenue less cost of power interchanged between stations.

TABLEAU 4 - RECETTES, 1946 (1)

Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia and Yukon	
\$	\$	\$	\$	\$	
✓ 87,370,115	12,066,616	7,705,605	✓ 9,864,158	23,274,565	<u>RECETTES PROVENANT DE LA VENTE D'ÉLECTRICITÉ.</u>
26,514,259	4,680,855	2,940,165	3,166,731	7,305,880	Pour éclairage domestique
11,510,147	2,456,785	2,359,784	2,643,801	5,355,217	Pour éclairage commercial
3,500,536	532,799	1,004,415	1,025,460	962,427	Pour force motrice (petite)
41,582,996	3,972,505	840,745	2,512,212	8,940,660	Pour force motrice (grosse)
2,201,409	168,596	245,794	186,159	205,748	Pour pouvoir municipal
2,260,766	255,282	514,704	529,795	504,455	Pour éclairage des rues
11,518,518	6,206,154	2,590,650	4,879,680	20,475,803	<u>RECETTES DES USINES COMMERCIALES</u>
2,646,119	248,535	2,923	125,416	7,055,968	Non-génératrices
8,672,599	5,957,619	2,587,727	4,756,244	13,417,835	Génératrices
8,633,570	5,841,890	-	5,521,347	13,056,047	Hydrauliques
58,829	115,929	2,587,727	1,254,897	361,788	A combustible
76,051,585	5,860,464	5,114,955	4,984,478	2,800,562	<u>RECETTES DES USINES MUNICIPALES</u>
17,255,559	1,757,255	1,030,348	1,822,957	854,237	Non-génératrices
58,796,056	4,103,211	4,084,607	5,161,521	1,966,525	Génératrices
58,681,086	4,013,398	-	-	1,448,752	Hydrauliques
104,950	89,815	4,084,607	5,161,521	517,575	A combustible
19,901,676	2,005,588	1,035,271	1,946,575	7,890,205	Recettes des usines non-génératrices
67,468,435	10,061,030	6,672,534	7,917,765	15,384,160	Recettes des usines génératrices
67,324,656	9,855,268	-	3,521,547	14,504,799	Recettes des usines hydrauliques
145,779	205,742	6,672,534	4,396,418	879,561	Recettes des usines à combustible
I 25.70	22.56	45.24	49.77	52.00	Moyenne de recettes par H.P. de machinerie primaire
I 25.59	21.77	45.24	45.45	29.81	Moyenne de recettes par H.P. de machinerie principale et auxiliaire
I 32.66	28.10	55.85	59.47	39.25	Moyenne de recettes par Kv.A. de capacité de dynamos
I 32.26	26.96	55.85	54.05	56.58	Moyenne de recettes par Kv.A. de capacité des dynamos, usines principales et auxiliaires
.55	.50	2.85	1.62	.80	Moyenne de recettes par Kw. heure (cents)
50.01	45.36	45.66	34.25	34.66	Moyenne de recettes par abonnés d'éclairage domestique
103.28	128.84	125.95	124.97	163.91	Moyenne de recettes par abonnés d'éclairage commercial
234.68	151.59	511.85	155.05	182.17	Moyenne de recettes par abonnés pour petite force motrice
11,618.61	934.05	6,725.96	3,919.21	9,264.93	Moyenne de recettes par abonnés pour grosse force motrice
					Moyenne de recettes par Kw. heure-service domestique
1.16	1.02	4.29	4.18	2.66	et de ferme (cents)
1.33	1.95	4.26	3.85	3.07	Moyenne de recettes par Kw.heure - service commercial.. (cents)

✓ Affecté par énergie achetée d'une autre province.

I Ajusté pour achats de courant des usines du Québec.

(1) Revenu brut moins le coût de l'énergie échangée entre stations.

TABLE 5 - EXPENSES, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
TOTAL EXPENSES	\$ 150,750,488	\$ 420,562	\$ 7,526,991	\$ 3,515,048	\$ 40,299,705
Per cent of total for Canada	100.00	0.28	4.99	2.33	26.75
Salaries and wages	46,422,998	125,174	1,971,541	1,162,026	12,647,124
Fuel	5,585,206	217,756	1,405,555	808,850	64,464
Taxes (x)	22,169,479	75,499	967,596	213,485	12,099,181
Cost of power	76,572,805	2,135	3,184,501	1,550,709	15,428,836
TOTAL FOR COMMERCIAL STATIONS	66,789,794	377,885	5,811,872	1,618,284	29,609,582
Salaries and wages	18,755,998	106,595	1,565,646	405,621	9,069,657
Fuel	3,504,599	191,856	1,275,169	261,954	11,541
Taxes	19,009,251	75,499	901,852	213,044	10,495,934
Cost of power	25,720,146	2,135	2,271,205	739,685	10,054,220
Non-generating stations	12,806,219	2,135	951,699	946,969	165,959
Generating stations	53,985,575	375,750	4,880,173	671,515	29,445,443
Hydraulic stations	46,387,749	11,140	614,045	227,571	29,420,649
Fuel stations	7,595,826	364,610	4,266,150	443,744	24,794
TOTAL FOR MUNICIPAL STATIONS	85,960,694	42,679	1,715,119	1,896,784	10,690,323
Salaries and wages	27,667,000	16,779	605,695	758,405	3,577,437
Fuel	2,280,807	25,900	150,584	546,896	52,925
Taxes	3,160,228	-	65,744	439	1,605,247
Cost of power	50,852,659	-	915,296	591,024	5,454,716
Non-generating stations	42,618,966	-	873,206	565,757	645,018
Generating stations	41,055,171	42,679	753,556	1,351,007	10,047,505
Hydraulic stations	36,526,159	-	550,598	74,246	9,985,845
Fuel stations	4,727,012	42,679	422,958	1,256,761	63,462
TOTAL EXPENSES FOR NON-GENERATING STATIONS	55,625,185	2,135	1,804,905	1,512,726	806,957
Salaries and wages	11,265,596	-	453,676	285,698	245,820
Fuel	8,558	-	56	-	-
Taxes	1,986,046	-	145,902	66,886	10,236
Cost of power	42,565,185	2,135	1,225,271	1,162,142	552,901
TOTAL EXPENSES FOR GENERATING STATIONS	95,125,505	418,429	5,722,086	2,002,522	59,492,748
Salaries and wages	55,157,402	125,174	1,557,665	878,528	12,405,504
Fuel	5,576,848	217,756	1,405,497	808,850	64,464
Taxes	20,185,453	75,499	821,694	146,597	12,088,945
Cost of power	54,207,620	-	1,959,250	168,567	14,956,055
Hydraulic stations	32,802,465	11,140	1,032,998	501,617	9,404,492
Fuel stations	12,322,836	407,289	4,689,088	1,700,505	68,256

(x) Sales tax not included (see page 8).

/ Includes only the four items listed.

TABLEAU 5 / DEPENSES, 1946

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia and Yukon	
\$	\$	\$	\$	\$	
70,567,779	4,008,755	4,260,740	4,527,784	15,823,124	<u>TOTAL DES DEPENSES</u>
46.68	2.66	2.85	3.00	10.50	Pourcentage du total pour le Canada
20,573,814	2,774,614	1,411,538	1,488,557	4,469,050	Salaires et gages
75,976	65,405	1,567,781	811,535	770,106	Combustible
2,975,596	271,707	460,902	1,075,799	4,053,716	Taxes (x)
46,944,595	897,029	1,020,719	1,154,113	6,550,272	Achat d'énergie électrique
9,489,356	1,805,054	1,476,161	2,110,003	14,489,819	<u>TOTAL POUR LES USINES COMMERCIALES</u>
1,528,664	1,066,405	510,165	840,412	3,843,005	Salaires et gages
9,977	18,632	489,653	557,041	710,596	Combustible
2,008,535	159,061	391,765	756,759	4,009,004	Taxes
5,942,562	540,958	86,578	175,791	5,927,214	Achat d'énergie électrique
2,426,646	577,624	2,453	50,955	7,703,801	Usines non-génératrices
7,062,600	1,227,450	1,475,706	2,059,048	6,786,018	Usines génératrices
7,045,927	1,175,113	-	1,351,170	6,566,136	Usines hydrauliques
18,763	54,517	1,475,706	727,878	219,882	Usines à combustible
60,878,443	2,205,701	2,782,579	2,417,781	1,353,505	<u>TOTAL POUR LES USINES MUNICIPALES</u>
18,845,150	1,688,211	901,173	648,125	626,025	Salaires et gages
65,999	46,773	878,128	474,294	59,510	Combustible
965,263	112,646	69,157	517,040	24,712	Taxes
41,002,051	358,071	934,141	978,522	625,058	Achat d'énergie électrique
36,961,569	797,579	958,153	1,448,844	570,840	Usines non-génératrices
25,916,674	1,406,122	1,824,426	968,937	762,465	Usines génératrices
25,870,940	1,362,984	-	-	705,748	Usines hydrauliques
45,934	45,158	1,824,426	968,937	58,717	Usines à combustible
39,588,215	1,575,203	960,606	1,499,799	8,274,641	<u>TOTAL DES DEPENSES DES USINES NON-GENERATRICES</u>
7,373,269	462,546	125,981	272,519	2,072,287	Salaires et gages
85	-	-	-	8,219	Combustible
516,582	15,828	68,830	214,025	1,147,757	Taxes
51,698,281	897,029	767,795	1,015,255	5,046,378	Achat d'énergie électrique
30,979,564	2,635,552	3,300,134	5,027,985	7,548,485	<u>TOTAL DES DEPENSES DES USINES GENERATRICES</u>
15,000,545	2,512,268	1,287,557	1,216,018	2,396,743	Salaires et gages
75,895	65,405	1,367,781	811,535	761,887	Combustible
2,657,014	255,879	392,072	859,774	2,885,959	Taxes
15,248,112	-	252,924	140,858	1,503,894	Achat d'énergie électrique
30,914,667	2,556,097	-	1,351,170	7,269,884	Usines hydrauliques
64,697	97,455	3,300,134	1,696,815	278,599	Usines à combustible

(x) Ne comprend que les quatres items énumérés.

(x) Taxe des ventes non comprises (Voir p. 8).

TABLE 6 - EMPLOYEES, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
TOTAL NUMBER OF PERSONS EMPLOYED	24,577	116	1,247	918	6,610
Per cent of total for Canada	100.00	0.47	5.07	3.74	26.90
Officers, clerks, other salaried employees, etc.	7,851	45	441	193	1,741
Employees on wages	16,726	71	806	725	4,869
TOTAL EMPLOYEES IN COMMERCIAL STATIONS	10,249	97	787	300	5,067
Officers, clerks, other salaried employees, etc.	2,933	40	222	92	1,105
Employees on wages	7,316	57	565	208	3,962
Non-generating	1,294	-	172	120	52
Generating	8,955	97	615	180	5,015
Hydraulic	7,709	4	201	84	5,002
Fuel	1,246	93	414	96	15
TOTAL EMPLOYEES IN MUNICIPAL STATIONS	14,328	19	460	618	1,543
Officers, clerks, other salaried employees, etc.	4,918	5	219	101	636
Employees on wages	9,410	14	241	517	907
Non-generating	5,119	-	115	76	119
Generating	9,209	19	345	542	1,424
Hydraulic	7,934	-	250	48	1,407
Fuel	1,275	19	95	494	17
TOTAL EMPLOYEES IN NON-GENERATING STATIONS	6,413	-	287	196	171
Officers, clerks, other salaried employees, etc.	2,818	-	103	94	59
Employees on wages	3,595	-	184	102	112
TOTAL EMPLOYEES IN GENERATING STATIONS	18,164	116	980	722	6,459
Officers, clerks, other salaried employees, etc.	5,053	45	358	99	1,682
Employees on wages	15,151	71	622	625	4,757
Hydraulic	15,643	4	451	132	6,409
Fuel	2,521	112	509	590	50

TABLEAU 6 - EMPLOYES, 1946

Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia and Yukon	
9,974	1,868	755	973	2,116	<u>TOTAL DU PERSONNEL OCCUPE</u>
40.58	7.60	3.07	3.96	8.61	Pourcentage du total pour le Canada
5,476	567	217	318	853	Administrateurs, directeurs, commis et tous employés des bureaux
6,498	1,301	538	655	1,263	Ouvriers et journaliers
792	559	333	580	1,734	<u>PERSONNEL DES USINES COMMERCIALES</u>
208	251	80	183	772	Administrateurs, directeurs, commis et tous employés des bureaux
584	328	253	397	962	Ouvriers et journaliers
90	10	2	10	858	Non-génératrices
702	549	331	570	896	Génératrices
695	528	-	349	846	Hydrauliques
7	21	331	221	50	Combustible
9,182	1,309	422	395	382	<u>PERSONNEL DES USINES MUNICIPALES</u>
5,268	356	137	135	81	Administrateurs, directeurs, commis et tous employés des bureaux
5,914	973	285	258	301	Ouvriers et journaliers
5,930	589	64	157	69	Non-génératrices
5,252	720	358	256	315	Génératrices
5,259	700	-	-	290	Hydrauliques
13	20	358	256	23	Combustible
4,020	599	66	167	907	<u>PERSONNEL DES USINES NON-GENERATRICES</u>
1,750	139	33	89	551	Administrateurs, directeurs, commis et tous employés des bureaux
2,270	460	33	78	556	Ouvriers et journaliers
5,954	1,269	689	806	1,209	<u>PERSONNEL DES USINES GENERATRICES</u>
1,726	428	184	229	302	Administrateurs, directeurs, commis et tous employés des bureaux
4,228	841	505	577	907	Ouvriers et journaliers
5,934	1,228	-	349	1,156	Hydrauliques
20	41	689	457	73	Combustible

TABLE 7 - NUMBER OF CUSTOMERS, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
<u>NUMBER OF CUSTOMERS</u>	2,476,830	6,489	105,515	77,066	685,925
Per cent of total for Canada	100.00	0.34	4.25	3.11	27.69
Domestic service	2,104,549	6,682	89,484	67,479	590,125
Commercial light	306,592	1,466	12,769	7,977	80,998
Power (small)	50,254	119	2,765	1,390	11,810
Power (large)	11,846	6	204	146	1,927
Power (municipal)	867	1	6	9	143
Street lighting	2,702	15	85	67	922
<u>COMMERCIAL STATIONS</u>	826,091	6,962	69,806	50,162	329,959
Domestic service	693,277	5,617	59,137	25,186	284,288
Commercial light	108,202	1,250	8,608	4,117	37,624
Power (small)	17,731	76	1,930	741	5,862
Power (large)	5,104	5	85	91	1,216
Power (municipal)	308	-	2	6	104
Street lighting	1,469	14	44	21	865
Non-generating	230,086	129	26,229	18,197	4,157
Generating	596,005	6,855	45,577	11,965	325,822
Hydraulic	496,690	461	12,427	5,089	325,199
Fuel	99,315	6,372	31,150	6,876	623
<u>MUNICIPAL STATIONS</u>	1,650,739	1,527	55,507	46,906	555,966
Domestic service	1,411,272	1,265	50,347	42,293	305,857
Commercial light	198,590	216	4,161	5,860	45,574
Power (small)	52,525	43	835	649	5,948
Power (large)	6,742	1	119	55	711
Power (municipal)	579	1	4	3	39
Street lighting	1,235	1	41	46	57
Non-generating	891,981	-	17,926	14,569	24,098
Generating	758,758	1,527	17,581	52,357	551,868
Hydraulic	630,857	-	10,110	2,361	330,555
Fuel	127,901	1,527	7,471	29,976	1,315
<u>NON-GENERATING STATIONS</u>	1,122,067	129	44,155	52,766	28,255
Domestic service	955,461	89	58,153	28,516	25,004
Commercial light	159,050	59	4,955	5,804	2,608
Power (small)	22,582	-	968	580	507
Power (large)	3,772	-	80	42	58
Power (municipal)	446	-	4	5	15
Street lighting	756	1	55	19	45
<u>GENERATING STATIONS</u>	1,354,765	6,560	61,158	44,302	657,690
<u>Hydraulic stations</u>	1,127,547	461	22,557	5,450	655,754
Domestic service	969,573	362	19,367	4,578	563,655
Commercial light	128,860	96	2,575	724	77,959
Power (small)	19,964	2	482	111	11,275
Power (large)	7,551	-	83	28	1,865
Power (municipal)	253	-	1	4	129
Street lighting	1,366	1	29	5	873
<u>Fuel stations</u>	227,216	7,899	38,621	38,652	1,936
Domestic service	179,515	6,451	51,984	34,585	1,468
Commercial	58,682	1,351	5,259	3,449	451
Power (small)	7,708	117	1,315	699	28
Power (large)	543	6	41	76	6
Power (municipal)	186	1	1	-	1
Street lighting	580	15	21	43	4
Average number of domestic service customers per 100 of population	17.10	7.32	14.62	14.06	16.26

TABLEAU 7 - NOMBRE D'USAGERS, 1946

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia and Yukon	
1,007,754	150,918	90,200	121,512	249,871	<u>NOMBRE D'USAGERS</u>
40,69	5,29	5,64	4,90	10,09	Pourcentage du total pour le Canada
876,761	105,204	67,536	92,461	210,817	Service domestique
111,449	19,068	19,058	21,156	52,671	Eclairage commercial
14,916	4,049	5,221	6,701	5,283	Force motrice (petite)
5,579	4,255	125	641	965	Force motrice (grosse)
410	81	103	119	15	Energie (municipale)
619	263	577	234	120	Eclairage des rues
67,813	40,988	29,562	45,484	207,555	<u>NOMBRE D'USAGERS DES USINES COMMERCIALES</u>
58,346	31,791	22,544	30,785	175,783	Service domestique
8,158	6,518	5,819	9,398	26,710	Eclairage commercial
867	489	1,159	2,669	5,958	Force motrice (petite)
574	2,169	59	304	821	Force motrice (grosse)
8	1	74	109	4	Energie (municipale)
60	20	147	219	79	Eclairage des rues
15,461	9,506	144	2,751	155,732	Non-génératrices
52,552	31,682	29,418	40,733	53,623	Génératrices
51,880	50,069	-	25,088	50,477	Hydrauliques
472	1,615	29,418	17,645	5,146	Combustible
959,921	89,930	60,638	77,828	42,516	<u>NOMBRE D'USAGERS DES USINES MUNICIPALES</u>
818,415	71,413	44,992	61,676	35,054	Service domestique
103,291	12,550	15,219	11,758	5,961	Eclairage commercial
14,049	3,560	2,082	4,032	1,525	Force motrice (petite)
5,205	2,084	86	357	144	Force motrice (grosse)
402	80	29	10	11	Energie (municipale)
559	245	230	15	41	Eclairage des rues
727,922	53,281	19,287	54,758	20,140	Non-génératrices
211,999	56,649	41,551	45,070	22,376	Génératrices
210,447	56,648	-	-	20,756	Hydrauliques
1,552	1	41,551	45,070	1,640	Combustible
745,585	42,587	19,431	57,509	175,872	<u>NOMBRE D'USAGERS DES USINES NON-GENERATRICES</u>
657,876	33,577	14,475	50,686	147,505	Service domestique
69,558	7,558	5,985	4,620	22,365	Eclairage commercial
12,894	1,561	928	2,065	3,279	Force motrice (petite)
2,525	266	26	116	659	Force motrice (grosse)
400	2	7	7	8	Energie (municipale)
530	245	12	15	56	Eclairage des rues
264,551	88,531	70,769	85,803	75,999	<u>NOMBRE D'USAGERS DES USINES GENERATRICES</u>
262,327	86,717	-	23,088	71,213	Usines hydrauliques
257,207	68,750	-	16,192	59,482	Service domestique
21,831	11,332	-	4,866	9,477	Eclairage commercial
1,943	2,585	-	1,668	1,898	Force motrice (petite)
1,055	3,982	-	222	500	Force motrice (grosse)
9	78	-	27	5	Energie (municipale)
284	10	-	115	51	Eclairage des rues
2,024	1,614	70,769	60,715	4,786	<u>Usines à combustible</u>
1,678	1,097	52,861	45,583	3,830	Service domestique
260	398	15,055	11,670	829	Eclairage commercial
79	105	2,295	2,968	106	Force motrice (petite)
1	5	99	303	6	Force motrice (grosse)
1	1	96	85	2	Energie (municipale)
5	10	365	106	15	Eclairage des rues
21.38	14.20	8.08	11.51	20.55	Moyenne de consommateurs d'éclairage électrique par 100 habitants

TABLE 8 - POLE LINE MILEAGE, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
<u>POLE LINE MILEAGE</u>	89,251	427	4,635	3,832	17,671
Per cent of total for Canada	100.00	0.48	5.19	4.30	19.80
Miles of steel towers	5,540	-	20	243	1,402
Miles of steel poles	554	-	2	-	260
Miles of wooden poles	80,759	424	4,599	3,588	15,256
Miles of concrete poles	522	-	-	1	-
Miles of underground and submarine cables	2,056	5	12	-	753
<u>TOTAL POLE LINE MILEAGE - COMMERCIAL STATIONS</u>	53,184	589	2,556	715	14,732
Non-generating	5,048	11	585	204	321
Generating	28,136	378	1,951	511	14,411
Hydraulic	24,185	26	1,174	304	14,598
Fuel	5,951	552	777	207	15
<u>TOTAL POLE LINE MILEAGE - MUNICIPAL STATIONS</u>	56,047	58	2,097	3,117	2,959
Non-generating	12,247	-	25	187	211
Generating	45,800	58	2,072	2,950	2,728
Hydraulic	36,225	-	1,552	40	2,700
Fuel	7,575	58	520	2,910	28
<u>TOTAL POLE LINE MILEAGE - NON-GENERATING STATIONS</u>	17,295	11	610	571	532
<u>TOTAL POLE LINE MILEAGE - GENERATING STATIONS</u>	71,936	416	4,025	3,461	17,159
Hydraulic	60,410	26	2,726	544	17,098
Fuel	11,526	390	1,297	3,117	41

TABLE 9 - AUXILIARY PLANT EQUIPMENT, 1946

<u>TOTAL PRIMARY POWER</u>	H.P.	176,253	135	2,265	3,450	37,426
Per cent of total for Canada		100.00	0.08	1.28	1.96	21.23
Steam reciprocating engines	No.	21	1	5	5	-
Total capacity	H.P.	9,243	75	1,190	900	-
Steam turbines	No.	41	-	1	4	8
Total capacity	H.P.	156,624	-	670	2,550	36,224
Gas and oil engines	No.	47	1	4	-	6
Total capacity	H.P.	10,386	60	405	-	1,202
<u>TOTAL SECONDARY POWER</u>	Kv.A.	149,462	48	1,825	2,725	55,894
<u>COMMERCIAL STATIONS</u>						
<u>TOTAL PRIMARY POWER</u>	H.P.	87,177	135	2,025	3,450	3,790
Steam reciprocating engines	No.	15	1	5	5	-
Total capacity	H.P.	5,118	75	1,190	900	-
Steam turbines	No.	27	-	1	4	5
Total capacity	H.P.	75,995	-	670	2,550	3,500
Gas and oil engines	No.	50	1	1	-	4
Total capacity	H.P.	6,064	60	165	-	290
<u>TOTAL SECONDARY POWER</u>	Kv.A.	70,745	48	1,638	2,725	3,125
<u>MUNICIPAL STATIONS</u>						
<u>TOTAL PRIMARY POWER</u>	H.P.	89,076	-	240	-	33,656
Steam reciprocating engines	No.	6	-	-	-	-
Total capacity	H.P.	4,125	-	-	-	-
Steam turbines	No.	15	-	-	-	4
Total capacity	H.P.	30,629	-	-	-	52,724
Gas and oil engines	No.	17	-	5	-	2
Total capacity	H.P.	4,522	-	240	-	912
<u>TOTAL SECONDARY POWER</u>	Kv.A.	78,717	-	185	-	30,769

TABLEAU 8 - LONGUEUR (EN MILLES) DES LIGNES SUR POTEAUX, 1946

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia and Yukon	
59,765	5,759	4,920	5,450	6,794	<u>LONGUEUR (EN MILLES) DES LIGNES SUR POTEAUX</u>
44,57	6,43	5,51	6,11	7,61	Pourcentage du total pour tout le Canada
5,055	746	-	51	65	Milles de pylones d'acier
89	3	-	-	-	Milles de poteaux d'acier
35,087	4,954	4,895	5,336	6,620	Milles de poteaux de bois
520	1	-	-	-	Milles de poteaux de ciment
1,034	35	25	85	111	Milles de cables souterrains et sous-marins
2,054	1,418	1,235	4,474	5,651	<u>TOTAL (EN MILLES) POUR LE SERVICE DES USINES COMMERCIALES</u>
367	223	5	67	5,265	Non-génératrices
1,687	1,195	1,230	4,407	2,368	Génératrices
1,681	1,120	-	3,200	2,282	Hydrauliques
6	75	1,230	1,207	84	A combustible
37,711	4,521	5,685	976	1,165	<u>TOTAL (EN MILLES) POUR LE SERVICE DES USINES MUNICIPALES</u>
7,415	5,404	207	480	558	Non-génératrices
30,296	917	5,478	496	825	Génératrices
30,262	892	-	-	779	Hydrauliques
54	25	5,478	496	46	A combustible
7,782	5,627	212	547	5,605	<u>TOTAL (EN MILLES) POUR LE SERVICE DES USINES NON-GENERATRICES</u>
51,983	2,112	4,708	4,905	3,191	<u>TOTAL (EN MILLES) POUR LE SERVICE DES USINES GENERATRICES</u>
51,943	2,012	-	3,200	5,061	Hydrauliques
40	100	4,708	1,705	150	A combustible

TABLEAU 9 - OUTILLAGE AUXILIAIRE, 1946

41,060	19,490	-	18,963	55,464	<u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P.
23,30	11,06	-	10,76	30,55	Pourcentage du total pour tout le Canada Nomb.
4	1	-	7	2	Machines à vapeur, à mouvement alternatif Nomb.
1,600	1,750	-	2,755	975	Capacité totale H.P.
4	8	-	4	14	Turbines à vapeur Nomb.
58,000	17,740	-	15,000	46,440	Capacité totale H.P.
4	-	-	7	25	Moteurs à gaz et à pétrole Nomb.
1,460	-	-	1,210	6,049	Capacité totale H.P.
55,309	18,026	-	16,662	42,977	<u>TOTAL, FORCE MOTRICE SECONDAIRE</u> Kv.A.
9,960	-	-	18,963	48,854	<u>USINES COMMERCIALES</u>
-	-	-	7	1	<u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P.
-	-	-	2,755	200	Machines à vapeur, à mouvement alternatif Nomb.
2	-	-	4	13	Capacité totale H.P.
8,500	-	-	15,000	45,775	Turbines à vapeur Nomb.
4	-	-	7	13	Capacité totale H.P.
1,460	-	-	1,210	2,879	Moteurs à gaz et à pétrole Nomb.
7,094	-	-	16,662	39,455	Capacité totale H.P.
51,100	19,490	-	-	4,610	<u>TOTAL, FORCE MOTRICE SECONDAIRE</u> Kv.A.
4	1	-	-	1	<u>USINES MUNICIPALES</u>
1,600	1,750	-	-	775	<u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P.
2	6	-	-	1	Machines à vapeur, à mouvement alternatif Nomb.
29,500	17,740	-	-	665	Capacité totale H.P.
-	-	-	-	12	Turbines à vapeur Nomb.
-	-	-	-	3,170	Capacité totale H.P.
28,215	18,026	-	-	5,522	<u>TOTAL, FORCE MOTRICE SECONDAIRE</u> Kv.A.

TABLE 10 - TOTAL EQUIPMENT INCLUDING AUXILIARY PLANT EQUIPMENT, 1946

		Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
<u>TOTAL PRIMARY POWER</u>	H.P.	10,001,712	9,570	206,707	153,572	5,434,275
Per cent of total for Canada		100.00	0.09	2.07	1.54	54.33
Water wheels and turbines	No.	854	6	55	17	288
Total capacity	H.P.	9,378,867	563	106,658	107,010	5,395,832
Steam reciprocating engines	No.	49	1	5	7	5
Total capacity	H.P.	17,795	75	2,990	2,980	255
Steam turbines	No.	116	4	20	10	8
Total capacity	H.P.	542,905	6,680	94,051	41,930	56,224
Gas and oil engines	No.	580	14	21	9	14
Total capacity	H.P.	62,145	2,252	5,008	1,652	5,962
<u>TOTAL DYNAMO CAPACITY</u>	Kv.A.	8,512,358	6,995	172,244	151,385	4,603,991
Per cent of total for Canada		100.00	0.09	2.07	1.58	55.39
Dynamos, A.C.	No.	1,561	21	100	41	506
Total capacity	Kv.A.	8,504,978	6,995	171,944	151,185	4,603,971
Dynamos, D.C.	No.	218	-	1	1	1
Total capacity	Kw.	7,380	-	500	200	20
<u>COMMERCIAL STATIONS</u>						
<u>TOTAL PRIMARY POWER</u>	H.P.	6,389,175	7,585	117,912	115,280	4,365,792
Water Wheels and turbines	No.	486	6	16	11	212
Total capacity	H.P.	6,104,383	363	25,878	94,150	4,361,672
Steam reciprocating engines	No.	31	1	5	7	1
Total capacity	H.P.	10,245	75	2,990	2,980	150
Steam turbines	No.	66	4	15	6	5
Total capacity	H.P.	241,255	6,680	86,845	15,550	5,500
Gas and oil engines	No.	409	9	8	2	6
Total capacity	H.P.	55,290	467	2,199	600	470
<u>TOTAL DYNAMO CAPACITY</u>	Kv.A.	5,504,225	5,507	98,189	96,754	3,644,938
Dynamos, A.C.	No.	785	16	45	24	216
Total capacity	Kv.A.	5,298,572	5,507	97,889	96,554	3,644,918
Dynamos, D.C.	No.	188	-	1	1	1
Total capacity	Kw.	5,655	-	500	200	20
<u>MUNICIPAL STATIONS</u>						
<u>TOTAL PRIMARY POWER</u>	H.P.	5,612,539	1,785	88,795	40,292	1,068,481
Water Wheels and turbines	No.	368	-	59	6	76
Total capacity	H.P.	5,274,484	-	80,780	12,860	1,052,160
Steam reciprocating engines	No.	18	-	-	-	2
Total capacity	H.P.	7,550	-	-	-	105
Steam turbines	No.	49	-	5	4	4
Total capacity	H.P.	301,650	-	7,206	26,380	52,724
Gas and oil engines	No.	171	5	15	7	8
Total capacity	H.P.	28,855	1,785	809	1,052	5,492
<u>TOTAL DYNAMO CAPACITY</u>	Kv.A.	5,008,155	1,486	74,055	34,651	959,055
Dynamos, A.C.	No.	576	5	57	17	90
Total capacity	Kv.A.	5,006,406	1,486	74,055	34,651	959,055
Dynamos, D.C.	No.	50	-	-	-	-
Total capacity	Kw.	1,727	-	-	-	-

TABLEAU 10 - OUTILLAGE GLOBAL, Y COMPRIS OUTILLAGE AUXILIAIRE, 1946

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia and Yukon	
2,475,160	554,355	170,528	217,152	780,817	<u>TOTAL FORCE MOTRICE PRIMAIRE</u> H.P.
24.75	5.54	1.70	2.17	7.81	Pourcentage du total pour le Canada
348	45	1-	9	86	Turbines et roues hydrauliques Nomb.
2,432,597	532,300	-	91,000	715,107	Capacité totale H.P.
7	2	1	17	6	Machines à vapeur, à mouvement alternatif Nomb
1,720	1,770	750	6,111	1,144	Capacité totale H.P.
4	6	26	19	19	Turbines à vapeur Nomb.
58,000	17,740	144,310	110,190	53,780	Capacité totale H.P.
16	24	265	144	75	Moteurs à gaz et à pétrole Nomb.
2,843	2,523	25,268	9,851	10,786	Capacité totale H.P.
1,988,564	447,506	143,152	182,516	636,207	<u>CAPACITE TOTALE DES DYNAMOS</u> Kv.A.
23.92	5.38	1.72	2.20	7.65	Pourcentage du total pour le Canada
370	77	147	124	175	Dynamos, C.A. Nomb.
1,986,604	447,506	141,355	179,448	635,994	Capacité totale Kv.A.
2	-	140	65	10	Dynamos, C.D. Nomb.
1,760	-	1,819	3,068	213	Capacité totale Kw.
<u>USINES COMMERCIALES</u>					
492,225	354,841	59,809	124,144	753,585	<u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P.
141	23	-	9	68	Turbines et roues hydrauliques Nomb.
481,862	355,500	-	91,000	696,158	Capacité totale H.P.
1	1	-	12	5	Machines à vapeur, à mouvement alternatif Nomb.
15	20	-	3,701	514	Capacité totale H.P.
2	-	12	6	18	Turbines à vapeur Nomb.
8,500	-	46,785	20,300	53,115	Capacité totale H.P.
8	17	195	134	50	Moteurs à gaz et à pétrole Nomb.
1,848	1,521	15,044	9,143	5,998	Capacité totale H.P.
415,779	279,111	48,869	99,884	615,194	<u>CAPACITE TOTALE DES DYNAMOS</u> Kv.A.
149	41	83	101	112	Dynamos, C.A. Nomb.
414,019	279,111	47,551	98,001	615,022	Capacité totale Kv.A.
2	-	116	59	6	Dynamos, C.D. Nomb.
1,760	-	1,316	1,883	172	Capacité totale Kw.
<u>USINES MUNICIPALES</u>					
1,982,935	199,492	110,519	95,008	27,232	<u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P.
207	22	-	-	18	Turbines et roues hydrauliques Nomb.
1,950,735	179,000	-	-	18,949	Capacité totale H.P.
6	1	1	5	3	Machines à vapeur, à mouvement alternatif Nomb.
1,705	1,750	750	2,410	850	Capacité totale H.P.
2	6	14	15	1	Turbines à vapeur Nomb.
29,500	17,740	97,545	89,890	665	Capacité totale H.P.
8	7	70	10	43	Moteurs à gaz et à pétrole Nomb.
995	1,002	12,224	708	6,788	Capacité totale H.P.
1,572,585	168,395	94,283	82,632	21,013	<u>CAPACITE TOTALE DES DYNAMOS</u> Kv.A.
221	36	64	23	63	Dynamos, C.A. Nomb.
1,572,585	168,395	93,782	81,447	20,972	Capacité totale Kv.A.
-	-	24	4	2	Dynamos, C.D. Nomb.
-	-	501	1,185	41	Capacité totale Kw.

TABLE 11 - MAIN PLANT EQUIPMENT, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
TOTAL PRIMARY POWER	H.P.	9,825,459	9,235	204,442	150,122
Per cent of total for Canada		100.00	0.10	2.08	1.53
Water Wheels and turbines	No.	854	6	55	17
Total Capacity	H.P.	9,578,867	563	106,658	107,010
Steam reciprocating engines	No.	28	-	2	4
Total Capacity	H.P.	8,552	-	1,800	2,080
Steam turbines	No.	75	4	19	6
Total Capacity	H.P.	386,281	6,680	93,581	39,580
Gas and oil engines	No.	555	13	17	9
Total Capacity	H.P.	51,759	2,192	2,603	1,652
TOTAL DYNAMO CAPACITY	Kv.A.	8,162,896	6,945	170,421	128,682
Per cent of total for Canada		100.00	0.08	2.09	1.58
Dynamos, A.C.	No.	1,263	20	95	54
Total Capacity	Kv.A.	8,156,916	6,945	170,421	128,462
Dynamos, D.C.	No.	215	-	-	1
Total Capacity	Kw.	5,980	-	-	200
COMMERCIAL STATIONS					
TOTAL PRIMARY POWER	H.P.	6,301,996	7,450	115,887	109,850
Per cent of total for Canada		100.00	0.12	1.84	1.74
Water Wheels and turbines	No.	486	6	16	11
Total Capacity	H.P.	6,104,385	563	25,878	94,150
Steam reciprocating engines	No.	16	-	2	4
Total Capacity	H.P.	5,127	-	1,800	2,080
Steam turbines	No.	39	4	14	2
Total Capacity	H.P.	165,260	6,680	86,175	13,000
Gas and oil engines	No.	379	8	7	2
Total Capacity	H.P.	27,226	407	2,054	600
TOTAL DYNAMO CAPACITY	Kv.A.	5,233,480	5,459	96,551	94,051
Per cent of total for Canada		100.00	0.10	1.85	1.80
Dynamos, A.C.	No.	724	15	39	17
Total Capacity	Kv.A.	5,229,227	5,459	96,551	93,851
Dynamos, D.C.	No.	185	-	-	1
Total Capacity	Kw.	4,255	-	-	200
MUNICIPAL STATIONS					
TOTAL PRIMARY POWER	H.P.	3,523,463	1,785	88,555	40,292
Per cent of total for Canada		100.00	0.05	2.51	1.14
Water Wheels and turbines	No.	568	-	59	6
Total Capacity	H.P.	3,274,484	-	80,780	12,860
Steam reciprocating engines	No.	12	-	-	-
Total Capacity	H.P.	3,425	-	-	105
Steam turbines	No.	56	-	5	4
Total Capacity	H.P.	221,021	-	7,206	26,380
Gas and oil engines	No.	154	5	10	7
Total Capacity	H.P.	24,535	1,785	569	1,052
TOTAL DYNAMO CAPACITY	Kv.A.	2,929,416	1,486	73,870	34,651
Per cent of total for Canada		100.00	0.05	2.52	1.18
Dynamos, A.C.	No.	539	5	54	17
Total Capacity	Kv.A.	2,927,699	1,486	73,870	34,651
Dynamos, D.C.	No.	30	-	-	-
Total Capacity	Kw.	1,727	-	-	-
HYDRAULIC STATIONS					
TOTAL DYNAMO CAPACITY	Kv.A.	7,782,303	558	87,095	92,258
Per cent of total for Canada		100.00	0.01	1.12	1.18
Dynamos, A.C.	No.	847	5	55	16
Total Capacity	Kv.A.	7,780,265	558	87,095	92,058
Dynamos, D.C.	No.	5	-	-	1
Total Capacity	Kw.	2,040	-	-	200
FUEL STATIONS					
TOTAL DYNAMO CAPACITY	Kv.A.	580,593	6,607	85,326	36,424
Per cent of total for Canada		100.00	1.74	21.89	9.57
Dynamos, A.C.	No.	416	15	38	18
Total Capacity	Kv.A.	576,653	6,607	85,326	36,424
Dynamos, D.C.	No.	210	-	-	-
Total Capacity	Kw.	3,940	-	-	-

x - Capacity of one hydraulic station in Saskatchewan included in Manitoba.

TABLEAU 11. — OUTILLAGE DES USINES PRINCIPALES, 1946

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia and Yukon	
2,454,100 24.77 548 • 2,432,597	x 534,845 5.44 45 532,300	x 170,528 1.73 1 —	198,189 2.02 9 91,000	727,553 7.40 86 715,107	<u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P. Pourcentage du total pour le Canada Roues hydrauliques et turbines Nomb. Capacité totale H.P. Machines à vapeur, à mouvement alternatif Nomb. Capacité totale H.P. Turbines à vapeur Nomb. Capacité totale H.P. Moteurs à gaz et à pétrole Nomb. Capacité totale H.P.
5 120 — — 12 1,383	1 20 — 144,510 24 2,523	1 750 26 95,190 265 25,268	10 3,358 15 7,540 137 8,641	4 169 5 7,540 48 4,737	
1,955,055 23.95 560 1,955,295	429,480 5.26 70 429,480	143,152 1.75 147 141,533	165,854 2.05 108 163,886	593,230 7.27 135 593,017	<u>CAPACITE DES DYNAMOS</u> Kv.A. Pourcentage du total pour le Canada Dynamics, C.A. Nomb. Capacité totale Kv.A. Dynamics, C.D. Nomb. Capacité totale Kw.
2 1,760	— —	140 1,819	61 1,968	10 213	
482,265 7.65 141 481,862	554,841 5.65 25 553,300	59,809 0.95 — —	105,181 1.67 9 91,000	704,731 11.18 68 696,158	<u>USINES COMMERCIALES</u> <u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P. Pourcentage du total pour le Canada Turbines et roues hydrauliques Nomb. Capacité totale H.P. Machines à vapeur, à mouvement alternatif Nomb. Capacité totale H.P. Turbines à vapeur Nomb. Capacité totale H.P. Moteurs à gaz et à pétrole Nomb. Capacité totale H.P.
408,685 7.61 145 406,925	279,111 5.55 41 279,111	48,869 0.95 83 47,551	83,222 1.59 85 82,439	575,739 11.00 86 575,567	<u>CAPACITE DES DYNAMOS</u> Kv.A. Pourcentage du total pour le Canada Dynamics, C.A. Nomb. Capacité totale Kv.A. Dynamics, C.D. Nomb. Capacité totale Kw.
2 1,760	— —	116 1,518	57 785	8 172	
1,951,635 55.40 207 1,950,735	180,002 5.11 22 179,000	110,519 5.14 — —	95,008 2.64 — —	22,622 0.64 18 18,949	<u>USINES MUNICIPALES</u> <u>TOTAL, FORCE MOTRICE PRIMAIRE</u> H.P. Pourcentage du total pour le Canada Turbines et roues hydrauliques Nomb. Capacité totale H.P. Machines à vapeur, à mouvement alternatif Nomb. Capacité totale H.P. Turbines à vapeur Nomb. Capacité totale H.P. Moteurs à gaz et à pétrole Nomb. Capacité totale H.P.
1,546,370 52.79 215 1,546,370	150,369 5.15 29 150,369	94,283 5.22 64 93,782	82,632 2.82 23 81,447	17,491 0.60 49 17,450	<u>CAPACITE DES DYNAMOS</u> Kv.A. Pourcentage du total pour le Canada Dynamics, C.A. Nomb. Capacité totale Kv.A. Dynamics, C.D. Nomb. Capacité totale Kw.
— —	— —	24 501	4 1,185	2 41	
1,953,868 25.11 546 1,952,118	427,600 5.49 45 427,800	— — — —	71,500 .92 9 71,500	582,086 7.48 85 582,016	<u>USINES HYDRAULIQUES</u> <u>CAPACITE TOTALE DES DYNAMOS</u> Kv.A. Pourcentage du total pour le Canada Dynamics, C.A. Nomb. Capacité totale Kv.A. Dynamics, C.D. Nomb. Capacité totale Kw.
1 1,750	— —	— —	— —	2 70	
1,187 0.51 14 1,177	1,680 0.50 25 1,880	143,152 37.61 147 141,533	94,554 24.79 99 92,586	11,144 2.93 50 11,001	<u>USINES A COMBUSTIBLE</u> <u>CAPACITE TOTALE DES DYNAMOS</u> Kv.A. Pourcentage du total pour le Canada Dynamics, C.A. Nomb. Capacité totale Kv.A. Dynamics, C.D. Nomb. Capacité totale Kw.
1 10	— —	140 1,819	61 1,968	8 145	

x = Rendement maximum d'une usine hydraulique de la Saskatchewan inclus dans le Manitoba.

TABLE 12 - ELECTRIC ENERGY GENERATED, 1946

	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
<u>ALL STATIONS</u>					
Total Kilowatt hours generated(thousands)	41,736,987	16,702	590,492	592,923	25,597,321
Per cent of total for Canada	100.00	0.04	1.42	1.42	56.54
Kilowatt hours generated by non-generating stations ..(Thousands)	1,035	-	-	-	-
<u>Kilowatt hours generated by generating stations(thousands)</u>	<u>41,735,952</u>	<u>16,702</u>	<u>590,492</u>	<u>592,923</u>	<u>25,597,321</u>
K.v.A. capacity of generating stations	6,289,862	6,993	170,571	128,662	4,593,991
Ratio of output to maximum capacity p.c.	57.48	27.26	59.52	52.60	58.64
Average kilowatt hours per Kv.A.	5,035	2,588	3,462	4,808	5,157
<u>GENERATING STATIONS</u>					
<u>COMMERCIAL STATIONS</u>					
<u>TOTAL</u>					
Kilowatt hour generated(thousands)	26,996,711	15,209	342,413	457,876	18,957,865
Kv.A. capacity	5,297,405	5,507	96,701	94,051	3,644,958
Ratio of output to maximum capacity p.c.	58.17	27.39	40.42	55.58	59.57
Average kilowatt hours per Kv.A.	5,096	2,399	3,541	4,869	5,201
<u>Hydraulic Stations</u>					
Kilowatt hour generated(thousands)	26,562,215	513	101,200	421,424	18,957,160
Kv.A. capacity	5,152,749	586	19,758	81,975	3,644,666
Ratio of output to maximum capacity p.c.	59.08	15.17	58.55	58.69	59.57
Average kilowatt hours per Kv.A.	5,175	1,529	5,127	5,141	5,201
<u>Fuel Stations</u>					
Kilowatt hours generated(thousands)	454,496	12,696	241,213	56,452	705
Kv.A. capacity	164,656	5,121	76,965	12,056	272
Ratio of output to maximum capacity p.c.	50.15	28.30	55.76	54.52	29.59
Average kilowatt hours per Kv.A.	2,659	2,479	3,154	3,024	2,592
<u>MUNICIPAL STATIONS</u>					
<u>TOTAL</u>					
Kilowatt hours generated(thousands)	14,739,241	3,495	248,079	155,047	4,659,456
Kv.A. capacity	2,992,457	1,486	73,870	34,651	949,053
Ratio of output to maximum capacity p.c.	56.22	26.84	58.55	44.52	55.81
Average kilowatt hours per Kv.A.	4,925	2,551	5,558	3,900	4,899
<u>Hydraulic Stations</u>					
Kilowatt hours generated(thousands)	14,229,949	-	259,742	23,569	4,655,188
Kv.A. capacity	2,776,520	-	67,507	10,265	946,806
Ratio of output to maximum capacity	58.50	-	40.54	25.99	57.00
Average kilowatt hours per Kv.A.	5,125	-	5,551	2,277	4,995
<u>Fuel Stations</u>					
Kilowatt hours generated(thousands)	509,292	3,495	8,557	111,678	6,268
Kv.A. capacity	215,937	1,486	6,363	24,568	2,247
Ratio of output to maximum capacity p.c.	26.95	26.84	14.95	52.52	51.84
Average kilowatt hours per Kv.A.	2,559	2,551	1,510	4,585	2,789
<u>TOTAL HYDRAULIC STATIONS</u>					
Kilowatt hours generated(thousands)	40,792,164	513	340,942	444,795	25,590,348
Kv.A. capacity	7,909,269	586	87,245	92,258	4,591,472
Ratio of output to maximum capacity p.c.	58.88	15.17	44.61	55.05	58.65
Average kilowatt hours per Kv.A.	5,158	1,529	3,908	4,822	5,158
Kilowatt hours generated by water power(thousands)	40,692,595	513	340,941	444,795	25,589,565
Kilowatt hours generated by auxiliary plants(thousands)	99,769	-	1	-	785
<u>TOTAL FUEL STATIONS</u>					
Kilowatt hours generated(thousands)	943,788	16,189	249,550	148,150	6,973
Kv.A. capacity	380,585	6,607	85,326	56,424	2,519
Ratio of output to maximum capacity p.c.	28.51	27.97	34.19	46.45	51.60
Average kilowatt hours per Kv.A.	2,460	2,450	2,995	4,067	2,788
<u>CONSUMPTION OF ELECTRIC ENERGY (Thousands of Kilowatt Hours)</u>					
Total Kilowatt hours generated	41,736,987	16,702	590,492	592,923	25,597,321
Kilowatt hours imported from the United States	9,527	-	-	10	362
Kilowatt hours imported from other provinces	-	-	-	7,598	846
Kilowatt hours exported to the United States	2,481,651	-	-	38,052	2,703
Kilowatt hours exported to other provinces	-	-	-	-	5,151,591
<u>KILOWATT HOURS FOR CONSUMPTION IN CANADA</u>(thousands)					
Domestic service	39,264,885	16,702	590,492	562,299	18,444,255
Commercial light	3,881,677	6,017	82,698	51,577	596,695
Small power	1,840,496	4,755	47,006	55,175	459,550
Large power	28,158,674	1,652	524,437	414,878	15,551,654
Municipal power	678,560	250	2,556	8,855	147,664
Street lighting	225,000	419	6,181	4,962	44,978
Free service (other than street lighting)	55,475	15	242	224	46,061
Losses	5,815,220	2,581	72,580	51,749	1,479,756

* Excludes exports to other provinces and/or to the United States.

TABLEAU 12 - ENERGIE ELECTRIQUE GENEREE, 1946

Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia & Yukon	
TOUTES USINES					
10,778,155 + 25,82 15 10,778,120	2,589,375 5,72 50 2,589,545	270,691 0,65 - 270,691	802,048 1,44 - 602,048	2,899,500 6,95 990 2,898,510	Total kw. heure générés (milliers) Pourcentage du total pour le Canada Kilowatt-heure générés par les usines non-génératrices (milliers) Kilowatt-heure générés par les usines génératrices (milliers)
1,986,055 61,95 5,427	445,250 61,54 5,391	143,152 21,59 1,891	182,516 57,66 3,299	634,692 52,12 4,566	Capacité des usines génératrices en Kv.A. Proportion de la production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
USINES GENERATRICES					
USINES COMMERCIALES					
TOTAL					
2,204,935 414,685 60,70 5,317	1,670,607 279,111 68,32 5,985	91,404 48,869 21,55 1,870	407,170 99,884 46,55 4,076	2,851,254 615,679 53,04 4,606	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de la production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
Usines Hydrauliques					
2,204,585 414,345 60,74 5,321	1,669,049 278,100 68,52 6,002	- -	582,125 88,162 49,47 4,354	2,826,161 605,377 53,29 4,666	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
Usines à combustible					
548 340 11,69 1,024	1,558 1,011 17,59 1,541	91,404 48,869 21,55 1,870	25,047 11,722 24,59 2,157	25,075 8,502 34,47 3,020	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
USINES MUNICIPALES					
TOTAL					
8,573,187 1,571,570 62,28 5,456	718,758 164,119 49,99 4,379	179,287 94,285 21,71 1,902	194,878 82,632 26,92 2,358	47,076 21,013 25,57 2,240	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de la production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
Usines Hydrauliques					
8,571,625 1,570,523 62,51 5,458	717,321 163,250 50,16 4,394	- - - -	- - - -	44,706 18,171 28,08 2,460	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
Usines à combustible					
1,564 847 21,08 1,847	1,417 869 18,62 1,631	179,287 94,285 21,71 1,902	194,878 82,632 26,92 2,358	2,570 2,842 9,52 854	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de la production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
TOUTES USINES HYDRAULIQUES					
10,776,206 1,984,866 61,97	2,586,570 441,350 61,72	- - 49,47	582,125 88,162 49,47	2,870,867 625,548 52,56	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de la production à la capacité maximum p.c.
5,429 10,771,742 4,466	5,407 2,586,558 52	- - -	- 557,057 25,066	4,554 4,604 69,419	Moyenne de kilowatt-heure par Kv.A. Kilowatt-heure générés par force motrice hydraulique (milliers) Kilowatt-heure générés par les usines auxiliaires (milliers)
TOUTES USINES A COMBUSTIBLE					
1,912 1,187 16,59 1,611	2,975 1,880 18,06 1,582	270,691 143,152 21,59 1,891	219,925 94,554 26,61 2,551	27,445 11,144 28,12 2,465	Kilowatt-heure générés (milliers) Capacité en Kv.A. Proportion de la production à la capacité maximum p.c. Moyenne de kilowatt-heure par Kv.A.
CONSOMMATION D'ENERGIE ELECTRIQUE (En Milliers de Kw.H.)					
10,778,155	2,589,375 524	270,691 50	802,048 130	2,899,500 8,651	Total de kilowatt-heure générés Kilowatt-heure importés des Etats-Unis
5,144,195 2,458,705 846	- 1,614 -	- -	7,164 -	- 577 7,164	Kilowatt-heure importés d'autres provinces
15,482,777 2,289,006 868,576 243,562	2,587,865 457,464 127,005 67,806	270,741 68,550 56,375 54,651	802,178 75,756 10,941 37,859	2,907,574 274,158 174,645 58,934	Kilowatt-heure exportés aux Etats-Unis
8,156,410 562,872 100,703 1,500,857	1,516,745 116,034 22,015 280,596	56,894 20,905 8,651 25,655	516,450 16,847 10,941 75,102	2,039,556 2,599 24,170 348,584	Kilowatt-heure exportés à d'autres provinces
KILOWATT-HEURE CONSOMMÉS AU CANADA					
					(milliers)
					Service domestique
					Eclairage commercial
					Petite force motrice
					Grosse force motrice
					Energie (municipale)
					Eclairage des rues
					Service gratuit (autre que l'éclairage des rues)
					Perdées

* Exclus les exportations par d'autres provinces et/ou aux Etats-Unis.

TABLE 13 - FUEL, 1946

	Bituminous Coal			
	Charbon Bitumineux			
	Canadian - Canadien		Imported - Importé	
	Quantity Quantité	Value Valeur	Quantity Quantité	Value Valeur
	Tons Tonnes	\$	Tons Tonnes	\$
CANADA	559,606	2,843,449	5,124	46,626
Prince Edward Island	15,985	150,052	-	-
Nova Scotia	208,598	1,188,294	-	-
New Brunswick	123,532	789,583	-	-
Quebec	324	2,946	388	4,505
Ontario	295	2,429	4,736	42,121
Manitoba	-	-	-	-
Saskatchewan	125,767	494,146	-	-
Alberta	70,561	138,176	-	-
British Columbia and Yukon ..	14,544	77,823	-	-
Fuel Oil and Diesel Oil				
Mazout et huile diesel				
	Wood		Bois	
	Quantity Quantité	Value Valeur	Quantity Quantité	Value Valeur
	Gal. Gal.	\$	Cords Cordes	\$
CANADA	26,238,166	1,786,098	300	1,700
Prince Edward Island	788,293	62,597	-	-
Nova Scotia	205,851	20,521	-	-
New Brunswick	190,838	19,247	-	-
Quebec	534,487	55,763	250	1,250
Ontario	256,581	30,690	-	-
Manitoba	284,544	35,172	50	450
Saskatchewan	14,904,811	791,882	-	-
Alberta	802,519	112,648	-	-
British Columbia and Yukon ..	8,270,262	657,578	-	-

Note: Tons = 2,000 lbs.
Gallons = Imperial
Cords = 128 cu. ft.

TABLEAU 13 - COMBUSTIBLE, 1946

Lignite Coal Charbon Lignite		Gasoline Gasoline		Kerosene Kérosène	
Quantity Quantité	Value Valeur	Quantity Quantité	Value Valeur	Quantity Quantité	Value Valeur
Tons Tonnes	\$	Gal. Gal.	\$	Gal. Gal.	\$
218,062	510,007	76,274	17,068	3,605	818
-	-	20,043	5,107	-	-
-	-	11,200	1,316	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	3,980	736	-	-
-	-	165	58	-	-
49,244	75,749	23,285	5,514	-	-
168,818	434,258	12,432	2,801	3,595	810
-	-	5,169	1,536	10	8
Manufactured Gas Gaz fabriqué		Natural Gas Gaz naturel		Other Fuel Autre combustible	Total
Quantity Quantité	Value Valeur	Quantity Quantité	Value Valeur	Value Valeur	Value Valeur
1,000 cu. ft. 1,000 pds.cu.	\$	1,000 cu. ft. 1,000 pds.cu.	\$	\$	\$
10,124,003	186,650	-	-	70,168	5,585,206
-	-	-	-	-	217,756
10,124,003	186,650	-	-	6,792	1,403,553
-	-	-	-	-	808,830
-	-	-	-	-	64,464
-	-	-	-	-	75,976
-	-	-	-	29,725	65,405
-	-	-	-	490	1,367,781
-	-	-	-	-	811,355
-	-	-	-	33,161	770,106

Note: Tonne = 2,000 livres.
 Gallon = Impérial
 Corde = 128 pds. cu.

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