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TRANSPORTATION & PUBLIC UTILITIES BRANCH

CENSUS OF INDUSTRY, 1939

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# CENTRAL ELECTRIC STATIONS IN CANADA

(Prepared in collaboration with the Dominion Water Power and Hydrometric Bureau, Department of the Interior)

Published by Authority of the HON. W.D. EULER, M.P., Minister of Trade and Commerce.

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Minister of Trade and Commerce. 1939

# DOMINION BUREAU OF STATISTICS
## TRANSPORTATION AND PUBLIC UTILITIES BRANCH
## OTTAWA

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## CENTRAL ELECTRIC STATION INDUSTRY, 1939.

For the purpose of the 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 25 stations which were holding generating equipment classed as auxiliary plant equipment. Seventeen of them purchased all their electric energy and the remaining eight generated only 5,228,000 kilowatt hours. This explains the rather anomalous item in table 14 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 outputs of the twelve calendar months shown in the monthly reports. The various data, however, in the annual reports are for comparable periods.

The output of central electric stations rose fairly continuously each year up to May 1930 when the index number of monthly output adjusted for seasonal variations reached a peak of 156. Due to general industrial conditions the output began to decline and the index number dropped to 122 for July 1932. It began to rise again more or less continuously to 240 for June 1937 when another slump set in which lasted about a year and the index dropped to 210 for June 1938. From this point on it rose fairly steadily, overcoming the loss in about a year and reaching a new peak in July 1940 of 279.

The total output for 1939 was 28,338,030,000 kilowatt hours which, however, was only 49.8 per cent of the rated capacity of the equipment. Of course a ratio of 100 per cent is not possible with varying loads and with some stations having more capacity than can be used continuously with the water available. The output was 2,183,870,000 kilowatt hours or 8.4 per cent greater than for 1938.

The production of secondary power amounted to 6,590,378,000 kilowatt hours which was 23 per cent of the total output and 839,028,000 kilowatt hours or 15 per cent more than the secondary power output for 1938. This increase was largely due to the pulp and paper mills which showed an increase in purchased power for electric boilers of 602,130,000 kilowatt hours, and 392,592,000 kilowatt hours for power and lighting. This industry is the largest consumer of electric power, taking about a third of the total output of central electric stations. The consumption of electric energy for domestic service continued to grow, increasing by 6.4 per cent over 1938; commercial light was heavier by 7.4 per cent, small power (50 kw. and less) by 3.5 per cent and street lighting by 3.7 per cent.

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 fiscal year ended March 31, 1940, the export duty amounted to $443,783 as against $449,987 for the previous year. The rate is three one-hundredths of one cent per kilowatt hour on electric energy exported with certain exports excepted. Below is a table showing the quantities of power produced for export for the calendar year 1939, also the amounts exported, the differences between the two quantities being the line losses. The data for this table were compiled from the annual reports of the Director of the Electricity and Gas Inspection Services.

KILOWATT HOURS PRODUCED FOR EXPORT AND EXPORTED TO THE UNITED STATES

(Calendar Year 1939)

| Company | Produced for Export | Exported |
|---|---|---|
| | Kw.h. | Kw.h. |
| Hydro Electric Power Commission of Ontario ..... | 394,371,700 | 389,926,100 |
| " " " " " " (surplus)-Niagara.. | 451,028,000 | 444,101,487 |
| " " " " " " " -Cornwall | ≠ 1,085,680 | 1,006,122 |
| Cedar Rapids Manufacturing and Power Co., Ltd. ..... | 623,741,485 | 596,526,022 |
| Canadian Niagara Power Co., Ltd. ..... | 441,630,100 | 383,205,902 |
| " " " " " (surplus) ..... | 42,827,700 | 42,827,700 |
| Ontario and Minnesota Power Co., Ltd. ..... | 28,774,200 | 28,774,200 |
| Maine and New Brunswick Electric Power Co. ..... | 20,332,215 | 19,516,633 |
| British Columbia Electric Railway Co., Ltd. ..... | 228,662 | 198,936 |
| Northport Power and Light Co. ..... | 284,398 | 284,398 |
| Southern Canada Power Company ..... | 451,190 | 451,190 |
| Canadian Cottons, Ltd. ..... | 760,369 | 760,369 |
| Northern British Columbia Power Co. ..... | 28,750 | 28,750 |
| Fraser Companies, Ltd. ..... | 3,866,000 | 3,866,000 |
| Detroit and Windsor Subway Company ..... | 274,900 | 274,900 |
| Manitoba Power Commission ..... | 874,284 | 874,284 |
| TOTAL ..... | 2,010,559,633 | 1,912,622,993 |
| Kilowatt hours produced for export and exported by central electric stations only ..... | 2,006,693,633 | 1,908,756,993 |

≠ One month only

Of the total output of 28,338,030,000 kilowatt hours, 27,829,017,000 kilowatt hours, or over 98 per cent, were produced by water power, whereas only 496,111,000 kilowatt hours were produced by plants using only thermal engines and 12,902,000 kilowatt hours were produced by auxiliary equipment in hydraulic and non-generating stations.

The total hydraulic installation in all industries in Canada in 1939 including active and inactive plants, as compiled by the Dominion Water and Power Bureau was 8,289,212 horse-power which was about 19 per cent of the total that the recorded falls would warrant installing under present day practices. The available and developed water power in Canada is shown in the following table:

POTENTIAL AND DEVELOPED WATER POWER IN CANADA

| Province (1) | Available 24 hour Power at 80% Efficiency | | Turbine Installation December 31 | |
|---|---|---|---|---|
| | At Ordinary Minimum Flow (2) | At Ordinary Six Months Flow (3) | 1 9 3 9 (4) | 1 9 4 0 (5) |
| | 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 | 131,717 | 139,217 |
| New Brunswick ..... | 68,600 | 169,100 | 133,347 | 133,347 |
| Quebec ..... | 8,459,000 | 13,064,000 | 4,084,763 | 4,320,943 |
| Ontario ..... | 5,330,000 | 6,940,000 | 2,596,799 | 2,597,595 |
| Manitoba ..... | 3,309,000 | 5,344,500 | 420,925 | 420,925 |
| Saskatchewan ..... | 542,000 | 1,082,000 | 90,835 | 90,835 |
| Alberta ..... | 390,000 | 1,049,500 | 71,997 | 71,997 |
| British Columbia ... | 1,931,000 | 5,103,500 | 738,013 | 788,763 |
| Yukon & Northwest Territories ..... | 294,000 | 731,000 | 18,199 | 18,199 |
| CANADA | 20,347,400 | 33,617,200 | 8,289,212 | 8,584,438 |

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 43,700,000 horse-power.

The following table shows the provincial production plus imports less exports, the net amount being the consumption within each province including all line losses; the deliveries to electric boilers in each province are shown here segregated from other uses. The consumption of electric energy is further analyzed in table 14.

CONSUMPTION OF ELECTRIC ENERGY IN CANADA (INCLUDING LINE LOSSES)

(Thousands of Kilowatt Hours)

| Province | Secondary Power Delivered to Electric Boilers 1939 | Other Uses and Line Losses 1939 | Total 1939 | Total ≠1938 | Changes 1939 vs. 1938 Kw.h. | | Changes 1939 vs. 1938 p.c. |
|---|---|---|---|---|---|---|---|
| P.E. Island ..... | ... | 7,747 | 7,747 | 7,038 | + | 709 | 10.07 |
| Nova Scotia ..... | ... | 436,269 | 436,269 | 404,828 | + | 31,441 | 7.77 |
| New Brunswick ... | 49,167 | 396,172 | 445,339 | 453,408 | - | 8,069 | 1.78 |
| Quebec ..... | 4,774,593 | 7,115,854 | 11,890,447 | 10,961,870 | + | 928,577 | 8.47 |
| Ontario ..... | 1,295,671 | 8,162,459 | 9,458,130 | 8,475,038 | + | 983,092 | 11.60 |
| Manitoba ..... | 467,834 | 1,306,816 | 1,774,650 | 1,686,271 | + | 88,379 | 5.24 |
| Saskatchewan .... | ... | 167,275 | 167,275 | 153,500 | + | 13,775 | 8.97 |
| Alberta ..... | ... | 254,247 | 254,247 | 234,940 | + | 19,307 | 8.22 |
| British Columbia and Yukon ..... | 3,113 | 1,992,723 | 1,995,836 | 1,955,788 | + | 40,048 | 2.05 |
| CANADA ..... | 6,590,378 | 19,839,562 | 26,429,940 | 24,332,681 | + | 2,097,259 | 8.62 |

≠ Revised

TABLE 1 - COMPARATIVE SUMMARY, 1930-1939

During the year the number of hydro-electric plants remained unchanged and the number of fuel plants, or plants using thermal engines exclusively, was increased by 22. The capital has been increasing steadily, 1939 being 38 per cent above 1930 and 1.2 per cent, or $19,186,619 above 1938. During 1939 revenue increased by $7,549,342 or 5.2 per cent, and expenses (wages, power purchased, fuel, and taxes) by $4,618,032. Pole line mileage was extended 5,155 miles and the number of customers was larger by 68,042. Since 1930, 306,348 domestic customers have been added to the lines and the production of electricity has increased 57 per cent. The generator capacity of the industry has increased 44 per cent since 1930 and at the close of 1939 amounted to 6,435,416 kilovolt amperes.

TABLE 2 - DOMESTIC SERVICE, 1930-1939

This table shows the number of customers, the consumption, revenue, and averages computed from these for domestic service including farm service for 1939 back to 1930 which is as far back as all the data are available. In all provinces the number of customers increased between 1930 and 1939, the percentages ranging from 9 per cent in Saskatchewan to 45 per cent in Nova Scotia. The total consumption also increased in all provinces, Prince Edward Island leading here also with an increase of 148.6 per cent. All of the provinces showed increased revenues from domestic service. The average annual consumption per customer varied widely, Manitoba leading with an average in 1939 of 3,956 kilowatt hours per customer and Prince Edward Island showing the smallest consumption at 574 kilowatt hours. There have been relatively small changes in the average annual bills in each province even where the consumptions have shown fairly large increases and the bills for Nova Scotia, New Brunswick, Ontario, and British Columbia have been remarkably close together throughout these ten years despite the wide variations in unit costs. Domestic services are further discussed under Table 5 and at the end of this report.

## TABLE 3 - POWER PLANTS

The generating stations are the individual power plants of the central electric stations. Each building housing power machinery is counted as a generating station. The commercial organizations are companies and individuals selling electric energy and the municipalities include urban and rural municipalities, provincial commissions, etc., selling electric energy. Those generating power operate from one to several power plants each, the largest system being the Ontario Hydro Electric Power Commission which operates 49 hydraulic plants and owns one steam auxiliary plant. The auxiliary plants are thermal power equipment belonging to hydraulic systems or non-generating systems and are not included above as generating stations.

## TABLE 4 - CAPITAL

The capital employed in the industry is reported under three heads, viz., generation, transmission and distribution, and general. "Generation" includes investments in power houses and sites, dams, penstocks, flumes, storage and regulating structures, surge tanks, storage basins, etc., and equipment in power houses, except step-up transformers or other transmission equipment. "Transmission and distribution" includes all transmission and distribution towers, poles, wires, cables and conduits and right-of-way, receiving stations and substations and sites, switchboards and step-up transformers in these and in power houses, step-down transformers, meters, etc. "General" includes investments in office buildings, sites and fixtures, materials and supplies on hand, cash, trading and operating accounts and bills receivable. The total represents the capital employed in the industry. The capital is the total, as at December 31, or end of fiscal years, of each station operating and does not include any investments by new organizations not yet operating, but does include expenditures by organizations operating plants in which provisions have been made for future installations of equipment. The averages of total capital per unit of power are more indicative of different classes of stations and service given than costs of similar installations. The same also applies to generation capital per unit of power, only to a lesser degree.

## TABLE 5 - REVENUES

Central electric stations are required to make a division of customers, consumption and revenue under the following headings: (1) farm service, (2) domestic service, which includes lighting and all other uses in residences, (3) commercial light, (4) power, small, 50 kw. and under, (5) power, large, over 50 kw., (6) sales to distributing companies, and (7) street lighting, also the quantity of electricity supplied without charge to public buildings, 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, but even here 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 showed a smaller proportion of revenue from domestic service than

≠ See 1933 report, page 5, for effect of this omission.

any other stations although greater in dollars than those in other provinces except Ontario. In computing the average revenue per kilowatt hour for all purposes 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 cost of 1.90 cents per kilowatt hour for all domestic service compares with an average of 4.03 cents or 3.86 cents including farm services in the United States. 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 tables 12 and 13 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.

## TABLE 6 - EXPENSES

These data include only the four items, (1) salaries and wages, (2) fuel, (3) taxes, and (4) cost of power. The last is an inter-industry expense and could very well 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. Cost of power includes the cost to municipalities receiving their supply from provincial commissions as well as interchange of power between generating stations and between generating and other non-generating stations. Taxes include the Dominion sales tax on domestic service of 8 per cent effective from September 13, 1939. Because the fiscal year of some of the large systems, particularly the Ontario provincial system, ended before Dec. 31 the full effect of the four months tax is not shown in these data. This tax affected both commercial and municipal stations but other taxes were paid largely by the commercial stations except in Ontario and Alberta. In Ontario the largest item for municipal stations was for the provincial system which pays taxes on certain of its properties and in Alberta the municipalities tax their own utilities.

## TABLE 7 - EMPLOYEES

Stations in all provinces showed increases in the number of employees, the increase in the total being 919 employees. The table below analyzes the hours of labour of wage-earners in the industry. Over one-half of the employees worked a 48-hour week and four-fifths worked 48 hours or less per week.

NUMBER OF WAGE-EARNERS IN MONTH OF HIGHEST EMPLOYMENT WHOSE REGULAR HOURS PER WEEK WERE:

| Hours per Week | 40 or less | 41-43 | 44 | 45-47 | 48 | 49-50 | 51-53 | 54 | 55 | 56-59 | 60 & over | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P.E.I. | 1 | - | - | - | 37 | - | - | 4 | - | - | 4 | 46 |
| N.S. | 241 | 9 | 29 | 26 | 630 | 12 | 21 | 65 | 12 | 81 | 202 | 1,328 |
| N.B. | 31 | 2 | 30 | 1 | 98 | 1 | - | 169 | - | 21 | 38 | 391 |
| Quebec | 330 | 15 | 283 | 23 | 2,183 | 42 | 9 | 327 | 9 | 284 | 161 | 3,666 |
| Ontario | 672 | 75 | 725 | 127 | 3,219 | 253 | 52 | 234 | 29 | 129 | 205 | 5,720 |
| Manitoba | 32 | - | 63 | 20 | 718 | 121 | 3 | 6 | - | 2 | 2 | 967 |
| Sask. | 63 | 3 | 48 | 18 | 185 | - | 6 | 33 | - | 20 | 10 | 386 |
| Alberta | 94 | 1 | 83 | - | 192 | 1 | - | 1 | - | 7 | 2 | 381 |
| B.C. and Yukon | 340 | 1 | 195 | 92 | 1,081 | 12 | 15 | - | 1 | 3 | 19 | 1,759 |
| CANADA | 1,804 | 106 | 1,456 | 307 | 8,343 | 442 | 106 | 839 | 51 | 547 | 643 | 14,644 |
| Per cent of Total | 12.5 | .7 | 9.9 | 2.1 | 57.0 | 3.0 | .7 | 5.7 | .3 | 3.7 | 4.4 | 100.0 |

## TABLE 8 - CUSTOMERS

As explained under table 4, stations are asked for a division of customers into seven classes, but due to inability of many of the stations to make complete segregation between domestic service and farm customers these two have been combined. The number of farm customers reported for 1939 was 90,899 or 5.6 per cent of the combined domestic and farm customers, and they consumed 98,265,070 kilowatt hours. From the 1931 population census data we know the actual number of farms served was considerably greater than this, the difference probably being included with domestic services. Farms close to large urban centres receiving service at rates similar to urban customers still will be classed as domestic customers in many cases. In Ontario where the majority of farm customers are served by the provincial commission and are classed as farm customers the difference from the 1931 census figure was small. In 1939 the Ontario farm customers reported were 54,479 or 60 per cent of the total. Quebec stations reported 24,965 farm customers. For the other provinces 11,455 were reported, but if the 1931 data can be used as a criterion this is considerably less than the actual number of farms served. Each municipality using electricity for street lighting has been counted as one street lighting customer. In some cases the current was supplied by commercial stations and in others the municipality itself distributed it. The provinces having high percentages of urban populations had the greatest densities of domestic service customers. The average number of domestic service customers per 100 population increased from 13.9 in 1938 to 14.4 in 1939. These averages are based on the Bureau's estimated populations and each residence or family served is counted as one customer. These averages were first computed for 1920 and since then the average for Canada has increased from 8.86 to 14.4, or by 62 per cent. In Alberta the density was fairly high in 1920 and the increase between 1920 and 1939 was only 10 per cent greater than the increase in population, but in the other provinces the increase has been much greater than the increase in population. In New Brunswick the average number of domestic service customers per 100 population increased by 165 per cent, in Nova Scotia by 118 per cent, in Prince Edward Island by 84 per cent, in Quebec by 39 per cent, in Ontario by 90 per cent, in Manitoba by 27 per cent, in Saskatchewan by 56 per cent, and in British Columbia by 47 per cent. When comparing these rates of increase the densities at the

beginning of the period should be analyzed; for example, Manitoba had a density of 8.76 in 1920, or more than twice the density of New Brunswick and three times that of Prince Edward Island.

## TABLE 9 - POLE LINE MILEAGE

Transmission and distribution lines have been combined in this table instead of being separated as in reports previous to 1934 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 mileages.

## TABLES 10-11-12-13 - EQUIPMENT

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 7,674,000 kilowatt hours being generated during the year by this auxiliary equipment.

## TABLE 14 - ELECTRIC ENERGY GENERATED

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. All the large stations meter their output and for those stations which have no watt-hour meters the kilowatt hours are estimated as best possible. 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, but the ratios of output to maximum capacity were computed from the kilowatt hours generated and the rated capacities of dynamos multiplied by the number of hours during the year they were available. Thus, the maximum capacity of a 1,000 Kv.A. dynamo for a year would be 8,760,000 kilowatt hours, but, if installed on November 30, its maximum capacity would be only 744,000 kilowatt hours at unity power factor. Consequently, the ratios are directly comparable for each year irrespective of when large additions are made to the generating capacity of the industry and the rising and falling of 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. In some cases 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 has been growing quite rapidly. In 1924 this secondary power amounted to only 260,489,000 kilowatt hours, but in 1937 it had grown to 7,313,014,000 kilowatt hours and in 1938 it declined to 5,751,350,000 kilowatt hours but increased in 1939 to 6,590,378,000 kilowatt hours.

ELECTRICITY SOLD FOR USE IN ELECTRIC BOILERS

(Thousands of Kilowatt Hours)

| Month | 1936 | 1937 | 1938 | 1939 |
|---|---|---|---|---|
| January | 560,230 | 708,188 | 567,585 | 575,082 |
| February | 529,423 | 664,150 | 498,506 | 572,203 |
| March | 622,208 | 706,651 | 541,016 | 587,329 |
| April | 685,527 | 648,127 | 447,901 | 495,714 |
| May | 581,429 | 620,589 | 420,817 | 545,067 |
| June | 518,029 | 600,398 | 344,815 | 495,510 |
| July | 504,160 | 513,634 | 362,027 | 455,716 |
| August | 490,277 | 491,409 | 407,929 | 473,859 |
| September | 498,474 | 487,348 | 479,317 | 552,752 |
| October | 618,109 | 566,436 | 536,493 | 634,114 |
| November | 654,015 | 636,633 | 593,051 | 637,114 |
| December | 680,960 | 669,451 | 551,893 | 565,918 |
| TOTAL | 6,942,841 | 7,313,014 | 5,751,350 | 6,590,378 |

TABLE 15 - FUEL

Fuel used is almost entirely local coal, oil, and gas, and Saskatchewan and Nova Scotia are the only provinces using any substantial quantities of fuel to develop electric energy. Nova Scotia has several large hydro-electric developments, but Saskatchewan has only one which is on the Manitoba boundary and is included with Manitoba stations in these statistics. "Other fuel" is composed of steam purchased by a Nova Scotia station and sawdust and "hog" fuel in British Columbia.

## DOMESTIC SERVICE

Below is a table bringing together and analyzing the domestic service data for each province. The concentration of population in the cities, towns and villages having electric service would affect the number of customers, the number per 100 population, and ratios of consumption to total provincial consumptions and to the domestic consumption in Canada. The price would affect consumption, average bill, average cost per kilowatt hour, and, to a lesser degree, the number of customers. The method of charging for service would also have a marked effect on the average consumption and average cost per kilowatt hour. Flat rate charges and sliding scales which induce increased consumption, particularly the first, tend to greatly increase the kilowatt hour consumption and reduce the average cost per kilowatt hour although they may increase the connected load by only a fraction of the rate of consumption increase. The habits and customs of the people also would have an effect on the consumption. British Columbia ranked first in density of customers, Ontario was second and Quebec third. Manitoba showed by far the lowest average cost per kilowatt hour and the largest consumption per customer and per capita. These were considerably affected by the flat rate for water heaters in Winnipeg. Flat rate water heaters in Ontario also affect Ontario averages, but not to the same extent because the consumption of these heaters was a smaller percentage of the total consumption than in Manitoba.

### DOMESTIC SERVICE, 1939

| 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 Kw.Hr. | Per Capita Kw.Hr. | Per cent of total Provincial Consumption | Per cent of Dominion Dom. Service Consumption |
| P.E. Island | 5,067 | 5.33 | 32.21 | 5.61 | 574 | 31 | 37.5 | 0.1 |
| Nova Scotia | 62,034 | 11.20 | 27.56 | 4.37 | 630 | 71 | 9.0 | 1.7 |
| New Brunswick | 46,485 | 10.31 | 28.13 | 4.85 | 581 | 60 | 5.9 | 1.2 |
| Quebec | 434,825 | 13.55 | 21.08 | 2.94 | 716 | 97 | 2.0 | 13.5 |
| Ontario | 719,871 | 19.19 | 27.31 | 1.43 | 1,909 | 366 | 17.2 | 59.4 |
| Manitoba | 81,091 | 11.15 | 40.84 | 1.03 | 3,956 | 441 | 18.1 | 13.9 |
| Saskatchewan | 49,980 | 5.27 | 40.10 | 4.87 | 824 | 43 | 24.6 | 1.8 |
| Alberta | 68,267 | 8.65 | 31.42 | 5.08 | 618 | 53 | 16.8 | 1.8 |
| B.C. & Yukon | 156,052 | 20.06 | 27.73 | 2.85 | 974 | 195 | 7.6 | 6.6 |
| CANADA | 1,623,672 | 14.35 | 26.97 | 1.90 | 1,423 | 204 | 8.2 | 100.0 |

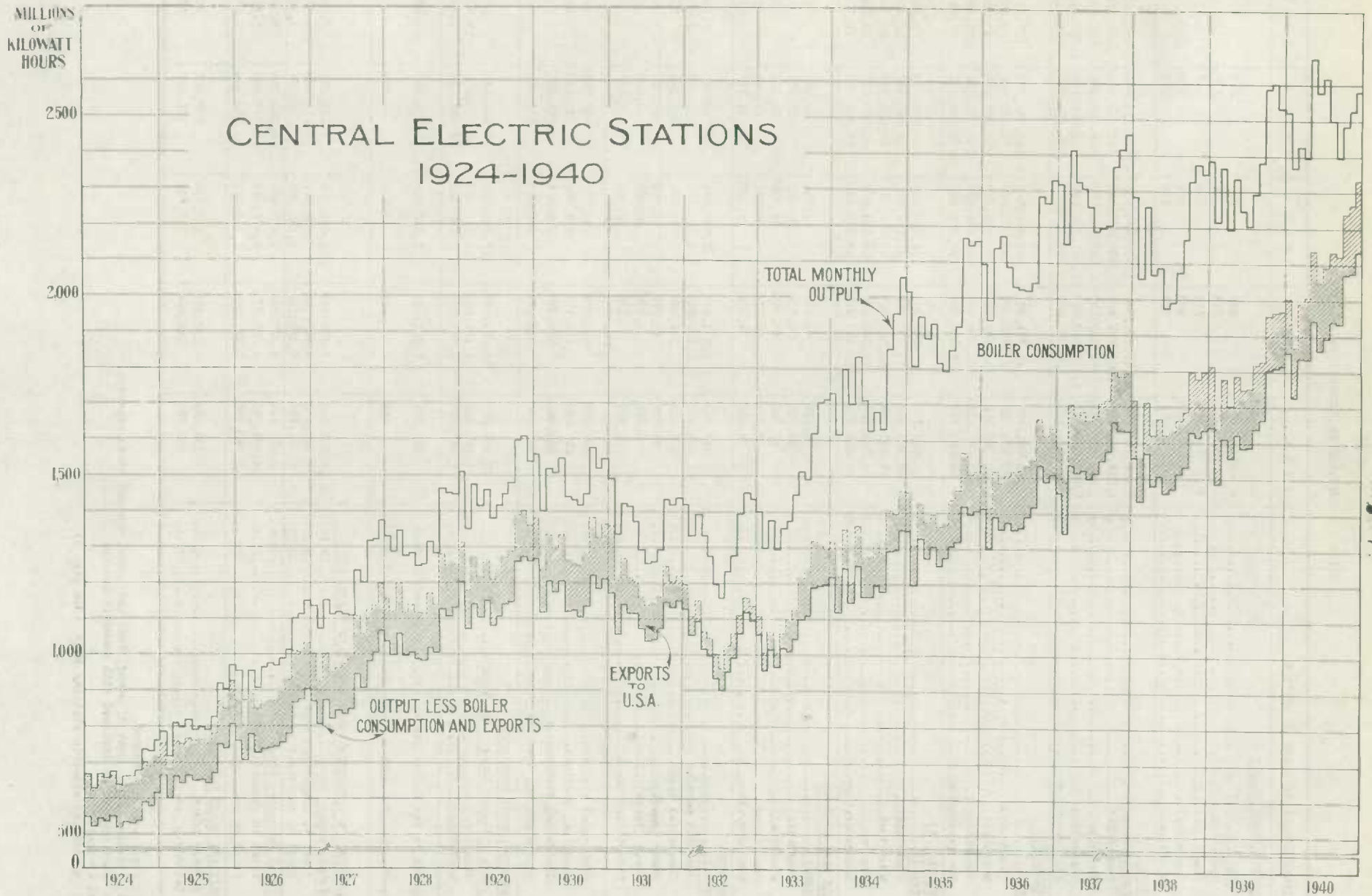
CENTRAL ELECTRIC STATIONS
1924-1940
MILLIONS OF KILOWATT HOURS
2500
2000
1500
1000
500
0
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
TOTAL MONTHLY OUTPUT
BOILER CONSUMPTION
EXPORTS TO U.S.A.
OUTPUT LESS BOILER CONSUMPTION AND EXPORTS

TABLE 1 - COMPARATIVE SUMMARY, 1929-1939.

| PRINCIPAL DATA BY CLASS OF STATION | 1939 | 1938 | 1937 | 1936 | 1935 |
|---|---|---|---|---|---|
| ELECTRIC POWER PLANTS | | | | | |
| Total | 611 | 589 | 568 | 561 | 566 |
| Hydraulic | 313 | 313 | 314 | 312 | 316 |
| Fuel | 298 | 276 | 254 | 249 | 250 |
| Commercial | 427 | 406 | 389 | 390 | 397 |
| Municipal | 184 | 183 | 179 | 171 | 169 |
| CAPITAL | | | | | |
| Total $ | 1,564,603,211 | 1,545,416,592 | 1,497,330,231 | 1,483,116,649 | 1,459,821,168 |
| Commercial $ | 1,014,704,665 | 1,002,891,485 | 979,950,159 | 957,466,865 | 962,263,142 |
| Municipal $ | 549,898,546 | 542,525,107 | 517,380,072 | 525,649,784 | 497,558,026 |
| Generating $ | 1,396,838,921 | 1,377,120,289 | 1,337,399,695 | 1,326,820,103 | 1,307,710,173 |
| Non-generating $ | 167,764,290 | 168,296,303 | 159,930,536 | 156,296,546 | 152,110,995 |
| REVENUE (1) | | | | | |
| Total $ | 151,880,969 | 144,331,627 | 143,546,643 | 135,865,173 | 127,177,954 |
| Commercial $ | 92,535,049 | 87,697,078 | 85,283,008 | 78,882,504 | 79,341,554 |
| Municipal $ | 59,345,920 | 56,634,549 | 58,263,635 | 56,982,669 | 47,836,400 |
| Generating $ | 127,483,222 | 120,784,939 | 120,465,135 | 112,776,015 | 105,638,584 |
| Non-generating $ | 24,397,747 | 23,546,688 | 23,081,508 | 23,089,158 | 21,539,370 |
| EXPENSES (2) | | | | | |
| Total $ | 91,982,372 | 87,364,340 | 84,185,082 | 77,939,050 | 79,625,134 |
| Commercial $ | 42,471,534 | 41,067,998 | 41,132,931 | 36,530,527 | 33,836,054 |
| Municipal $ | 49,510,838 | 46,296,342 | 43,052,151 | 41,408,523 | 45,789,080 |
| Generating $ | 51,570,137 | 48,946,422 | 46,114,640 | 41,390,019 | 43,904,771 |
| Non-generating $ | 40,412,235 | 38,417,918 | 38,070,442 | 36,549,031 | 35,720,363 |
| POLE LINE MILEAGE | | | | | |
| Total | 72,132 | 66,977 | 63,035 | 59,436 | 57,802 |
| Commercial | 30,288 | 29,355 | 26,332 | 27,271 | 26,520 |
| Municipal | 41,844 | 37,622 | 34,703 | 32,165 | 31,082 |
| Generating | 57,084 | 52,373 | 48,866 | 45,099 | 43,372 |
| Non-generating | 15,048 | 14,604 | 14,169 | 14,337 | 14,230 |
| CUSTOMERS | | | | | |
| Total | 1,941,663 | 1,873,621 | 1,805,995 | 1,740,793 | 1,694,703 |
| Domestic service (3) | 1,623,672 | 1,559,394 | 1,500,128 | 1,443,059 | 1,401,983 |
| Commercial light | 262,590 | 259,893 | 252,305 | 245,144 | 240,468 |
| Power (small) | 43,896 | 41,999 | 41,415 | 40,742 | 40,292 |
| Power (large) | 9,267 | 10,152 | 10,066 | 9,840 | 9,989 |
| Street lighting | 2,238 | 2,183 | 2,081 | 2,008 | 1,971 |
| Commercial stations | 889,418 | 859,506 | 833,711 | 802,676 | 779,400 |
| Municipal stations | 1,052,245 | 1,014,115 | 972,284 | 938,117 | 915,303 |
| Generating stations | 998,067 | 954,797 | 916,648 | 866,407 | 837,278 |
| Non-generating stations | 943,596 | 918,824 | 889,347 | 874,366 | 857,425 |
| ELECTRIC ENERGY GENERATED | | | | | |
| Total Kilowatt Hours (thousands) | 28,338,030 | 26,154,160 | 27,687,845 | 25,402,282 | 23,283,033 |
| Commercial | 21,290,930 | 19,488,323 | 20,315,627 | 18,515,225 | 17,757,949 |
| Municipal | 7,047,100 | 6,665,837 | 7,372,018 | 6,887,057 | 5,515,084 |
| Exports to the United States (5)...(thousands)..Kw.h. | 1,908,756 | 1,822,103 | 1,843,227 | 1,573,980 | 1,359,021 |
| Imports from the United States (5)..(thousands).Kw.h. | 666 | 624 | 1,317 | 765 | 656 |
| EQUIPMENT IN GENERATING STATIONS (MAIN PLANT ONLY) | | | | | |
| Total Primary Power H.P. | 7,607,122 | 7,476,976 | 7,342,085 | 7,119,272 | 7,104,142 |
| Total in commercial stations H.P. | 5,385,632 | 5,300,183 | 5,203,529 | 5,012,968 | 5,138,200 |
| Total in municipal stations H.P. | 2,221,490 | 2,176,793 | 2,138,556 | 2,106,304 | 1,965,942 |
| Total Secondary Power Kv.a. | 6,435,416 | 6,327,868 | 6,206,465 | 6,025,999 | 5,893,984 |
| Total in commercial stations Kv.a. | 4,654,745 | 4,586,273 | 4,496,443 | 4,340,869 | 4,317,823 |
| Total in municipal stations Kv.a. | 1,780,671 | 1,741,595 | 1,710,022 | 1,685,130 | 1,576,161 |
| AUXILIARY PLANT EQUIPMENT | | | | | |
| Primary power H.P. | 194,139 | 195,626 | 197,350 | 200,621 | 206,831 |
| Secondary power Kv.a. | 165,785 | 166,660 | 167,839 | 172,327 | 176,890 |

(1) Duplications excluded.
(2) Includes wages, cost of power, fuel and taxes, but not other expenses.
(3) Farm service is included with domestic service.
(4) Revised.
(5) By central electric stations only. (See page 2)

TABLEAU 1 - SOMMAIRE COMPARATIF, 1929-1939.

| 1934 | 1933 | 1932 | 1931 | 1930 | DONNEES PRINCIPALES PAR CLASSES D'USINES |
|---|---|---|---|---|---|
| | | | | | USINES ELECTRIQUES |
| 573 | 575 | 572 | 559 | 587 | Total |
| 314 | 314 | 312 | 307 | 311 | Hydrauliques |
| 259 | 261 | 260 | 252 | 276 | A combustible |
| 402 | 403 | 402 | 396 | 421 | Commerciales |
| 171 | 172 | 170 | 163 | 166 | Municipales |
| | | | | | CAPITAL |
| 1,430,852,166 | 1,386,532,055 | 1,335,886,987 | 1,229,988,951 | 1,138,200,016 | Total |
| 956,382,436 | 913,946,953 | 880,013,400 | 785,915,480 | 723,890,071 | Commerciales |
| 474,469,730 | 472,585,102 | 455,873,587 | 444,073,471 | 414,309,945 | Municipales |
| 1,281,048,308 | 1,240,169,785 | 1,191,499,557 | 1,092,292,089 | 995,701,285 | Génératrices |
| 149,803,863 | 146,362,270 | 144,387,420 | 137,696,862 | 142,498,731 | Non-génératrices |
| | | | | | RECETTES (1) |
| 124,463,613 | 117,532,081 | 121,212,679 | 122,310,730 | 126,038,145 | Total |
| 77,309,001 | 73,082,078 | 73,124,089 | 72,103,930 | 73,261,572 | Commerciales |
| 47,154,612 | 44,450,003 | 48,088,590 | 50,206,800 | 52,776,573 | Municipales |
| 104,089,041 | 98,735,084 | 100,821,712 | 101,475,523 | 104,632,540 | Génératrices |
| 20,374,572 | 18,796,997 | 20,390,967 | 20,835,207 | 21,405,605 | Non-génératrices |
| | | | | | DEPENSES (2) |
| 75,948,821 | 73,051,651 | 74,306,251 | 75,235,767 | 74,209,469 | Total |
| 31,778,237 | 29,169,633 | 30,349,320 | 32,418,131 | 33,712,063 | Commerciales |
| 44,170,584 | 43,882,018 | 43,956,931 | 42,817,636 | 40,497,406 | Municipales |
| 40,911,118 | 38,608,455 | 40,262,157 | 41,336,673 | 40,646,659 | Génératrices |
| 35,037,703 | 34,443,196 | 34,044,094 | 33,898,894 | 33,562,610 | Non-génératrices |
| | | | | | LIGNES SUR POTEAUX |
| 56,214 | 56,570 | 53,845 | 52,399 | 48,814 | Total |
| 26,476 | 25,129 | 25,010 | 24,299 | 23,614 | Commerciales |
| 29,738 | 31,441 | 28,835 | 28,100 | 25,200 | Municipales |
| 42,537 | 43,625 | 40,675 | 39,709 | 35,707 | Génératrices |
| 13,677 | 12,945 | 13,170 | 12,690 | 13,107 | Non-génétratrices |
| | | | | | ABONNES |
| 1,660,079 | 1,666,882 | 1,657,464 | 1,632,792 | 1,607,881 | Total |
| 1,379,153 | 1,371,806 | 1,357,462 | 1,336,721 | 1,317,324 | Service domestique (3) |
| 229,187 | 244,283 | 248,487 | 244,634 | 238,847 | Eclairage commercial |
| 41,429 | 40,641 | 28,942 | 25,913 | 24,836 | Force motrice (petite) |
| 8,325 | 8,160 | 20,593 | 23,583 | 25,150 | Force motrice (grosse) |
| 1,985 | 1,992 | 1,970 | 1,941 | (4) 1,724 | Eclairage des rues |
| 760,462 | 776,581 | 776,400 | 758,285 | 745,608 | Usines commerciales |
| 899,617 | 890,301 | 881,054 | 874,507 | 862,158 | Usines municipales |
| 819,419 | 843,324 | 846,420 | 835,460 | 814,268 | Usines génératrices |
| 840,660 | 823,558 | 811,034 | 797,332 | 793,498 | Usines non-génératrices |
| | | | | | ENERGIE ELECTRIQUE GENEREE |
| 21,197,124 | 17,338,990 | 16,052,057 | 16,330,867 | 18,093,802 | Total Kw. heures générés (milliers) |
| 16,060,883 | 13,665,974 | 12,338,216 | 12,191,139 | 12,937,014 | Commerciale |
| 5,136,241 | 3,673,016 | 3,713,841 | 4,139,707 | 5,156,788 | Municipale |
| 1,243,079 | 983,651 | 659,691 | 1,227,036 | 1,612,281 | Exportations d'électricité aux Etats-Unis (5)..... (milliers).. Kw.h. |
| 642 | 608 | 552 | 5,446 | 5,757 | Importations d'électricité des Etats-Unis (5)..... (milliers).. Kw.h. |
| | | | | | MACHINERIE DANS LES USINES GENERATRICES (Usines principales seulement) |
| 6,854,161 | 6,616,006 | 6,343,654 | 5,706,757 | 5,401,108 | Total force motrice primaire.....H.P.. |
| 4,961,639 | 4,707,096 | 4,577,493 | 4,046,810 | 3,794,819 | Total dans les usines commerciales.....H.P.. |
| 1,892,522 | 1,908,910 | 1,766,161 | 1,659,947 | 1,606,289 | Total dans les usines municipales.....H.P.. |
| 5,699,955 | 5,491,685 | 5,278,204 | 4,727,376 | 4,474,865 | Total force motrice secondaire.....Kv.a. |
| 4,179,536 | 3,956,475 | 3,850,009 | 3,388,926 | 3,181,428 | Total dans les usines commerciales.....Kv.a. |
| 1,520,419 | 1,535,210 | 1,428,195 | 1,338,450 | 1,293,437 | Total dans les usines municipales.....Kv.a. |
| | | | | | OUTILLAGE D'USINES AUXILIAIRES |
| 207,431 | 193,569 | 184,879 | 184,043 | 171,453 | Force motrice primaire.....H.P.. |
| 177,244 | 164,732 | 157,077 | 157,221 | 145,678 | Force motrice secondaire.....Kv.a. |

(1) Duplications exclues.
(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) Revisé.
(5) Par usines centrales électriques seulement. (Voir page 2).

TABLE 2 ≠ DOMESTIC SERVICE, 1930 - 1939.

| Year / Annee | Number of Customers / Nombre d'usagers | Kilowatt Hours Consumed / Kilowatt heures consommés | 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 ..... 1930 | 1,317,324 | 1,489,575 | 34,114,680 | 1,131 | 25.90 | 2.29 |
| 1931 | 1,336,721 | 1,563,705 | 35,259,391 | 1,170 | 26.38 | 2.25 |
| 1932 | 1,357,462 | 1,639,498 | 36,422,073 | 1,208 | 26.83 | 2.22 |
| 1933 | 1,371,806 | 1,650,395 | 35,953,823 | 1,203 | 26.21 | 2.18 |
| 1934 | 1,379,153 | 1,717,090 | 36,507,822 | 1,245 | 26.47 | 2.13 |
| 1935 | 1,401,983 | 1,769,848 | 36,773,643 | 1,262 | 26.23 | 2.08 |
| 1936 | 1,443,059 | 1,887,116 | 38,399,102 | 1,308 | 26.61 | 2.03 |
| 1937 | 1,500,128 | 2,007,433 | 39,253,133 | 1,338 | 26.17 | 1.96 |
| 1938 | 1,559,394 | 2,172,500 | 41,302,107 | 1,393 | 26.49 | 1.90 |
| 1939 | 1,623,672 | 2,310,691 | 43,793,482 | 1,423 | 26.97 | 1.90 |
| Change (Changement) 1930-1939 | | | | | | |
| Amount (Volume) | 306,348 | 821,316 | 9,678,802 | + 292 | + 1.07 | - 0.39 |
| Per cent (p.c.) | 23.26 | 55.14 | 28.37 | + 25.82 | + 4.13 | - 17.03 |
| PRINCE EDWARD ISLAND .. 1930 | 3,785 | 1,170 | 112,566 | 309 | 29.74 | 9.62 |
| 1931 | 3,980 | 1,343 | 120,606 | 337 | 30.30 | 8.98 |
| 1932 | 3,978 | 1,498 | 129,835 | 377 | 32.63 | 8.67 |
| 1933 | 3,970 | 1,584 | 135,231 | 399 | 34.06 | 8.54 |
| 1934 | 4,097 | 1,605 | 133,843 | 392 | 32.67 | 8.34 |
| 1935 | 4,199 | 1,722 | 134,740 | 410 | 32.08 | 7.82 |
| 1936 | 4,379 | 2,035 | 145,442 | 465 | 33.21 | 7.15 |
| 1937 | 4,545 | 2,232 | 152,660 | 491 | 33.59 | 6.84 |
| 1938 | 4,799 | 2,579 | 150,994 | 537 | 31.46 | 5.85 |
| 1939 | 5,067 | 2,908 | 163,226 | 574 | 32.21 | 5.61 |
| Change (Changement) 1930-1939 | | | | | | |
| Amount (Volume) | 1,282 | 1,738 | 50,660 | + 265 | + 2.47 | - 4.01 |
| Per cent (p.c.) | 33.87 | 148.55 | 45.00 | + 85.8 | + 8.3 | - 41.7 |
| NOVA SCOTIA..... 1930 | 42,703 | 15,924 | 1,097,500 | 373 | 25.70 | 6.89 |
| 1931 | 45,252 | 19,120 | 1,151,609 | 423 | 25.45 | 6.02 |
| 1932 | 46,421 | 21,213 | 1,201,279 | 457 | 25.88 | 5.66 |
| 1933 | 47,124 | 21,800 | 1,199,951 | 463 | 25.46 | 5.50 |
| 1934 | 48,852 | 23,637 | 1,257,599 | 484 | 25.74 | 5.32 |
| 1935 | 52,300 | 25,937 | 1,330,632 | 496 | 25.44 | 5.13 |
| 1936 | 54,763 | 29,212 | 1,457,054 | 533 | 26.61 | 4.99 |
| 1937 | 58,165 | 31,692 | 1,535,298 | 545 | 26.40 | 4.84 |
| 1938 | 58,556 | 35,307 | 1,595,086 | 603 | 27.24 | 4.52 |
| 1939 | 62,034 | 39,084 | 1,709,507 | 630 | 27.56 | 4.37 |
| Change (Changement) 1930-1939 | | | | | | |
| Amount (Volume) | 19,331 | 23,160 | 612,007 | + 257 | + 1.86 | - 2.52 |
| Per cent (p.c.) | 45.27 | 145.44 | 55.76 | + 68.9 | + 7.2 | - 36.6 |
| NEW BRUNSWICK..... 1930 | 32,426 | 15,734 | 839,395 | 485 | 25.89 | 5.33 |
| 1931 | 33,964 | 17,676 | 901,325 | 520 | 26.54 | 5.10 |
| 1932 | 35,543 | 19,230 | 971,597 | 541 | 27.34 | 5.05 |
| 1933 | 34,959 | 18,740 | 954,423 | 536 | 27.30 | 5.09 |
| 1934 | 35,364 | 19,607 | 962,212 | 554 | 27.21 | 4.91 |
| 1935 | 36,602 | 20,597 | 994,895 | 563 | 27.18 | 4.83 |
| 1936 | 38,660 | 22,049 | 1,068,038 | 570 | 27.63 | 4.84 |
| 1937 | 41,604 | 23,488 | 1,117,953 | 565 | 26.87 | 4.76 |
| 1938 | 43,556 | 25,367 | 1,232,937 | 582 | 28.31 | 4.86 |
| 1939 | 46,485 | 26,989 | 1,307,772 | 581 | 28.13 | 4.85 |
| Change (Changement) 1930-1939 | | | | | | |
| Amount (Volume) | 14,059 | 11,255 | 468,377 | + 96 | + 2.24 | - .48 |
| Per cent (p.c.) | 43.36 | 71.53 | 55.80 | + 19.8 | + 8.7 | - 9.0 |
| QUEBEC..... 1930 | 374,725 | 205,457 | 8,082,058 | 548 | 21.57 | 3.93 |
| 1931 | 375,764 | 223,671 | 8,100,380 | 595 | 21.56 | 3.62 |
| 1932 | 385,211 | 239,032 | 8,210,401 | 621 | 21.31 | 3.43 |
| 1933 | 385,175 | 240,110 | 7,795,948 | 623 | 20.24 | 3.25 |
| 1934 | 378,705 | 237,322 | 7,776,391 | 627 | 20.53 | 3.28 |
| 1935 | 378,388 | 226,285 | 7,297,458 | 598 | 19.29 | 3.22 |
| 1936 | 390,711 | 241,799 | 7,723,973 | 619 | 19.77 | 3.19 |
| 1937 | 407,155 | 265,405 | 8,108,946 | 652 | 19.92 | 3.06 |
| 1938 | 421,178 | 287,107 | 8,669,034 | 882 | 20.58 | 3.02 |
| 1939 | 434,825 | 311,420 | 9,167,384 | 716 | 21.08 | 2.94 |
| Change (Changement) 1930-1939 | | | | | | |
| Amount (Volume) | 60,100 | 105,963 | 1,085,326 | + 168 | - .49 | - .99 |
| Per cent (p.c.) | 16.04 | 51.57 | 13.43 | + 30.7 | - 2.27 | - 25.2 |

≠ Revenues, average annual bill and revenue per kilowatt hour include a Dominion tax of 8 p.c., from September 13, 1939.

TABLEAU 2 - ¢ SERVICE DOMESTIQUE, 1930 - 1939.

| | Year / Année | Number of Customers / Nombre d'usagers | Kilowatt Hours Consumed / Kilowatt heures consommés (000) | Revenue / Recettes $ | Kw. Hours per Customer / Consommation moyenne annuelle par usager kw. hrs. | Average Annual Bill / Compte moyen de l'année $ | Revenue per Kilowatt Hour / Moyenne par kilowatt heure ¢ |
|---|---|---|---|---|---|---|---|
| ONTARIO ..... | 1930 | 563,152 | 840,992 | 14,733,013 | 1,493 | 26.16 | 1.75 |
| | 1931 | 579,721 | 868,072 | 15,448,069 | 1,497 | 28.65 | 1.78 |
| | 1932 | 585,343 | 912,169 | 16,170,224 | 1,558 | 27.63 | 1.77 |
| | 1933 | 598,347 | 917,649 | 16,262,707 | 1,534 | 27.18 | 1.77 |
| | 1934 | 605,885 | 980,978 | 16,811,849 | 1,619 | 27.75 | 1.71 |
| | 1935 | 618,111 | 1,023,929 | 17,171,434 | 1,657 | 27.78 | 1.68 |
| | 1936 | 634,052 | 1,098,598 | 17,716,636 | 1,733 | 27.94 | 1.61 |
| | 1937 | 660,262 | 1,174,358 | 17,718,464 | 1,779 | 26.84 | 1.51 |
| | 1938 | 691,498 | 1,285,568 | 18,456,575 | 1,859 | 26.69 | 1.44 |
| | 1939 | 719,871 | 1,374,325 | 19,657,658 | 1,909 | 27.31 | 1.43 |
| Change (Changement) 1930 -1939 | | | | | | | |
| Amount (Volume) | | 156,719 | 533,333 | 4,924,645 | + 416 | + 1.15 | - .32 |
| Per cent (p.c.) | | 27.83 | 63.42 | 33.43 | + 27.9 | + 4.4 | - 18.3 |
| MANITOBA ..... | 1930 | 72,395 | 242,718 | 2,680,036 | 3,353 | 37.02 | 1.10 |
| | 1931 | 71,324 | 257,482 | 2,679,138 | 3,610 | 37.56 | 1.04 |
| | 1932 | 71,954 | 270,272 | 2,873,481 | 3,756 | 39.93 | 1.06 |
| | 1933 | 72,935 | 275,048 | 2,743,877 | 3,771 | 37.62 | 1.00 |
| | 1934 | 73,545 | 282,067 | 2,782,475 | 3,835 | 37.83 | 0.99 |
| | 1935 | 74,538 | 289,314 | 2,914,963 | 3,881 | 39.11 | 1.01 |
| | 1936 | 75,858 | 296,110 | 3,029,140 | 3,903 | 39.93 | 1.02 |
| | 1937 | 76,516 | 303,271 | 3,122,397 | 3,963 | 40.81 | 1.03 |
| | 1938 | 77,762 | 311,793 | 3,223,605 | 4,010 | 41.45 | 1.03 |
| | 1939 | 81,091 | 320,827 | 3,311,662 | 3,956 | 40.84 | 1.03 |
| Change (Changement) 1930-1939 | | | | | | | |
| Amount (Volume) | | 8,696 | 78,108 | 631,628 | + 603 | + 3.82 | - 0.07 |
| Per cent (p.c.) | | 12.01 | 32.18 | 23.57 | + 17.98 | + 10.3 | - 6.4 |
| SASKATCHEWAN ..... | 1930 | 45,777 | 35,380 | 1,905,257 | 773 | 41.62 | 5.39 |
| | 1931 | 44,078 | 35,524 | 1,809,029 | 806 | 41.04 | 5.09 |
| | 1932 | 44,952 | 36,142 | 1,802,758 | 804 | 40.10 | 4.99 |
| | 1933 | 44,319 | 36,317 | 1,775,597 | 819 | 40.07 | 4.89 |
| | 1934 | 44,493 | 34,906 | 1,741,371 | 785 | 39.14 | 4.99 |
| | 1935 | 45,451 | 35,402 | 1,795,683 | 779 | 39.51 | 5.07 |
| | 1936 | 46,478 | 36,044 | 1,851,794 | 776 | 39.84 | 5.14 |
| | 1937 | 46,630 | 37,234 | 1,852,503 | 798 | 39.73 | 4.98 |
| | 1938 | 48,060 | 39,077 | 1,903,731 | 813 | 39.61 | 4.87 |
| | 1939 | 49,980 | 41,198 | 2,004,433 | 824 | 40.10 | 4.87 |
| Change (Changement) 1930-1939 | | | | | | | |
| Amount (Volume) | | 4,203 | 5,818 | 99,176 | + 51 | - 1.52 | - .52 |
| Per cent (p.c.) | | 9.18 | 16.44 | 5.21 | + 6.6 | - 3.7 | - 9.6 |
| ALBERTA ..... | 1930 | 57,190 | 30,458 | 1,674,340 | 533 | 29.28 | 5.50 |
| | 1931 | 56,890 | 30,196 | 1,721,292 | 531 | 30.26 | 5.70 |
| | 1932 | 57,459 | 29,792 | 1,714,412 | 518 | 29.84 | 5.75 |
| | 1933 | 57,330 | 29,668 | 1,728,351 | 517 | 30.15 | 5.83 |
| | 1934 | 58,375 | 30,378 | 1,764,295 | 520 | 30.22 | 5.81 |
| | 1935 | 58,127 | 31,636 | 1,714,128 | 544 | 29.49 | 5.42 |
| | 1936 | 59,600 | 33,481 | 1,789,422 | 562 | 30.02 | 5.34 |
| | 1937 | 61,121 | 35,339 | 1,865,520 | 578 | 30.52 | 5.28 |
| | 1938 | 63,030 | 38,089 | 1,983,226 | 604 | 31.46 | 5.21 |
| | 1939 | 68,267 | 42,210 | 2,145,093 | 618 | 31.42 | 5.08 |
| Change (Changement) 1930-1939 | | | | | | | |
| Amount (Volume) | | 11,077 | 11,752 | 470,753 | + 85 | + 2.14 | - .42 |
| Per cent (p.c.) | | 19.37 | 38.58 | 28.12 | + 15.9 | + 7.3 | - 7.6 |
| BRITISH COLUMBIA ) ..... AND YUKON ) | 1930 | 125,171 | 101,742 | 2,990,515 | 813 | 23.89 | 2.94 |
| | 1931 | 125,748 | 110,621 | 3,327,943 | 880 | 26.47 | 3.01 |
| | 1932 | 126,601 | 110,150 | 3,348,086 | 870 | 26.45 | 3.04 |
| | 1933 | 127,647 | 109,479 | 3,357,638 | 858 | 26.30 | 3.07 |
| | 1934 | 129,837 | 106,590 | 3,277,787 | 821 | 25.25 | 3.08 |
| | 1935 | 134,267 | 115,026 | 3,419,710 | 857 | 25.47 | 2.97 |
| | 1936 | 138,558 | 127,788 | 3,617,603 | 922 | 26.11 | 2.83 |
| | 1937 | 144,130 | 134,414 | 3,779,392 | 933 | 26.22 | 2.81 |
| | 1938 | 150,955 | 147,613 | 4,086,919 | 978 | 27.07 | 2.77 |
| | 1939 | 156,052 | 151,930 | 4,326,747 | 974 | 27.73 | 2.85 |
| Change (Changement) 1930-1939 | | | | | | | |
| Amount (Volume) | | 30,881 | 50,188 | 1,336,232 | + 161 | + 3.84 | - .09 |
| Per cent (p.c.) | | 24.67 | 49.33 | 44.68 | + 19.8 | + 16.1 | - 3.1 |

¢ Recettes, le compte moyen de l'année et les revenues par kilowatt heure comprement une taxe fédérale de 8 p.c. à compter du 13 Septembre 1939.

TABLE 3 - ELECTRIC POWER PLANTS, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| Total number of generating stations | 611 | 9 | 46 | 12 | 96 |
| Per cent of total for Canada | 100.00 | 1.47 | 7.53 | 1.96 | 15.71 |
| COMMERCIAL | 427 | 7 | 21 | 7 | 80 |
| Hydraulic | 205 | 5 | 11 | 4 | 78 |
| Fuel | 222 | 2 | 10 | 3 | 2 |
| MUNICIPAL | 184 | 2 | 25 | 5 | 16 |
| Hydraulic | 108 | - | 18 | 3 | 14 |
| Fuel | 76 | 2 | 7 | 2 | 2 |
| With water wheels and turbines | 313 | 5 | 29 | 7 | 78 |
| With steam engines only | 30 | - | 2 | 1 | - |
| With steam turbines only | 24 | 1 | 6 | 1 | 1 |
| With gas or oil engines only | 238 | 3 | 9 | 2 | 3 |
| With both steam engines and turbines | 5 | - | - | 1 | - |
| With both steam and gas or oil engines | 1 | - | - | - | - |
| With alternating current dynamos only | 461 | 9 | 43 | 10 | 94 |
| With direct current dynamos only | 146 | - | 3 | 1 | 2 |
| With both alternating and direct current dynamos | 3 | - | - | 1 | - |
| COMMERCIAL ORGANIZATIONS | 403 | 8 | 22 | 16 | 69 |
| Number generating power | 299 | 6 | 13 | 6 | 41 |
| Number buying power for redistribution | 104 | 2 | 9 | 10 | 28 |
| MUNICIPALITIES | 469 | 2 | 27 | 10 | 29 |
| Number generating power | 78 | 2 | 9 | 2 | 10 |
| Number buying power for redistribution | 391 | - | 18 | 8 | 19 |
| AUXILIARY PLANTS | 64 | 2 | 10 | 3 | 5 |
| To hydraulic stations | 39 | 2 | 4 | - | 4 |
| To non-generating stations | 25 | - | 6 | 3 | 1 |

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, 1939

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| 138 | 30 | 138 | 71 | 71 | Nombre d'usines génératrices |
| 22.59 | 4.91 | 22.59 | 11.62 | 11.62 | Pourcentage du total pour le Canada |
| 64 | 17 | 106 | 62 | 63 | COMMERCIALES |
| 59 | 4 | - | 4 | 40 | Hydrauliques |
| 5 | 13 | 106 | 58 | 23 | A combustible |
| 74 | 13 | 32 | 9 | 8 | MUNICIPALES |
| 65 | 2 | - | 1 | 5 | Hydrauliques |
| 9 | 11 | 32 | 8 | 3 | A combustible |
| 138 | 6 | - | 5 | 45 | Avec roues et turbines hydrauliques |
| 8 | 3 | - | 11 | 5 | Avec machines à vapeur seulement |
| - | 1 | 6 | 4 | 4 | Avec turbines à vapeur seulement |
| 6 | 19 | 130 | 49 | 17 | Avec moteurs à gaz ou à pétrole seulement |
| - | - | 2 | 2 | - | Avec machines et turbines à vapeur à la fois |
| - | 1 | - | - | - | Avec machines à vapeur à gaz et à pétrole |
| 135 | 25 | 48 | 32 | 65 | Avec dynamos à courant alternatif seulement |
| 3 | 3 | 90 | 38 | 6 | Avec dynamos à courant direct seulement |
| - | 1 | - | 1 | - | Avec dynamos à courant alternatif et direct |
| 59 | 20 | 89 | 63 | 56 | USINES COMMERCIALES |
| 40 | 13 | 87 | 53 | 39 | Nombre d'usines génératrices |
| 19 | 7 | 2 | 10 | 17 | Nombre d'usines achetant de l'électricité pour la revendre |
| 332 | 14 | 23 | 15 | 16 | MUNICIPALITES |
| 16 | 9 | 16 | 7 | 6 | Nombre d'usines génératrices |
| 316 | 5 | 7 | 8 | 10 | Nombre d'usines achetant de l'électricité pour la revendre |
| 9 | 6 | - | 9 | 20 | USINES AUXILIAIRES |
| 5 | 2 | - | 8 | 14 | Aux usines hydrauliques |
| 4 | 4 | - | 1 | 6 | 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 - CAPITAL, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| TOTAL CAPITAL | 1,564,603,211 | 1,401,600 | 36,378,868 | 34,467,786 | 677,457,217 |
| Per cent of total for Canada | 100.00 | 0.09 | 2.33 | 2.20 | 43.30 |
| Generation | 930,524,064 | 749,989 | 22,374,341 | 23,064,392 | 478,139,632 |
| Transmission and distribution | 529,751,597 | 558,513 | 11,734,164 | 10,037,838 | 155,157,497 |
| General | 104,327,550 | 93,098 | 2,270,363 | 1,365,556 | 44,160,088 |
| TOTAL CAPITAL IN COMMERCIAL STATIONS | 1,014,704,665 | 1,140,316 | 16,797,900 | 23,024,809 | 668,307,840 |
| Generation | 690,817,363 | 587,247 | 7,818,609 | 18,614,159 | 473,300,983 |
| Transmission and distribution | 254,501,373 | 480,470 | 7,100,183 | 3,566,230 | 151,276,825 |
| General | 69,385,929 | 72,599 | 1,879,108 | 844,420 | 43,730,032 |
| Non-generating stations | 40,542,159 | 5,500 | 6,676,747 | 2,163,394 | 667,731 |
| Generating stations | 974,162,506 | 1,134,816 | 10,121,153 | 20,861,415 | 667,640,109 |
| Hydraulic stations | 949,875,498 | 124,278 | 5,164,396 | 17,639,472 | 667,591,918 |
| Fuel stations | 24,287,008 | 1,010,538 | 4,956,757 | 3,221,943 | 48,191 |
| TOTAL CAPITAL IN MUNICIPAL STATIONS | 549,898,546 | 261,284 | 19,580,968 | 11,442,977 | 9,149,377 |
| Generation | 239,706,701 | 162,742 | 14,555,732 | 4,450,233 | 4,838,649 |
| Transmission and distribution | 275,250,224 | 78,043 | 4,633,981 | 6,471,608 | 3,880,672 |
| General | 34,941,621 | 20,499 | 391,255 | 521,136 | 430,056 |
| Non-generating stations | 127,222,131 | - | 1,916,136 | 1,376,060 | 2,576,489 |
| Generating stations | 422,676,415 | 261,284 | 17,664,832 | 10,066,917 | 6,572,888 |
| Hydraulic stations | 399,980,253 | - | 16,759,445 | 5,681,019 | 6,259,442 |
| Fuel stations | 22,696,162 | 261,284 | 905,387 | 4,385,898 | 313,446 |
| TOTAL CAPITAL IN NON-GENERATING STATIONS | 167,764,290 | 5,500 | 8,592,883 | 3,539,454 | 3,244,220 |
| Generation | 3,630,396 | - | 1,742,018 | 338,678 | 696,888 |
| Transmission and distribution | 141,025,962 | 5,500 | 5,254,508 | 2,446,157 | 2,375,403 |
| General | 23,107,932 | - | 1,596,357 | 754,619 | 171,929 |
| TOTAL CAPITAL IN GENERATING STATIONS | 1,396,838,921 | 1,396,100 | 27,785,985 | 30,928,332 | 674,212,997 |
| Generation | 926,893,668 | 749,989 | 20,632,323 | 22,725,714 | 477,442,744 |
| Transmission and distribution | 388,725,635 | 553,013 | 6,479,656 | 7,591,681 | 152,782,094 |
| General | 81,219,618 | 93,098 | 674,006 | 610,937 | 43,988,159 |
| Hydraulic stations | 1,349,855,751 | 124,278 | 21,923,841 | 23,320,491 | 673,851,360 |
| Fuel stations | 46,983,170 | 1,271,822 | 5,862,144 | 7,607,841 | 361,637 |
| TOTAL CAPITAL | | | | | |
| Average per H.P. of primary power | 206 | 168 | 228 | 247 | 186 |
| Average per H.P. including auxiliary equipment | 201 | 164 | 211 | 242 | 185 |
| Average per Kv.A. of dynamo capacity | 243 | 224 | 268 | 291 | 211 |
| Average per Kv.A. including auxiliary equipment | 237 | 222 | 249 | 285 | 209 |
| GENERATION | | | | | |
| Average cost per H.P. (including auxiliary equipment) | | | | | |
| In all generating stations | 120 | 88 | 140 | 165 | 131 |
| In hydraulic stations | 122 | 139 | 175 | 178 | 131 |
| In fuel stations | 72 | 84 | 61 | 117 | 75 |

X - Capital invested in one hydraulic station in Saskatchewan included in Manitoba.

TABLEAU 4 - CAPITAL, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| 562,672,053 | 78,840,760 | 26,817,115 | 28,572,179 | 117,995,633 | TOTAL CAPITAL |
| 35.96 | 5.04 | 1.71 | 1.83 | 7.54 | Pourcentage du total pour le Canada |
| 275,652,868 | 44,581,859 | 13,280,161 | 12,651,573 | 60,029,249 | Génération |
| 250,120,168 | 30,406,414 | 12,123,726 | 14,205,317 | 45,407,960 | Transmission et distribution |
| 36,899,017 | 3,852,487 | 1,413,228 | 1,715,289 | 12,558,424 | Généralités |
| 111,923,914 | 42,308,789 | 12,636,038 | 22,709,804 | 115,855,255 | TOTAL CAPITAL DANS LES USINES COMMERCIALES |
| 83,802,159 | 30,672,743 | 6,202,087 | 10,517,695 | 59,301,681 | Génération |
| 20,381,800 | 11,034,535 | 5,640,991 | 10,998,760 | 44,121,579 | Transmission et distribution |
| 7,739,955 | 601,511 | 892,960 | 1,193,349 | 12,431,995 | Généralités |
| 3,013,885 | 1,061,995 | 1,780,148 | 113,389 | 25,059,370 | Usines non-génératrices |
| 108,910,029 | 41,246,794 | 10,855,890 | 22,596,415 | 90,795,885 | Usines génératrices |
| 108,884,932 | 40,855,258 | - | 19,358,595 | 90,256,649 | Usines hydrauliques |
| 25,097 | 391,536 | 10,855,890 | 3,237,820 | 539,236 | Usines à combustible |
| 450,748,139 | 36,531,971 | 14,181,077 | 5,862,375 | 2,140,378 | TOTAL CAPITAL DANS LES USINES MUNICIPALES |
| 191,850,709 | 13,909,116 | 7,078,074 | 2,133,878 | 727,568 | Génération |
| 229,738,368 | 19,371,879 | 6,582,735 | 3,206,557 | 1,286,381 | Transmission et distribution |
| 29,159,062 | 3,250,976 | 520,268 | 521,940 | 126,429 | Généralités |
| 110,201,067 | 6,180,767 | 1,645,961 | 2,267,385 | 1,058,266 | Usines non-génératrices |
| 340,547,072 | 30,351,204 | 12,535,116 | 3,594,990 | 1,082,112 | Usines génératrices |
| 340,331,491 | 29,660,700 | - | 246,465 | 1,041,691 | Usines hydrauliques |
| 215,581 | 690,504 | 12,535,116 | 3,348,525 | 40,421 | Usines à combustible |
| 113,214,952 | 7,242,762 | 3,426,109 | 2,380,774 | 26,117,636 | TOTAL CAPITAL DANS LES USINES NON-GENERATRICES |
| 183,248 | 396,030 | - | 20,000 | 253,534 | Génération |
| 97,198,131 | 5,882,330 | 3,120,910 | 2,131,460 | 22,611,563 | Transmission et distribution |
| 15,833,573 | 964,402 | 305,199 | 229,314 | 3,252,539 | Généralités |
| 449,457,101 | 71,597,998 | 23,391,006 | 26,191,405 | 91,877,997 | TOTAL CAPITAL DANS LES USINES GENERATRICES |
| 275,469,620 | 44,185,829 | 13,280,161 | 12,631,573 | 59,775,715 | Génération |
| 152,922,037 | 24,524,084 | 9,002,816 | 12,073,857 | 22,796,397 | Transmission et distribution |
| 21,065,444 | 2,888,085 | 1,108,029 | 1,485,975 | 9,305,885 | Généralités |
| 449,216,423 | 70,515,958 | - | 19,605,060 | 91,298,340 | Usines hydrauliques |
| 240,678 | 1,082,040 | 23,391,006 | 6,586,345 | 579,657 | Usines à combustible |
| | | | | | TOTAL CAPITAL |
| 249 | 156 | 163 | 190 | 200 | Moyenne par H.P. de la machinerie d'énergie primaire |
| 245 | 147 | 163 | 169 | 184 | Moyenne par H.P. y compris machinerie auxiliaire |
| 311 | 192 | 193 | 232 | 244 | Moyenne par Kv.A. de la capacité des dynamos |
| 305 | 179 | 193 | 204 | 225 | Moyenne par Kv.A. y compris machinerie auxiliaire |
| | | | | | GENERATION |
| | | | | | Moyenne par H.P. y compris machinerie auxiliaire |
| 120 | 84 | 81 | 75 | 94 | Dans les usines génératrices |
| 120 | 83 | - | 110 | 94 | Dans les usines hydrauliques |
| 117 | 138 | 81 | 36 | 77 | Dans les usines à combustible |

X - Capital engagé dans une usine hydraulique de la Saskatchewan inclus sous Manitoba.

TABLE 5 - REVENUE, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ |
| REVENUE FROM SALE OF ELECTRIC ENERGY | 151,880,969 | 326,420 | 5,548,336 | ≠ 3,838,907 | ≠ 56,619,092 |
| For domestic service (xx) | 43,793,482 | 163,226 | 1,709,507 | 1,307,772 | 9,167,384 |
| For commercial light | 25,741,384 | 98,403 | 962,635 | 579,215 | 7,540,008 |
| For power (small) | 9,789,093 | 26,324 | 364,345 | 208,307 | 2,558,008 |
| For power (large) | 67,641,989 | 20,509 | 2,312,726 | 1,630,123 | 36,122,306 |
| For street lighting | 4,915,021 | 18,958 | 199,123 | 116,490 | 1,231,386 |
| REVENUE OF COMMERCIAL STATIONS | 92,535,049 | 258,834 | 3,477,548 | 2,324,501 | 55,090,885 |
| Non-generating | 6,521,960 | 2,033 | 1,317,418 | 432,539 | 141,046 |
| Generating | 86,013,089 | 256,801 | 2,160,130 | 1,891,962 | 54,949,639 |
| Hydraulic | 81,030,735 | 23,939 | 672,593 | 1,432,036 | 54,924,919 |
| Fuel | 4,982,354 | 232,862 | 1,487,537 | 459,926 | 24,920 |
| REVENUE OF MUNICIPAL STATIONS | 59,345,920 | 67,586 | 2,070,788 | 1,514,406 | 1,528,207 |
| Non-generating | 17,875,787 | - | 412,053 | 372,848 | 560,329 |
| Generating | 41,470,133 | 67,586 | 1,658,735 | 1,141,558 | 967,878 |
| Hydraulic | 35,815,197 | - | 1,469,209 | 655,089 | 891,352 |
| Fuel | 5,654,936 | 67,586 | 189,526 | 486,469 | 76,526 |
| Revenue of non-generating stations | 24,397,747 | 2,033 | 1,729,471 | 805,387 | 701,375 |
| Revenue of generating stations | 127,483,222 | 324,387 | 3,818,865 | 3,033,520 | 55,917,717 |
| Revenue of hydraulic stations | 116,845,932 | 23,939 | 2,141,802 | 2,087,125 | 55,816,271 |
| Revenue of fuel stations | 10,637,290 | 300,448 | 1,677,063 | 946,395 | 101,446 |
| Average revenue per H.P. of primary power | 19.97 | 39.05 | 34.73 | 27.54 | 15.58 |
| Average revenue per H.P. in main and auxiliary plants | 19.47 | 38.29 | 32.25 | 26.97 | 15.43 |
| Average revenue per Kv.A. of dynamo capacity | 23.60 | 52.18 | 40.90 | 32.38 | 17.66 |
| Average revenue per Kv.A. in main and auxiliary plants | 23.01 | 51.78 | 37.99 | 31.79 | 17.48 |
| Average revenue per kilowatt hour consumed ..... Cents | .54 | 4.21 | 1.27 | .84 | .37 |
| Average revenue per domestic service customer ..... (xx) | 26.97 | 32.21 | 27.56 | 28.13 | 21.08 |
| Average revenue per commercial light customer | 98.03 | 84.11 | 92.85 | 88.16 | 101.01 |
| Average revenue per small power customer | 223.01 | 234.48 | 177.04 | 198.75 | 213.77 |
| Average revenue per large power customer | 7,299.23 | 2,563.63 | 14,188.50 | 8,764.10 | 30,177.37 |
| Average revenue per kilowatt hour - domestic and farm service ..... Cents xx | 1.90 | 5.61 | 4.37 | 4.85 | 2.94 |
| Average revenue per kilowatt hour - commercial light ..... Cents | 2.32 | 5.14 | 4.55 | 3.31 | 2.78 |

≠ Affected by power purchased from another province.

X Adjusted for power purchased from Quebec plants.

(xx) Includes 8 p.c. Dominion tax from September 13, 1939.

TABLEAU 6 - RECETTES, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| $ | $ | $ | $ | $ | |
| ≠ 61,588,914 | 8,467,519 | 5,105,620 | ≠ 5,841,867 | 14,537,559 | RECETTES PROVENANT DE LA VENTE D'ELECTRICITE |
| 19,657,658 | 3,311,662 | 2,004,433 | 2,145,093 | 4,326,747 | Pour éclairage domestique |
| 8,786,851 | 1,588,036 | 1,429,624 | 1,635,703 | 3,120,909 | Pour éclairage commercial |
| 4,152,049 | 383,307 | 703,526 | 747,553 | 649,674 | Pour force motrice (petite) |
| 26,873,645 | 2,946,992 | 686,485 | 1,031,519 | 6,010,949 | Pour force motrice (grosse) |
| 2,118.711 | 237,522 | 281,552 | 281,999 | 429,280 | Pour éclairage des rues |
| 11,299,935 | 4,213,618 | 1,930,166 | 2,657,322 | 13,727,266 | RECETTES DES USINES COMMERCIALES |
| 1,818,988 | 182,887 | 148,599 | 81,554 | 3,789.532 | Non-génératrices |
| 9,480,947 | 4,030,731 | 1,781,567 | 2,575,768 | 9,937,734 | Génératrices |
| 9,463,931 | 3,946,201 | - | 1,862,305 | 9,757,201 | Hydrauliques |
| 17,016 | 84,530 | 1,781,567 | 713,463 | 180,533 | A combustible |
| 50,288,979 | 4,253,901 | 3,175,454 | 3,184,545 | 810,293 | RECETTES DES USINES MUNICIPALES |
| 13,376,076 | 866,647 | 668,495 | 1,190,185 | 478,982 | Non-génératrices |
| 36,912,903 | 3,387,254 | 2,506,959 | 1,994,360 | 331,311 | Génératrices |
| 36,825,729 | 3,152,025 | - | 37,394 | 282,810 | Hydrauliques |
| 87,174 | 235,229 | 2,506,959 | 1,956,966 | 48,501 | A combustible |
| 15,195,064 | 1,049,534 | 817,094 | 1,271,739 | 4,268,514 | Recettes des usines non-génératrices |
| 46,393,850 | 7,417,985 | 4,288,526 | 4,570,128 | 10,269,045 | Recettes des usines génératrices |
| 46,289,660 | 7,098,226 | - | 1,899,699 | 10,040,011 | Recettes des usines hydrauliques |
| 104,190 | 319,759 | 4,288,526 | 2,670,429 | 229,034 | Recettes des usines à combustible |
| X 21.58 | 16.75 | 31.03 | 38.94 | 24.62 | Moyenne de recettes par H.P. de machinerie primaire |
| X 21.27 | 15.78 | 31.03 | 34.52 | 22.69 | Moyenne de recettes par H.P. de machinerie principale et auxiliaire |
| X 27.27 | 20.57 | 36.81 | 47.17 | 30.06 | Moyenne de recettes par Kv.A. de capacité de dynamos |
| X 26.87 | 19.23 | 36.81 | 41.60 | 27.73 | Moyenne de recettes par Kv.A. de capacité des dynamos, usines principales et auxiliaires |
| .54 | .48 | 3.05 | 2.32 | .73 | Moyenne de recettes par Kw. heure (cents) |
| 27.31 | 40.84 | 40.10 | 31.42 | 27.73 | Moyenne de recettes par abonnés d'éclairage domestique |
| 93.93 | 92.37 | 95.24 | 100.84 | 111.89 | Moyenne de recettes par abonnés d'eclairage commercial |
| 315.36 | 118.34 | 240.19 | 164.66 | 133.76 | Moyenne de recettes par abonnés pour petite force motrice |
| 7,628.06 | 987.93 | 5,240.34 | 2,947.20 | 8,279.54 | Moyenne de recettes par abonnés pour grosse force motrice |
| 1.43 | 1.03 | 4.87 | 5.08 | 2.85 | Moyenne de recettes par Kw. heure - service domestique et de ferme (cents) |
| 1.60 | 1.97 | 5.73 | 4.68 | 2.91 | Moyenne de recettes par Kw. heure - service commercial (cents) |

≠ Affecté par énergie achetée d'une autre province.

X Adjusté pour achats de courant des usines du Québec.

(xx) Comprend une taxe fédérale de 8 p.c. à compter du 13 Septembre 1939.

TABLE 6 - EXPENSES, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ |
| TOTAL EXPENSES | 91,982,372 | 159,797 | 3,806,343 | 1,892,295 | 20,692,895 |
| Per cent of total for Canada | 100.00 | 0.17 | 4.14 | 2.06 | 22.49 |
| Salaries and wages | 28,223,376 | 73,951 | 1,210,037 | 599,399 | 6,747,465 |
| Fuel | 2,017,077 | 60,008 | 476,128 | 194,717 | 34,502 |
| Taxes | 11,859,878 | 24,684 | 451,816 | 199,379 | 6,782,641 |
| Cost of power | 49,882,041 | 1,154 | 1,668,362 | 898,800 | 7,128,287 |
| TOTAL FOR COMMERCIAL STATIONS | 42,471,534 | 138,458 | 2,855,464 | 1,046,553 | 20,069,132 |
| Salaries and wages | 13,791,708 | 64,773 | 839,460 | 312,863 | 8,474,005 |
| Fuel | 1,048,514 | 47,847 | 437,422 | 105,762 | 7,924 |
| Taxes | 10,887,815 | 24,684 | 437,759 | 198,991 | 6,769,990 |
| Cost of power | 16,743,497 | 1,154 | 1,140,823 | 430,937 | 6,817,213 |
| Non-generating stations | 8,916,117 | 1,164 | 1,576,073 | 666,348 | 90,866 |
| Generating stations | 33,555,417 | 137,294 | 1,279,391 | 382,205 | 19,978,266 |
| Hydraulic stations | 30,897,683 | 12,916 | 251,848 | 148,380 | 19,964,496 |
| Fuel stations | 2,657,734 | 124,378 | 1,027,543 | 233,825 | 13,770 |
| TOTAL FOR MUNICIPAL STATIONS | 49,510,838 | 21,339 | 950,879 | 843,742 | 623,763 |
| Salaries and wages | 14,431,668 | 9,178 | 370,577 | 286,536 | 273,460 |
| Fuel | 968,563 | 12,161 | 38,706 | 88,955 | 26,576 |
| Taxes | 972,063 | - | 14,057 | 386 | 12,651 |
| Cost of power | 33,138,544 | - | 527,539 | 467,863 | 311,074 |
| Non-generating stations | 31,496,118 | - | 584,003 | 418,196 | 412,169 |
| Generating stations | 18,014,720 | 21,339 | 366,876 | 425,546 | 211,594 |
| Hydraulic stations | 15,835,271 | - | 238,209 | 246,889 | 174,683 |
| Fuel stations | 2,179,449 | 21,339 | 128,667 | 178,657 | 36,711 |
| TOTAL EXPENSES FOR NON GENERATING STATIONS | 40,412,235 | 1,164 | 2,160,076 | 1,084,544 | 503,035 |
| Salaries and wages | 8,111,628 | - | 597,502 | 246,378 | 150,128 |
| Fuel | 38,588 | - | 35,376 | - | - |
| Taxes | 1,308,716 | 10 | 271,072 | 67,911 | 2,714 |
| Cost of power | 30,955,103 | 1,154 | 1,256,128 | 750,255 | 350,193 |
| TOTAL EXPENSES FOR GENERATING STATIONS | 51,570,137 | 158,633 | 1,646,267 | 807,751 | 20,189,860 |
| Salaries and wages | 20,111,548 | 73,951 | 612,535 | 353,021 | 6,597,337 |
| Fuel | 1,980,489 | 60,008 | 440,752 | 194,717 | 34,502 |
| Taxes | 10,551,162 | 24,674 | 180,744 | 111,468 | 6,779,927 |
| Cost of power | 18,926,938 | - | 412,236 | 148,545 | 6,778,094 |
| Hydraulic stations | 46,732,954 | 12,916 | 490,057 | 395,269 | 20,139,379 |
| Fuel stations | 4,837,183 | 145,717 | 1,156,210 | 412,482 | 50,481 |

/ Includes only the four items listed.

TABLEAU 6 - ≠ DEPENSES, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| $ | $ | $ | $ | $ | |
| 48,729,644 | 2,628,531 | 2,621,038 | 2,481,834 | 8,969,995 | TOTAL DES DEPENSES |
| 52.98 | 2.86 | 2.85 | 2.70 | 9.75 | Pourcentage du total pour le Canada |
| 12,567,451 | 1,935,819 | 884,816 | 964,137 | 3,240,301 | Salaires et gages |
| 35,882 | 74,475 | 774,753 | 272,115 | 94,497 | Combustible |
| 1,650,368 | 213,890 | 214,544 | 495,424 | 1,827,132 | Taxes |
| 34,475,943 | 404,347 | 746,925 | 750,158 | 3,808,065 | Achat d'énergie électrique |
| 6,963,257 | 1,100,409 | 902,231 | 853,540 | 8,540,490 | TOTAL POUR LES USINES COMMERCIALES |
| 1,492,193 | 719,864 | 352,990 | 451,253 | 3,084,307 | Salaires et gages |
| 7,061 | 17,626 | 264,543 | 75,917 | 84,412 | Combustible |
| 1,091,424 | 122,235 | 163,655 | 253,330 | 1,825,747 | Taxes |
| 4,372,579 | 240,684 | 121,043 | 73,040 | 3,546,024 | Achat d'énergie électrique |
| 1,518,702 | 273,146 | 112,638 | 46,286 | 4,630,894 | Usines non-génératrices |
| 5,444,555 | 827,263 | 789,593 | 807,254 | 3,909,596 | Usines génératrices |
| 5,438,488 | 783,739 | - | 481,721 | 3,816,095 | Usines hydrauliques |
| 6,067 | 43,524 | 789,593 | 325,533 | 93,501 | Usines à combustible |
| 41,766,387 | 1,528,122 | 1,718,807 | 1,628,294 | 429,505 | TOTAL POUR LES USINES MUNICIPALES |
| 11,075,258 | 1,215,955 | 531,826 | 512,884 | 155,994 | Salaires et gages |
| 28,821 | 56,849 | 510,210 | 196,198 | 10,085 | Combustible |
| 558,944 | 91,655 | 50,889 | 242,094 | 1,385 | Taxes |
| 30,103,364 | 163,663 | 625,882 | 677,118 | 262,041 | Achat d'énergie électrique |
| 27,613,174 | 436,998 | 720,578 | 958,302 | 352,698 | Usines non-génératrices |
| 14,153,213 | 1,091,124 | 998,229 | 669,992 | 76,807 | Usines génératrices |
| 14,122,504 | 983,724 | - | 10,424 | 58,638 | Usines hydrauliques |
| 30,709 | 107,400 | 998,229 | 659,568 | 18,169 | Usines à combustible |
| 29,131,876 | 710,144 | 833,216 | 1,004,588 | 4,983,592 | TOTAL DES DEPENSES DES USINES NON-GENERATRICES |
| 5,288,582 | 290,505 | 107,170 | 216,646 | 1,214,917 | Salaires et gages |
| 848 | 226 | - | - | 138 | Combustible |
| 171,683 | 15,066 | 53,997 | 76,232 | 630,031 | Taxes |
| 23,670,763 | 404,347 | 672,049 | 711,710 | 3,138,506 | Achat d'énergie électrique |
| 19,597,768 | 1,918,387 | 1,787,822 | 1,477,246 | 3,986,403 | TOTAL DES DEPENSES DES USINES GENERATRICES |
| 7,278,869 | 1,645,314 | 777,646 | 747,491 | 2,025,384 | Salaires et gages |
| 35,034 | 74,249 | 774,753 | 272,115 | 94,359 | Combustible |
| 1,478,685 | 198,824 | 160,547 | 419,192 | 1,197,101 | Taxes |
| 10,805,180 | - | 74,876 | 38,448 | 669,559 | Achat d'énergie électrique |
| 19,560,992 | 1,767,463 | - | 492,146 | 3,874,733 | Usines hydrauliques |
| 36,776 | 150,924 | 1,787,822 | 985,101 | 111,670 | Usines à combustible |

≠ Ne comprend que les quatre item énumérés.

TABLE 7 - EMPLOYEES, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| TOTAL NUMBER OF PERSONS EMPLOYED | 18,848 | 73 | 1,128 | 527 | 4,629 |
| Per cent of total for Canada | 100.00 | 0.39 | 5.98 | 2.80 | 24.56 |
| Officers, clerks, other salaried employees, etc. | 7,376 | 35 | 374 | 252 | 1,511 |
| Employees on wages | 11,472 | 38 | 754 | 275 | 3,118 |
| TOTAL EMPLOYEES IN COMMERCIAL STATIONS | 9,547 | 62 | 734 | 285 | 4,379 |
| Officers, clerks, other salaried employees, etc. | 3,196 | 25 | 212 | 115 | 1,402 |
| Employees on wages | 6,351 | 37 | 522 | 170 | 2,977 |
| Non-generating | 1,324 | - | 365 | 138 | 24 |
| Generating | 8,223 | 62 | 369 | 147 | 4,355 |
| Hydraulic | 7,510 | 13 | 239 | 66 | 4,350 |
| Fuel | 713 | 49 | 130 | 81 | 5 |
| TOTAL EMPLOYEES IN MUNICIPAL STATIONS | 9,301 | 11 | 394 | 242 | 250 |
| Officers, clerks, other salaried employees, etc. | 4,180 | 10 | 162 | 137 | 109 |
| Employees on wages | 5,121 | 1 | 232 | 105 | 141 |
| Non-generating | 4,279 | - | 101 | 86 | 94 |
| Generating | 5,022 | 11 | 293 | 156 | 156 |
| Hydraulic | 4,371 | - | 252 | 98 | 145 |
| Fuel | 651 | 11 | 41 | 58 | 11 |
| TOTAL EMPLOYEES IN NON-GENERATING STATIONS | 5,603 | - | 466 | 224 | 118 |
| Officers, clerks, other salaried employees, etc. | 2,850 | - | 211 | 123 | 64 |
| Employees on wages | 2,753 | - | 255 | 101 | 54 |
| TOTAL EMPLOYEES IN GENERATING STATIONS | 13,245 | 73 | 662 | 303 | 4,511 |
| Officers, clerks, other salaried employees, etc. | 4,526 | 35 | 163 | 129 | 1,447 |
| Employees on wages | 8,719 | 38 | 499 | 174 | 3,064 |
| Hydraulic | 11,881 | 13 | 491 | 164 | 4,495 |
| Fuel | 1,364 | 60 | 171 | 139 | 18 |

TABLEAU 7 - EMPLOYES, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| 7,723 | 1,438 | 590 | 635 | 2,105 | TOTAL DU PERSONNEL OCCUPE |
| 40.97 | 7.63 | 3.13 | 3.37 | 11.17 | Pourcentage du total pour le Canada |
| 3,070 | 861 | 256 | 312 | 705 | Administrateurs, directeurs, commis et tous employés des bureaux |
| 4,653 | 577 | 334 | 323 | 1,400 | Ouvriers et journaliers |
| 1,027 | 488 | 268 | 302 | 2,002 | PERSONNEL DES USINES COMMERCIALES |
| 291 | 191 | 119 | 175 | 666 | Administrateurs, directeurs, commis et tous employés des bureaux |
| 736 | 297 | 149 | 127 | 1,336 | Ouvriers et journaliers |
| 43 | 15 | 15 | 10 | 714 | Non-génératrices |
| 984 | 473 | 253 | 292 | 1,288 | Génératrices |
| 980 | 453 | - | 162 | 1,247 | Hydrauliques |
| 4 | 20 | 253 | 130 | 41 | Combustible |
| 6,696 | 950 | 322 | 333 | 103 | PERSONNEL DES USINES MUNICIPALES |
| 2,779 | 670 | 137 | 137 | 39 | Administrateurs, directeurs, commis et tous employés des bureaux |
| 3,917 | 280 | 185 | 196 | 64 | Ouvriers et journaliers |
| 3,451 | 293 | 56 | 135 | 63 | Non-génératrices |
| 3,245 | 657 | 266 | 198 | 40 | Génératrices |
| 3,232 | 603 | - | 7 | 34 | Hydrauliques |
| 13 | 54 | 266 | 191 | 6 | Combustible |
| 3,494 | 308 | 71 | 145 | 777 | PERSONNEL DES USINES NON-GENERATRICES |
| 1,740 | 125 | 41 | 88 | 458 | Administrateurs, directeurs, commis et tous employés des bureaux |
| 1,754 | 183 | 30 | 57 | 319 | Ouvriers et journaliers |
| 4,229 | 1,130 | 519 | 490 | 1,328 | PERSONNEL DES USINES GENERATRICES |
| 1,330 | 736 | 215 | 224 | 247 | Administrateurs, directeurs, commis et tous employés des bureaux |
| 2,899 | 394 | 304 | 266 | 1,081 | Ouvriers et journaliers |
| 4,212 | 1,056 | - | 169 | 1,281 | Hydrauliques |
| 17 | 74 | 519 | 321 | 47 | Combustible |

TABLE 8 - NUMBER OF CUSTOMERS, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| NUMBER OF CUSTOMERS | 1,941,663 | 6,363 | 74,699 | 54,313 | 523,375 |
| Per cent of total for Canada | 100.00 | 0.33 | 3.85 | 2.80 | 26.95 |
| Domestic service | 1,623,672 | 5,067 | 62,034 | 46,485 | 434,825 |
| Commercial light | 262,590 | 1,170 | 10,368 | 6,570 | 74,643 |
| Power (small) | 43,896 | 108 | 2,058 | 1,033 | 11,966 |
| Power (large) | 9,267 | 8 | 163 | 186 | 1,197 |
| Street lighting | 2,238 | 10 | 76 | 39 | 744 |
| COMMERCIAL STATIONS | 889,418 | 5,181 | 47,079 | 23,877 | 483,221 |
| Domestic service | 725,103 | 4,167 | 39,051 | 19,382 | 399,811 |
| Commercial light | 137,334 | 938 | 6,597 | 3,747 | 70,487 |
| Power (small) | 22,105 | 61 | 1,309 | 668 | 11,095 |
| Power (large) | 3,588 | 7 | 78 | 60 | 1,117 |
| Street lighting | 1,288 | 8 | 44 | 20 | 711 |
| Non-generating | 193,387 | 135 | 35,138 | 15,462 | 4,270 |
| Generating | 696,031 | 5,046 | 11,941 | 8,415 | 478,951 |
| Hydraulic | 640,236 | 736 | 8,080 | 490 | 478,521 |
| Fuel | 55,795 | 4,310 | 3,861 | 7,925 | 430 |
| MUNICIPAL STATIONS | 1,052,245 | 1,182 | 27,620 | 30,436 | 40,154 |
| Domestic service | 898,569 | 900 | 22,983 | 27,103 | 35,014 |
| Commercial light | 125,256 | 232 | 3,771 | 2,823 | 4,156 |
| Power (small) | 21,791 | 47 | 749 | 365 | 871 |
| Power (large) | 5,679 | 1 | 85 | 126 | 80 |
| Street lighting | 950 | 2 | 32 | 19 | 33 |
| Non-generating | 750,209 | - | 18,716 | 13,914 | 20,293 |
| Generating | 302,036 | 1,182 | 8,904 | 16,522 | 19,861 |
| Hydraulic | 225,394 | - | 4,601 | 10,095 | 18,750 |
| Fuel | 76,642 | 1,182 | 4,303 | 6,427 | 1,111 |
| NON-GENERATING STATIONS | 943,596 | 135 | 53,854 | 29,376 | 24,563 |
| Domestic service | 793,286 | 99 | 44,714 | 24,686 | 21,210 |
| Commercial light | 126,153 | 35 | 7,412 | 4,039 | 2,755 |
| Power (small) | 19,756 | - | 1,601 | 501 | 533 |
| Power (large) | 3,722 | - | 88 | 126 | 19 |
| Street lighting | 679 | 1 | 39 | 24 | 46 |
| GENERATING STATIONS | 998,067 | 6,228 | 20,845 | 24,937 | 498,812 |
| Hydraulic stations | 865,630 | 736 | 12,681 | 10,585 | 497,271 |
| Domestic service | 729,666 | 626 | 10,606 | 9,661 | 412,489 |
| Commercial light | 110,716 | 106 | 1,740 | 770 | 71,514 |
| Power (small) | 19,009 | - | 258 | 122 | 11,398 |
| Power (large) | 5,090 | 1 | 52 | 24 | 1,175 |
| Street lighting | 1,149 | 3 | 25 | 8 | 695 |
| Fuel Stations | 132,437 | 5,492 | 8,164 | 14,352 | 1,541 |
| Domestic service | 100,720 | 4,342 | 6,714 | 12,138 | 1,126 |
| Commercial light | 25,721 | 1,029 | 1,216 | 1,761 | 374 |
| Power (small) | 5,131 | 108 | 199 | 410 | 35 |
| Power (large) | 455 | 7 | 23 | 36 | 3 |
| Street lighting | 410 | 6 | 12 | 7 | 3 |
| Average number of domestic service customers per 100 of population | 14.35 | 5.33 | 11.20 | 10.31 | 13.55 |

TABLEAU 8 - NOMBRE D'USAGERS, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| 830,673 | 104,677 | 68,371 | 89,577 | 189,615 | NOMBRE D'USAGERS |
| 42.78 | 5.39 | 3.52 | 4.61 | 9.77 | Pourcentage du total pour le Canada |
| 719,871 | 81,091 | 49,980 | 68,267 | 156,052 | Service domestique |
| 93,523 | 17,192 | 15,011 | 16,221 | 27,892 | Eclairage commercial |
| 13,166 | 3,239 | 2,929 | 4,540 | 4,857 | Force motrice (petite) |
| 3,523 | 2,983 | 131 | 350 | 726 | Force motrice (grosse) |
| 590 | 172 | 320 | 199 | 88 | Eclairage des rues |
| 72,915 | 31,810 | 26,189 | 29,203 | 169,943 | NOMBRE D'USAGERS DES USINES COMMERCIALES |
| 61,588 | 23,061 | 18,500 | 19,345 | 140,198 | Service domestique |
| 9,780 | 7,079 | 6,511 | 7,445 | 24,750 | Eclairage commercial |
| 1,224 | 383 | 971 | 2,164 | 4,230 | Force motrice (petite) |
| 261 | 1,268 | 37 | 67 | 693 | Force motrice (grosse) |
| 62 | 19 | 170 | 182 | 72 | Eclairage des rues |
| 5,285 | 7,438 | 2,832 | 2,160 | 120,667 | Non-génératrices |
| 67,630 | 24,372 | 23,357 | 27,043 | 49,276 | Génératrices |
| 67,254 | 22,746 | - | 15,171 | 47,238 | Hydrauliques |
| 378 | 1,626 | 23,357 | 11,872 | 2,038 | Combustible |
| 757,758 | 72,867 | 42,182 | 60,374 | 19,672 | NOMBRE D'USAGERS DES USINES MUNICIPALES |
| 658,283 | 58,030 | 31,480 | 48,922 | 15,854 | Service domestique |
| 83,743 | 10,113 | 8,500 | 8,776 | 3,142 | Eclairage commercial |
| 11,942 | 2,856 | 1,958 | 2,376 | 627 | Force motrice (petite) |
| 3,262 | 1,715 | 94 | 283 | 33 | Force motrice (grosse) |
| 528 | 153 | 150 | 17 | 16 | Eclairage des rues |
| 620,840 | 17,967 | 15,063 | 28,959 | 14,457 | Non-génératrices |
| 136,918 | 54,900 | 27,119 | 31,415 | 5,215 | Génératrices |
| 135,733 | 50,972 | - | 763 | 4,480 | Hydrauliques |
| 1,185 | 3,928 | 27,119 | 30,652 | 735 | Combustible |
| 626,125 | 25,405 | 17,895 | 31,119 | 135,124 | NOMBRE D'USAGERS DES USINES NON-GENERATRICES |
| 531,414 | 20,298 | 13,280 | 25,527 | 112,068 | Service domestique |
| 80,654 | 3,989 | 3,595 | 4,378 | 19,296 | Eclairage commercial |
| 10,984 | 824 | 919 | 1,141 | 3,253 | Force motrice (petite) |
| 2,759 | 150 | 46 | 58 | 476 | Force motrice (grosse) |
| 314 | 144 | 55 | 15 | 41 | Eclairage des rues |
| 204,548 | 79,272 | 50,476 | 58,468 | 54,491 | NOMBRE D'USAGERS DES USINES GENERATRICES |
| 202,987 | 73,718 | - | 15,934 | 51,718 | Usines hydrauliques |
| 187,173 | 56,773 | - | 10,382 | 41,956 | Service domestique |
| 12,654 | 12,009 | - | 3,984 | 7,939 | Eclairage commercial |
| 2,127 | 2,128 | - | 1,430 | 1,546 | Force motrice (petite) |
| 761 | 2,800 | - | 35 | 242 | Force motrice (grosse) |
| 272 | 8 | - | 103 | 35 | Eclairage des rues |
| 1,561 | 5,554 | 50,476 | 42,524 | 2,773 | Usines à combustible |
| 1,284 | 4,020 | 36,700 | 32,358 | 2,038 | Service domestique |
| 215 | 1,194 | 11,416 | 7,859 | 657 | Eclairage commercial |
| 55 | 287 | 2,010 | 1,969 | 58 | Force motrice (petite) |
| 3 | 33 | 85 | 257 | 8 | Force motrice (grosse) |
| 4 | 20 | 265 | 81 | 12 | Eclairage des rues |
| 19.19 | 11.15 | 5.27 | 8.65 | 20.06 | Moyenne de consommateurs d'éclairage électrique par 100 habitants |

TABLE 9 - POLE LINE MILEAGE, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| POLE LINE MILEAGE | 72,132 | 281 | 3,722 | 3,175 | 13,768 |
| Per cent of total for Canada | 100.00 | 0.39 | 5.16 | 4.40 | 19.08 |
| Miles of steel towers | 4,698 | - | 21 | 214 | 1,200 |
| Miles of steel poles | 231 | - | 1 | - | 168 |
| Miles of wooden poles | 64,697 | 279 | 3,692 | 2,957 | 11,671 |
| Miles of concrete poles | 556 | - | - | 1 | - |
| Miles of underground and submarine cables | 1,950 | 2 | 8 | 3 | 729 |
| TOTAL POLE LINE MILEAGE - COMMERCIAL STATIONS | 30,288 | 257 | 1,891 | 668 | 13,242 |
| Non-generating | 4,856 | 10 | 794 | 285 | 277 |
| Generating | 25,432 | 247 | 1,097 | 383 | 12,985 |
| Hydraulic | 22,702 | 53 | 896 | 180 | 12,953 |
| Fuel | 2,730 | 194 | 201 | 203 | 12 |
| TOTAL POLE LINE MILEAGE - MUNICIPAL STATIONS | 41,844 | 24 | 1,831 | 2,507 | 526 |
| Non-generating | 10,192 | - | 453 | 191 | 170 |
| Generating | 31,652 | 24 | 1,378 | 2,316 | 356 |
| Hydraulic | 27,856 | - | 1,072 | 1,242 | 336 |
| Fuel | 3,796 | 24 | 306 | 1,074 | 20 |
| TOTAL POLE LINE MILEAGE - NON GENERATING STATIONS | 15,048 | 10 | 1,247 | 476 | 447 |
| TOTAL POLE LINE MILEAGE - GENERATING STATIONS | 57,084 | 271 | 2,475 | 2,699 | 13,321 |
| Hydraulic | 50,558 | 53 | 1,968 | 1,422 | 13,289 |
| Fuel | 6,526 | 218 | 507 | 1,277 | 32 |

TABLE 10 - AUXILIARY PLANT EQUIPMENT, 1939.

| | | | | | |
|---|---|---|---|---|---|
| TOTAL PRIMARY POWER ... H.P. | 194,139 | 165 | 12,285 | 2,950 | 36,272 |
| Per cent of total for Canada | 100.00 | 0.08 | 6.33 | 1.52 | 18.68 |
| Steam reciprocating engines ... No. | 31 | 1 | 9 | 3 | - |
| Total capacity ... H.P. | 12,491 | 75 | 3,913 | 1,025 | - |
| Steam turbines ... No. | 45 | - | 3 | 3 | 8 |
| Total capacity ... H.P. | 172,604 | - | 7,390 | 1,925 | 36,624 |
| Gas and oil engines ... No. | 48 | 2 | 7 | - | 2 |
| Total capacity ... H.P. | 9,044 | 90 | 982 | - | 48 |
| TOTAL SECONDARY POWER ... Kv.A. | 165,785 | 48 | 10,364 | 2,185 | 33,125 |
| COMMERCIAL STATIONS | | | | | |
| TOTAL PRIMARY POWER ... H.P. | 130,375 | 165 | 11,590 | 2,950 | 25,548 |
| Steam reciprocating engines ... No. | 19 | 1 | 7 | 3 | - |
| Total capacity ... H.P. | 7,793 | 75 | 3,490 | 1,025 | - |
| Steam turbines ... No. | 36 | - | 3 | 3 | 6 |
| Total capacity ... H.P. | 115,740 | - | 7,390 | 1,925 | 25,500 |
| Gas and oil engines ... No. | 33 | 2 | 3 | - | 2 |
| Total capacity ... H.P. | 6,842 | 90 | 710 | - | 48 |
| TOTAL SECONDARY POWER ... Kv.A. | 109,783 | 48 | 9,803 | 2,185 | 23,125 |
| MUNICIPAL STATIONS | | | | | |
| TOTAL PRIMARY POWER ... H.P. | 63,764 | - | 695 | - | 10,724 |
| Steam reciprocating engines ... No. | 12 | - | 2 | - | - |
| Total capacity ... H.P. | 4,698 | - | 423 | - | - |
| Steam turbines ... No. | 9 | - | - | - | 2 |
| Total capacity ... H.P. | 56,864 | - | - | - | 10,724 |
| Gas and oil engines ... No. | 15 | - | 4 | - | - |
| Total capacity ... H.P. | 2,202 | - | 272 | - | - |
| TOTAL SECONDARY POWER ... Kv.A. | 56,002 | - | 561 | - | 10,000 |

TABLEAU 9 - LONGUEUR (EN MILLES) DES LIGNES SUR POTEAUX, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| 33,622 | 3,997 | 3,911 | 4,156 | 5,500 | LONGUEUR (EN MILLES) DES LIGNES SUR POTEAUX |
| 46.63 | 5.54 | 5.42 | 5.76 | 7.62 | Pourcentage du total pour tout le Canada |
| 2,453 | 743 | - | 28 | 39 | Milles de pylones d'acier |
| 62 | - | - | - | - | Milles de poteaux d'acier |
| 29,566 | 3,220 | 3,886 | 4,060 | 5,366 | Milles de poteaux de bois |
| 555 | - | - | - | - | Milles de poteaux de ciment |
| 986 | 34 | 25 | 68 | 95 | Milles de cables souterrains et sous-marins |
| 2,602 | 1,435 | 1,861 | 3,296 | 5,036 | TOTAL (EN MILLES) POUR LE SERVICE DES USINES COMMERCIALES |
| 215 | 213 | 746 | 42 | 2,274 | Non-génératrices |
| 2,387 | 1,222 | 1,115 | 3,254 | 2,762 | Génératrices |
| 2,374 | 1,141 | - | 2,408 | 2,697 | Hydrauliques |
| 13 | 81 | 1,115 | 846 | 65 | A combustible |
| 31,020 | 2,562 | 2,050 | 860 | 464 | TOTAL (EN MILLES) POUR LE SERVICE DES USINES MUNICIPALES |
| 6,809 | 1,655 | 186 | 421 | 307 | Non-génératrices |
| 24,211 | 907 | 1,864 | 439 | 157 | Génératrices |
| 24,182 | 850 | - | 35 | 139 | Hydrauliques |
| 29 | 57 | 1,864 | 404 | 18 | A combustible |
| 7,024 | 1,868 | 932 | 463 | 2,581 | TOTAL (EN MILLES) POUR LE SERVICE DES USINES NON-GENERATRICES |
| 26,698 | 2,129 | 2,979 | 3,693 | 2,919 | TOTAL (EN MILLES) POUR LE SERVICE DES USINES GENERATRICES |
| 26,656 | 1,991 | - | 2,443 | 2,836 | Hydrauliques |
| 42 | 138 | 2,979 | 1,250 | 83 | A combustible |

TABLEAU 10 - OUTILLAGE AUXILIAIRE, 1939.

| | | | | | |
|---|---|---|---|---|---|
| 41,775 | 31,090 | - | 19,203 | 50,399 | TOTAL, FORCE MOTRICE PRIMAIRE.....H.P. |
| 21.52 | 16.02 | - | 9.89 | 25.96 | Pourcentage du total pour tout le Canada |
| 5 | 1 | - | 7 | 5 | Machines à vapeur, à mouvement alternatif.....Nomb. |
| 1,700 | 1,750 | - | 2,753 | 1,275 | Capacité totale.....H.P. |
| 5 | 7 | - | 4 | 15 | Turbines à vapeur.....Nomb. |
| 38,500 | 28,490 | - | 15,000 | 45,075 | Capacité totale.....H.P. |
| 4 | 7 | - | 9 | 17 | Moteurs à gaz et à pétrole.....Nomb. |
| 1,575 | 850 | - | 1,450 | 4,049 | Capacité totale.....H.P. |
| 33,947 | 28,711 | - | 16,847 | 40,558 | TOTAL, FORCE MOTRICE SECONDAIRE.....Kv.A. |
| | | | | | USINES COMMERCIALES |
| 10,575 | 12,000 | - | 18,963 | 48,584 | TOTAL, FORCE MOTRICE PRIMAIRE.....H.P. |
| - | - | - | 7 | 1 | Machines à vapeur, à mouvement alternatif.....Nomb. |
| - | - | - | 2,753 | 450 | Capacité totale.....H.P. |
| 3 | 3 | - | 4 | 14 | Turbines à vapeur.....Nomb. |
| 9,000 | 12,000 | - | 15,000 | 44,925 | Capacité totale.....H.P. |
| 4 | - | - | 7 | 15 | Moteurs à gaz et à pétrole.....Nomb. |
| 1,575 | - | - | 1,210 | 3,209 | Capacité totale.....H.P. |
| 7,857 | 11,250 | - | 16,662 | 39,053 | TOTAL, FORCE MOTRICE SECONDAIRE.....Kv.A. |
| | | | | | USINES MUNICIPALES |
| 31,200 | 19,090 | - | 240 | 1,815 | TOTAL, FORCE MOTRICE PRIMAIRE.....H.P. |
| 5 | 1 | - | - | 4 | Machines à vapeur, à mouvement alternatif.....Nomb. |
| 1,700 | 1,750 | - | - | 825 | Capacité totale.....H.P. |
| 2 | 4 | - | - | 1 | Turbines à vapeur.....Nomb. |
| 29,500 | 16,490 | - | - | 150 | Capacité totale.....H.P. |
| - | 7 | - | 2 | 2 | Moteurs à gaz et à pétrole.....Nomb. |
| - | 850 | - | 240 | 840 | Capacité totale.....H.P. |
| 26,290 | 17,461 | - | 185 | 1,505 | TOTAL, FORCE MOTRICE SECONDAIRE.....Kv.A. |

TABLE 11 - TOTAL EQUIPMENT INCLUDING AUXILIARY PLANT EQUIPMENT, 1939.

| | | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|---|
| TOTAL PRIMARY POWER | H.P. | 7,801,261 | 8,524 | 172,034 | 142,352 | 3,669,527 |
| Per cent of total for Canada | | 100.00 | 0.11 | 2.21 | 1.82 | 47.03 |
| Water wheels and turbines | No. | 826 | 7 | 56 | 16 | 266 |
| Total capacity | H.P. | 7,240,983 | 392 | 95,045 | 105,760 | 3,630,505 |
| Steam reciprocating engines | No. | 75 | 1 | 11 | 8 | - |
| Total capacity | H.P. | 22,953 | 75 | 4,188 | 4,205 | - |
| Steam turbines | No. | 115 | 4 | 16 | 9 | 9 |
| Total capacity | H.P. | 492,512 | 6,680 | 70,903 | 32,005 | 36,374 |
| Gas and oil engines | No. | 483 | 10 | 25 | 4 | 9 |
| Total capacity | H.P. | 44,813 | 1,377 | 1,898 | 582 | 2,648 |
| TOTAL DYNAMO CAPACITY | Kv.A. | 6,601,201 | 6,304 | 146,036 | 120,749 | 3,238,695 |
| Per cent of total for Canada | | 100.00 | 0.10 | 2.21 | 1.83 | 49.07 |
| Dynamos, A.C. | No. | 1,251 | 19 | 99 | 35 | 279 |
| Total capacity | Kv.A. | 6,595,123 | 6,304 | 145,646 | 119,899 | 3,238,669 |
| Dynamos, D.C. | No. | 228 | - | 7 | 2 | 2 |
| Total capacity | Kw. | 6,078 | - | 390 | 850 | 26 |
| COMMERCIAL STATIONS | | | | | | |
| TOTAL PRIMARY POWER | H.P. | 5,516,007 | 7,289 | 87,179 | 112,912 | 3,625,573 |
| Water wheels and turbines | No. | 542 | 7 | 18 | 10 | 240 |
| Total capacity | H.P. | 5,226,483 | 392 | 14,240 | 92,900 | 3,599,795 |
| Steam reciprocating engines | No. | 44 | 1 | 9 | 8 | - |
| Total capacity | H.P. | 13,377 | 75 | 3,765 | 4,205 | - |
| Steam turbines | No. | 70 | 4 | 13 | 6 | 7 |
| Total capacity | H.P. | 250,020 | 6,680 | 68,245 | 15,625 | 25,650 |
| Gas and oil engines | No. | 363 | 4 | 10 | 2 | 4 |
| Total capacity | H.P. | 26,127 | 142 | 929 | 182 | 128 |
| TOTAL DYNAMO CAPACITY | Kv.A. | 4,764,528 | 5,287 | 76,644 | 96,246 | 3,203,170 |
| Dynamos, A.C. | No. | 796 | 13 | 41 | 24 | 246 |
| Total capacity | Kv.A. | 4,760,063 | 5,287 | 76,254 | 95,396 | 3,203,144 |
| Dynamos, D.C. | No. | 203 | - | 7 | 2 | 2 |
| Total capacity | Kw. | 4,465 | - | 390 | 850 | 26 |
| MUNICIPAL STATIONS | | | | | | |
| TOTAL PRIMARY POWER | H.P. | 2,285,254 | 1,235 | 84,855 | 29,440 | 43,954 |
| Water wheels and turbines | No. | 284 | - | 38 | 6 | 26 |
| Total capacity | H.P. | 2,014,500 | - | 80,805 | 12,860 | 30,710 |
| Steam reciprocating engines | No. | 31 | - | 2 | - | - |
| Total capacity | H.P. | 9,576 | - | 423 | - | - |
| Steam turbines | No. | 45 | - | 3 | 3 | 2 |
| Total capacity | H.P. | 242,492 | - | 2,658 | 16,360 | 10,724 |
| Gas and oil engines | No. | 120 | 6 | 15 | 2 | 5 |
| Total capacity | H.P. | 18,686 | 1,235 | 969 | 200 | 2,520 |
| TOTAL DYNAMO CAPACITY | Kv.A. | 1,836,673 | 1,017 | 69,392 | 24,503 | 35,525 |
| Dynamos, A.C. | No. | 455 | 6 | 58 | 11 | 33 |
| Total capacity | Kv.A. | 1,835,060 | 1,017 | 69,392 | 24,503 | 35,525 |
| Dynamos, D.C. | No. | 25 | - | - | - | - |
| Total capacity | Kw. | 1,613 | - | - | - | - |

TABLEAU 11 - OUTILLAGE GLOBAL, Y COMPRIS OUTILLAGE AUXILIAIRE, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | | |
|---|---|---|---|---|---|---|
| 2,297,559 | 536,659 | 164,538 | 169,232 | 640,836 | TOTAL FORCE MOTRICE PRIMAIRE | H. P. |
| 29.45 | 6.88 | 2.11 | 2.17 | 8.22 | Pourcentage du total pour le Canada | |
| 347 | 43 | - | 11 | 80 | Turbines et roues hydrauliques | Nomb. |
| 2,254,344 | 500,800 | - | 69,140 | 584,997 | Capacité totale | H. P. |
| 14 | 8 | 2 | 23 | 10 | Machines à vapeur, à mouvement alternatif | Nomb. |
| 2,175 | 2,403 | 1,150 | 7,013 | 1,744 | Capacité totale | H. P. |
| 5 | 9 | 25 | 20 | 18 | Turbines à vapeur | Nomb. |
| 38,500 | 29,740 | 142,300 | 88,095 | 47,915 | Capacité totale | H. P. |
| 12 | 47 | 228 | 98 | 50 | Moteurs à gaz et à pétrole | Nomb. |
| 2,540 | 3,716 | 21,088 | 4,984 | 6,180 | Capacité totale | H. P. |
| 1,846,028 | 440,382 | 138,718 | 140,129 | 524,160 | CAPACITE TOTALE DES DYNAMOS | Kv.A. |
| 27.96 | 6.67 | 2.10 | 2.12 | 7.94 | Pourcentage du total pour le Canada | |
| 372 | 99 | 122 | 80 | 146 | Dynamos, C.A. | Nomb. |
| 1,845,963 | 440,184 | 137,260 | 137,261 | 523,937 | Capacité totale | Kv.A. |
| 3 | 7 | 127 | 68 | 12 | Dynamos, C.D. | Nomb. |
| 65 | 198 | 1,458 | 2,868 | 223 | Capacité totale | Kw. |
| | | | | | USINES COMMERCIALES | |
| 540,764 | 359,255 | 56,937 | 97,452 | 628,646 | TOTAL, FORCE MOTRICE PRIMAIRE | H. P. |
| 164 | 23 | - | 9 | 71 | Turbines et roues hydrauliques | Nomb. |
| 529,949 | 345,800 | - | 68,180 | 575,227 | Capacité totale | H. P. |
| 4 | - | - | 18 | 4 | Machines à vapeur, à mouvement alternatif | Nomb. |
| 165 | - | - | 4,303 | 864 | Capacité totale | H. P. |
| 3 | 3 | 11 | 6 | 17 | Turbines à vapeur | Nomb. |
| 9,000 | 12,000 | 44,755 | 20,300 | 47,765 | Capacité totale | H. P. |
| 6 | 25 | 173 | 94 | 45 | Moteurs à gaz et à pétrole | Nomb. |
| 1,650 | 1,455 | 12,182 | 4,669 | 4,790 | Capacité totale | H. P. |
| 453,669 | 290,517 | 46,758 | 76,936 | 515,301 | CAPACITE TOTALE DES DYNAMOS | Kv.A. |
| 173 | 47 | 69 | 58 | 125 | Dynamos, C.A. | Nomb. |
| 453,639 | 290,474 | 45,548 | 75,243 | 515,078 | Capacité totale | Kv.A. |
| 2 | 4 | 109 | 65 | 12 | Dynamos, C.D. | Nomb. |
| 30 | 43 | 1,210 | 1,693 | 223 | Capacité totale | Kw. |
| | | | | | USINES MUNICIPALES | |
| 1,756,795 | 177,404 | 107,601 | 71,780 | 12,190 | TOTAL, FORCE MOTRICE PRIMAIRE | H. P. |
| 183 | 20 | - | 2 | 9 | Turbines et roues hydrauliques | Nomb. |
| 1,724,395 | 155,000 | - | 960 | 9,770 | Capacité totale | H. P. |
| 10 | 6 | 2 | 5 | 6 | Machines à vapeur, à mouvement alternatif | Nomb. |
| 2,010 | 2,403 | 1,150 | 2,710 | 880 | Capacité totale | H. P. |
| 2 | 6 | 14 | 14 | 1 | Turbines à vapeur | Nomb. |
| 29,500 | 17,740 | 97,545 | 67,795 | 150 | Capacité totale | H. P. |
| 6 | 22 | 55 | 4 | 5 | Moteurs à gaz et à pétrole | Nomb. |
| 890 | 2,261 | 8,906 | 315 | 1,390 | Capacité totale | H. P. |
| 1,392,359 | 149,865 | 91,960 | 63,193 | 8,859 | CAPACITE TOTALE DES DYNAMOS | Kv.A. |
| 199 | 52 | 53 | 22 | 21 | Dynamos, C.A. | Nomb. |
| 1,392,324 | 149,710 | 91,712 | 62,018 | 8,859 | Capacité totale | Kv.A. |
| 1 | 3 | 18 | 3 | - | Dynamos, C.D. | Nomb. |
| 35 | 155 | 248 | 1,175 | - | Capacité totale | Kw. |

TABLE 12 - MAIN PLANT EQUIPMENT, 1939.

| | | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|---|
| TOTAL PRIMARY POWER | H.P. | 7,607,122 | 8,359 | 159,749 | 139,402 | 3,633,255 |
| Per cent of total for Canada | | 100.00 | 0.11 | 2.10 | 1.83 | 47.76 |
| Water wheels and turbines | No. | 826 | 7 | 56 | 16 | 266 |
| Total capacity | H.P. | 7,240,983 | 392 | 95,045 | 105,760 | 3,630,505 |
| Steam reciprocating engines | No. | 44 | - | 2 | 5 | - |
| Total capacity | H.P. | 10,462 | - | 275 | 3,180 | - |
| Steam turbines | No. | 70 | 4 | 13 | 6 | 1 |
| Total capacity | H.P. | 319,908 | 6,680 | 63,513 | 30,080 | 150 |
| Gas and oil engines | No. | 435 | 8 | 18 | 4 | 7 |
| Total capacity | H.P. | 35,769 | 1,287 | 916 | 382 | 2,600 |
| TOTAL DYNAMO CAPACITY | Kv.A. | 6,435,416 | 6,256 | 135,672 | 118,564 | 3,250,570 |
| Per cent of total for Canada | | 100.00 | 0.10 | 2.11 | 1.84 | 49.80 |
| Dynamos, A.C. | No. | 1,138 | 18 | 83 | 29 | 271 |
| Total capacity | Kv.A. | 6,430,738 | 6,256 | 135,582 | 117,714 | 3,205,544 |
| Dynamos, D.C. | No. | 225 | - | 6 | 2 | 2 |
| Total capacity | Kw. | 4,678 | - | 90 | 850 | 26 |
| COMMERCIAL STATIONS | | | | | | |
| TOTAL PRIMARY POWER | H.P. | 5,385,632 | 7,124 | 75,589 | 109,962 | 3,600,025 |
| Per cent of total for Canada | | 100.00 | 0.13 | 1.40 | 2.04 | 66.84 |
| Water wheels and turbines | No. | 542 | 7 | 18 | 10 | 240 |
| Total capacity | H.P. | 5,226,483 | 392 | 14,240 | 92,900 | 3,599,795 |
| Steam reciprocating engines | No. | 25 | - | 2 | 5 | - |
| Total capacity | H.P. | 5,584 | - | 275 | 3,180 | - |
| Steam turbines | No. | 34 | 4 | 10 | 3 | 1 |
| Total capacity | H.P. | 134,280 | 6,680 | 60,855 | 13,700 | 150 |
| Gas and oil engines | No. | 330 | 2 | 7 | 2 | 2 |
| Total capacity | H.P. | 19,285 | 52 | 219 | 182 | 80 |
| TOTAL DYNAMO CAPACITY | Kv.A. | 4,654,745 | 5,239 | 66,841 | 94,061 | 3,180,045 |
| Per cent of total for Canada | | 100.00 | 0.11 | 1.44 | 2.02 | 68.32 |
| Dynamos, A.C. | No. | 719 | 12 | 31 | 16 | 240 |
| Total capacity | Kv.A. | 4,651,680 | 5,239 | 66,751 | 93,211 | 3,180,019 |
| Dynamos, D.C. | No. | 200 | - | 6 | 2 | 2 |
| Total capacity | Kw. | 3,065 | - | 90 | 850 | 26 |
| MUNICIPAL STATIONS | | | | | | |
| TOTAL PRIMARY POWER | H.P. | 2,221,490 | 1,235 | 84,160 | 29,440 | 33,230 |
| Per cent of total for Canada | | 100.00 | 0.06 | 3.79 | 1.32 | 1.49 |
| Water wheels and turbines | No. | 284 | - | 38 | 6 | 26 |
| Total capacity | H.P. | 2,014,500 | - | 80,805 | 12,860 | 30,710 |
| Steam reciprocating engines | No. | 19 | - | - | - | - |
| Total capacity | H.P. | 4,878 | - | - | - | - |
| Steam turbines | No. | 36 | - | 3 | 3 | - |
| Total capacity | H.P. | 185,628 | - | 2,658 | 16,380 | - |
| Gas and oil engines | No. | 105 | 6 | 11 | 2 | 5 |
| Total capacity | H.P. | 16,484 | 1,235 | 697 | 200 | 2,520 |
| TOTAL DYNAMO CAPACITY | Kv.A. | 1,780,671 | 1,017 | 68,831 | 24,503 | 26,525 |
| Per cent of total for Canada | | 100.00 | 0.06 | 3.87 | 1.38 | 1.43 |
| Dynamos, A.C. | No. | 419 | 6 | 52 | 11 | 31 |
| Total capacity | Kv.A. | 1,779,058 | 1,017 | 68,831 | 24,503 | 25,525 |
| Dynamos, D.C. | No. | 25 | - | - | - | - |
| Total capacity | Kw. | 1,613 | - | - | - | - |
| HYDRAULIC STATIONS | | | | | | |
| TOTAL DYNAMO CAPACITY | Kv.A. | 6,124,265 | 359 | 79,172 | 91,238 | 3,203,281 |
| Per cent of total for Canada | | 100.00 | 0.01 | 1.29 | 1.49 | 52.30 |
| Dynamos, A.C. | No. | 820 | 6 | 56 | 15 | 263 |
| Total capacity | Kv.A. | 6,123,969 | 359 | 79,172 | 91,038 | 3,203,255 |
| Dynamos, D.C. | No. | 5 | - | - | 1 | 2 |
| Total capacity | Kw. | 296 | - | - | 200 | 26 |
| FUEL STATIONS | | | | | | |
| TOTAL DYNAMO CAPACITY | Kv.A. | 311,151 | 5,897 | 56,500 | 27,326 | 2,289 |
| Per cent of total for Canada | | 100.00 | 1.90 | 18.16 | 8.78 | 0.74 |
| Dynamos, A.C. | No. | 318 | 12 | 27 | 14 | 8 |
| Total capacity | Kv.A. | 306,769 | 5,897 | 56,410 | 26,676 | 2,289 |
| Dynamos, D.C. | No. | 220 | - | 6 | 1 | - |
| Total capacity | Kw. | 4,382 | - | 90 | 650 | - |

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

TABLEAU 12 - OUTILLAGE DES USINES PRINCIPALES, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| 2,255,784 | 505,569 | 164,538 | 150,029 | 590,437 | TOTAL, FORCE MOTRICE PRIMAIRE.....H.P. |
| 29.66 | 6.65 | 2.16 | 1.97 | 7.76 | Pourcentage du total pour le Canada..... |
| 347 | 43 | - | 11 | 80 | Roues hydrauliques et turbines.....Nomb. |
| 2,254,344 | 500,800 | - | 69,140 | 584,997 | Capacité totale.....H.P. |
| 9 | 5 | 2 | 16 | 5 | Machines à vapeur, à mouvement alternatif.....Nomb. |
| 475 | 653 | 1,150 | 4,260 | 469 | Capacité totale.....H.P. |
| - | 2 | 25 | 16 | 3 | Turbines à vapeur.....Nomb. |
| - | 1,250 | 142,300 | 73,095 | 2,840 | Capacité totale.....H.P. |
| 8 | 40 | 228 | 89 | 33 | Moteurs à gaz et à pétrole.....Nomb. |
| 965 | 2,866 | 21,088 | 3,534 | 2,131 | Capacité totale.....H.P. |
| 1,812,081 | 411,671 | 138,718 | 123,282 | 483,602 | CAPACITE DES DYNAMOS.....Kv.A. |
| 28.16 | 6.40 | 2.16 | 1.92 | 7.51 | Pourcentage du total pour le Canada..... |
| 359 | 84 | 122 | 62 | 110 | Dynamos, C.A.....Nomb. |
| 1,812,016 | 411,473 | 137,260 | 121,514 | 483,379 | Capacité totale.....Kv.A. |
| 3 | 7 | 127 | 66 | 12 | Dynamos, C.D.....Nomb. |
| 65 | 198 | 1,458 | 1,788 | 223 | Capacité totale.....Kw. |
| | | | | | USINES COMMERCIALES |
| 530,189 | 347,255 | 56,937 | 78,489 | 580,062 | TOTAL, FORCE MOTRICE PRIMAIRE.....H.P. |
| 9.85 | 6.45 | 1.06 | 1.46 | 10.77 | Pourcentage du total pour le Canada..... |
| 164 | 23 | - | 9 | 71 | Turbines et roues hydrauliques.....Nomb. |
| 529,949 | 345,600 | - | 68,180 | 575,227 | Capacité totale.....H.P. |
| 4 | - | - | 11 | 3 | Machines à vapeur, à mouvement alternatif.....Nomb. |
| 165 | - | - | 1,550 | 414 | Capacité totale.....H.P. |
| - | - | 11 | 2 | 3 | Turbines à vapeur.....Nomb. |
| - | - | 44,755 | 5,300 | 2,840 | Capacité totale.....H.P. |
| 2 | 25 | 173 | 67 | 30 | Moteurs à gaz et à pétrole.....Nomb. |
| 75 | 1,455 | 12,182 | 3,459 | 1,581 | Capacité totale.....H.P. |
| 446,012 | 279,267 | 46,758 | 60,274 | 476,248 | CAPACITE DES DYNAMOS.....Kv.A. |
| 9.58 | 6.00 | 1.01 | 1.29 | 10.23 | Pourcentage du total pour le Canada..... |
| 167 | 44 | 69 | 42 | 98 | Dynamos, C.A.....Nomb. |
| 445,982 | 279,224 | 45,548 | 59,681 | 476,025 | Capacité totale.....Kv.A. |
| 2 | 4 | 109 | 63 | 12 | Dynamos, C.D.....Nomb. |
| 30 | 43 | 1,210 | 593 | 223 | Capacité totale.....Kw. |
| | | | | | USINES MUNICIPALES |
| 1,725,595 | 158,314 | 107,601 | 71,540 | 10,375 | TOTAL, FORCE MOTRICE PRIMAIRE.....H.P. |
| 77.68 | 7.13 | 4.84 | 3.22 | 0.47 | Pourcentage du total pour le Canada..... |
| 183 | 20 | - | 2 | 9 | Turbines et roues hydrauliques.....Nomb. |
| 1,724,395 | 155,000 | - | 960 | 9,770 | Capacité totale.....H.P. |
| 5 | 5 | 2 | 5 | 2 | Machines à vapeur, à mouvement alternatif.....Nomb. |
| 310 | 653 | 1,150 | 2,710 | 55 | Capacité totale.....H.P. |
| - | 2 | 14 | 14 | - | Turbines à vapeur.....Nomb. |
| - | 1,250 | 97,545 | 67,795 | - | Capacité totale.....H.P. |
| 6 | 15 | 55 | 2 | 3 | Moteurs à gaz et à pétrole.....Nomb. |
| 890 | 1,411 | 8,906 | 75 | 550 | Capacité totale.....H.P. |
| 1,366,069 | 132,404 | 91,960 | 63,008 | 7,354 | CAPACITE DES DYNAMOS.....Kv.A. |
| 76.72 | 7.43 | 5.16 | 3.54 | 0.41 | Pourcentage du total pour le Canada..... |
| 192 | 40 | 53 | 20 | 14 | Dynamos, C.A.....Nomb. |
| 1,386,034 | 132,249 | 91,712 | 61,833 | 7,354 | Capacité totale.....Kv.A. |
| 1 | 3 | 18 | 3 | - | Dynamos, C.D.....Nomb. |
| 35 | 155 | 248 | 1,175 | - | Capacité totale.....Kw. |
| | | | | | USINES HYDRAULIQUES |
| 1,810,984 | 407,600 | - | 52,450 | 479,181 | CAPACITE TOTALE DES DYNAMOS.....Kv.A. |
| 29.57 | 6.66 | - | 0.86 | 7.82 | Pourcentage du total pour le Canada..... |
| 345 | 43 | - | 11 | 81 | Dynamos, C.A.....Nomb. |
| 1,810,984 | 407,600 | - | 52,450 | 479,111 | Capacité totale.....Kv.A. |
| - | - | - | - | 2 | Dynamos, C.D.....Nomb. |
| - | - | - | - | 70 | Capacité totale.....Kw. |
| | | | | | USINES A COMBUSTIBLE |
| 1,097 | 4,071 | 138,718 | 70,832 | 4,421 | CAPACITE TOTALE DES DYNAMOS.....Kv.A. |
| 0.35 | 1.31 | 44.58 | 22.76 | 1.42 | Pourcentage du total pour le Canada..... |
| 14 | 41 | 122 | 51 | 29 | Dynamos, C.A.....Nomb. |
| 1,032 | 3,873 | 137,260 | 69,064 | 4,268 | Capacité totale.....Kv.A. |
| 3 | 7 | 127 | 66 | 10 | Dynamos, C.D.....Nomb. |
| 85 | 198 | 1,458 | 1,768 | 153 | Capacité totale.....Kw. |

X - Rendement maximum d'une usine hydraulique de la Saskatchewan inclus dans le Manitoba.

TABLE 13 - MAIN PLANT EQUIPMENT CLASSIFIED, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec | Ontario |
|---|---|---|---|---|---|---|
| PRIMARY POWER..... H.P. | 7,607,122 | 8,359 | 159,749 | 139,402 | 3,633,255 | 2,255,784 |
| Water wheels and turbines..... No. | 826 | 7 | 56 | 16 | 266 | 347 |
| Total H.P. | 7,240,983 | 392 | 95,045 | 105,760 | 3,630,505 | 2,254,344 |
| Under 500 H.P..... No. | 137 | 7 | 21 | 2 | 29 | 53 |
| Total H.P. | 27,998 | 392 | 4,885 | 710 | 5,561 | 11,454 |
| 500 - 2,000 H.P..... No. | 216 | - | 18 | 3 | 62 | 122 |
| Total H.P. | 234,739 | - | 19,770 | 2,550 | 65,694 | 133,355 |
| 2,000 - 5,000 H.P..... No. | 135 | - | 11 | 6 | 33 | 66 |
| Total H.P. | 397,821 | - | 36,890 | 17,500 | 94,550 | 188,935 |
| 5,000 - 10,000 H.P..... No. | 109 | - | 6 | 1 | 33 | 32 |
| Total H.P. | 720,225 | - | 33,500 | 5,000 | 233,400 | 207,500 |
| 10,000 - 15,000 H.P..... No. | 84 | - | - | - | 28 | 44 |
| Total H.P. | 981,300 | - | - | - | 301,900 | 528,600 |
| 15,000 - 25,000 H.P..... No. | 51 | - | - | 4 | 17 | 11 |
| Total H.P. | 963,000 | - | - | 80,000 | 352,500 | 182,500 |
| 25,000 H.P. and up..... No. | 94 | - | - | - | 64 | 19 |
| Total H.P. | 3,915,900 | - | - | - | 2,576,900 | 1,002,000 |
| Steam reciprocating engines..... No. | 44 | - | 2 | 5 | - | 9 |
| Total H.P. | 10,462 | - | 275 | 3,180 | - | 475 |
| Under 500 H. P..... No. | 37 | - | 2 | 2 | - | 9 |
| Total H.P. | 4,502 | - | 275 | 280 | - | 475 |
| 500 H.P. and up..... No. | 7 | - | - | 3 | - | - |
| Total H.P. | 5,960 | - | - | 2,900 | - | - |
| Steam turbines..... No. | 70 | 4 | 13 | 6 | 1 | - |
| Total H.P. | 319,908 | 6,680 | 63,513 | 30,080 | 150 | - |
| Under 500 H.P..... No. | 6 | - | 1 | - | 1 | - |
| Total H.P. | 1,514 | - | 402 | - | 150 | - |
| 500 - 2,000 H.P..... No. | 19 | 3 | 2 | 1 | - | - |
| Total H.P. | 21,199 | 4,180 | 2,256 | 700 | - | - |
| 2,000 - 5,000 H.P..... No. | 23 | 1 | 4 | 3 | - | - |
| Total H.P. | 69,866 | 2,500 | 12,080 | 11,000 | - | - |
| 5,000 - 10,000 H.P. and up .... No. | 22 | - | 6 | 2 | - | - |
| Total H.P. | 227,329 | - | 48,775 | 18,380 | - | - |
| Gas and oil engines..... No. | 435 | 6 | 18 | 4 | 7 | 8 |
| Total H.P. | 35,769 | 1,287 | 916 | 382 | 2,600 | 965 |
| SECONDARY POWER | | | | | | |
| Dynamos, A.C. and D.C..... No. | 1,363 | 18 | 89 | 31 | 273 | 362 |
| Total Kv.A. | 6,435,416 | 6,256 | 135,672 | 118,564 | 3,205,570 | 1,812,081 |
| Dynamos, A.C..... No. | 1,138 | 18 | 83 | 29 | 271 | 359 |
| Total Kv.A. | 6,430,738 | 6,256 | 135,582 | 117,714 | 3,205,544 | 1,812,016 |
| Under 50 Kv.A..... No. | 105 | 5 | 9 | - | 6 | 7 |
| Total Kv.A. | 3,063 | 136 | 269 | - | 223 | 198 |
| 50 - 200 Kv.A..... No. | 171 | 7 | 15 | 7 | 13 | 34 |
| Total Kv.A. | 18,592 | 678 | 1,635 | 804 | 1,408 | 4,035 |
| 200 - 500 Kv.A..... No. | 134 | 2 | 15 | 1 | 23 | 42 |
| Total Kv.A. | 41,868 | 612 | 4,663 | 375 | 8,088 | 13,171 |
| 500 - 1,000 Kv.A..... No. | 136 | 1 | 9 | 4 | 38 | 66 |
| Total Kv.A. | 97,333 | 625 | 6,445 | 2,750 | 27,600 | 47,520 |
| 1,000 - 5,000 Kv.A..... No. | 271 | 3 | 27 | 11 | 53 | 116 |
| Total Kv.A. | 624,760 | 4,205 | 70,395 | 28,475 | 112,295 | 242,960 |
| 5,000 - 10,000 Kv.A..... No. | 113 | - | 8 | 2 | 25 | 47 |
| Total Kv.A. | 791,797 | - | 52,175 | 15,310 | 166,020 | 353,592 |
| 10,000 - 15,000 Kv.A..... No. | 72 | - | - | - | 32 | 24 |
| Total Kv.A. | 779,825 | - | - | - | 333,660 | 257,040 |
| 15,000 - 25,000 Kv.A..... No. | 58 | - | - | 4 | 20 | 8 |
| Total Kv.A. | 1,099,000 | - | - | 70,000 | 409,250 | 154,000 |
| 25,000 Kv.A. and up..... No. | 78 | - | - | - | 61 | 15 |
| Total Kv.A. | 2,974,500 | - | - | - | 2,147,000 | 739,500 |
| Dynamos, D.C..... No. | 225 | - | 6 | 2 | 2 | 3 |
| Total Kw. | 4,678 | - | 90 | 850 | 26 | 65 |
| Under 50 Kw..... No. | 219 | - | 6 | - | 2 | 3 |
| Total Kw. | 2,553 | - | 90 | - | 26 | 65 |
| 50 - 200 Kw..... No. | 2 | - | - | - | - | - |
| Total Kw. | 125 | - | - | - | - | - |
| 200 - 500 Kw..... No. | 2 | - | - | 1 | - | - |
| Total Kw. | 600 | - | - | 200 | - | - |
| 500 Kw. and up..... No. | 2 | - | - | 1 | - | - |
| Total Kw. | 1,400 | - | - | 650 | - | - |

TABLEAU 13 - OUTILLAGE CLASSIFIE DES USINES PRINCIPALES, 1939.

| Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | Commercial | Municipal | |
|---|---|---|---|---|---|---|
| 505,569 | 164,538 | 150,029 | 590,437 | 5,385,632 | 2,221,490 | FORCE MOTRICE PRIMAIRE..... H.P. |
| 43 | - | 11 | 80 | 542 | 284 | Turbines et roues hydrauliques..... Nomb. |
| 500,800 | - | 69,140 | 584,997 | 5,226,483 | 2,014,500 | Total H.P. |
| - | - | 3 | 22 | 90 | 47 | Moins de 500 H.P..... Nomb. |
| - | - | 1,140 | 3,856 | 15,693 | 12,305 | Total H.P. |
| - | - | - | 11 | 118 | 98 | 500 - 2,000 H.P..... Nomb. |
| - | - | - | 13,370 | 122,994 | 111,745 | Total H.P. |
| 4 | - | 2 | 13 | 91 | 44 | 2,000 - 5,000 H.P..... Nomb. |
| 12,800 | - | 8,000 | 39,146 | 272,271 | 125,550 | Total H.P. |
| 21 | - | 4 | 12 | 72 | 37 | 5,000 - 10,000 H.P..... Nomb. |
| 130,000 | - | 24,000 | 86,825 | 492,525 | 227,700 | Total H.P. |
| 7 | - | - | 5 | 56 | 28 | 10,000 - 15,000 H.P..... Nomb. |
| 92,000 | - | - | 58,800 | 628,600 | 352,700 | Total H.P. |
| 5 | - | 2 | 12 | 40 | 11 | 15,000 - 25,000 H.P..... Nomb. |
| 98,000 | - | 36,000 | 214,000 | 780,500 | 182,500 | Total H.P. |
| 6 | - | - | 5 | 75 | 19 | 25,000 et plus H.P..... Nomb. |
| 168,000 | - | - | 169,000 | 2,913,900 | 1,002,000 | Total H.P. |
| 5 | 2 | 16 | 5 | 25 | 19 | Machines à vapeur, à mouvement Nomb. |
| 653 | 1,150 | 4,260 | 469 | 5,584 | 4,878 | alternatif..... Total H.P. |
| 5 | 1 | 13 | 5 | 22 | 15 | Moins et 500 H.P..... Nomb. |
| 653 | 400 | 1,950 | 469 | 2,684 | 1,818 | Total H.P. |
| - | 1 | 3 | - | 3 | 4 | 500 H.P. et plus..... Nomb. |
| - | 750 | 2,310 | - | 2,900 | 3,060 | Total H.P. |
| 2 | 25 | 16 | 3 | 34 | 36 | Turbines à vapeur..... Nomb. |
| 1,250 | 142,300 | 73,095 | 2,840 | 134,280 | 185,628 | Total H.P. |
| 1 | 1 | 2 | - | 1 | 5 | Moins et 500 H.P..... Nomb. |
| 400 | 267 | 295 | - | 150 | 1,364 | Total H.P. |
| 1 | 7 | 2 | 3 | 11 | 8 | 500 - 2,000 H.P..... Nomb. |
| 850 | 8,373 | 2,000 | 2,840 | 12,923 | 8,276 | Total H.P. |
| - | 8 | 7 | - | 12 | 11 | 2,000 - 5,000 H.P..... Nomb. |
| - | 24,286 | 20,000 | - | 34,166 | 35,700 | Total H.P. |
| - | 9 | 5 | - | 10 | 12 | 5,000 - 10,000 H.P..... Nomb. |
| - | 109,374 | 50,800 | - | 87,041 | 140,288 | Total H.P. |
| 40 | 228 | 89 | 33 | 330 | 105 | Moteurs à gaz et à pétrole..... Nomb. |
| 2,866 | 21,088 | 3,534 | 2,131 | 19,285 | 16,484 | Total H.P. |
| | | | | | | FORCE MOTRICE SECONDAIRE |
| 91 | 249 | 128 | 122 | 919 | 444 | Dynamos, C.A. et C.D..... Nomb. |
| 411,671 | 138,718 | 123,282 | 483,602 | 4,654,745 | 1,780,671 | Total Kv.A. |
| 84 | 122 | 62 | 110 | 719 | 419 | Dynamos, C.A..... Nomb. |
| 411,473 | 137,260 | 121,514 | 483,379 | 4,651,680 | 1,779,058 | Total Kv.A. |
| 22 | 27 | 13 | 16 | 72 | 33 | Moins et 50 Kv.A..... Nomb. |
| 601 | 856 | 322 | 458 | 2,139 | 924 | Total Kv.A. |
| 14 | 38 | 19 | 24 | 111 | 60 | 50 - 200 Kv.A..... Nomb. |
| 1,271 | 4,211 | 2,104 | 2,446 | 11,530 | 7,062 | Total Kv.A. |
| 4 | 29 | 7 | 11 | 64 | 70 | 200 - 500 Kv.A..... Nomb. |
| 1,200 | 8,502 | 2,125 | 3,112 | 19,461 | 22,407 | Total Kv.A. |
| 1 | 6 | 3 | 8 | 76 | 60 | 500 - 1,000 Kv.A..... Nomb. |
| 781 | 3,886 | 2,088 | 5,638 | 53,545 | 43,788 | Total Kv.A. |
| 14 | 14 | 14 | 19 | 164 | 107 | 1,000 - 5,000 Kv.A..... Nomb. |
| 46,350 | 32,305 | 42,375 | 45,400 | 378,405 | 246,355 | Total Kv.A. |
| 11 | 4 | 2 | 14 | 69 | 44 | 5,000 - 10,000 Kv.A..... Nomb. |
| 70,750 | 25,000 | 11,250 | 97,700 | 481,625 | 310,172 | Total Kv.A. |
| 7 | 2 | 1 | 6 | 53 | 19 | 10,000 - 15,000 Kv.A..... Nomb. |
| 76,000 | 25,000 | 12,500 | 75,625 | 581,225 | 198,600 | Total Kv.A. |
| 11 | 2 | 3 | 10 | 47 | 11 | 15,000 - 25,000 Kv.A..... Nomb. |
| 214,500 | 37,500 | 48,750 | 165,000 | 888,750 | 210,250 | Total Kv.A. |
| - | - | - | 2 | 63 | 15 | 25,000 Kv.A. et plus..... Nomb. |
| - | - | - | 88,000 | 2,235,000 | 739,500 | Total Kv.A. |
| 7 | 127 | 66 | 12 | 200 | 25 | Dynamos, C.D..... Nomb. |
| 198 | 1,458 | 1,768 | 223 | 3,065 | 1,613 | Total Kw. |
| 5 | 127 | 64 | 12 | 198 | 21 | Moins de 50 Kw..... Nomb. |
| 73 | 1,458 | 618 | 223 | 2,215 | 338 | Total Kw. |
| 2 | - | - | - | - | 2 | 50 - 200 Kw..... Nomb. |
| 125 | - | - | - | - | 125 | Total Kw. |
| - | - | 1 | - | 1 | 1 | 200 - 500 Kw..... Nomb. |
| - | - | 400 | - | 200 | 400 | Total Kw. |
| - | - | 1 | - | 1 | 1 | 500 Kw. et plus..... Nomb. |
| - | - | 750 | - | 650 | 750 | Total Kw. |

TABLE 14 - ELECTRIC ENERGY GENERATED, 1939.

| | Canada | Prince Edward Island | Nova Scotia | New Brunswick | Quebec |
|---|---|---|---|---|---|
| ALL STATIONS | | | | | |
| Total kilowatt hours generated..... (thousands)... | 28,338,030 | 7,747 | 436,269 | 459,546 | 15,234,384 |
| Per cent of total for Canada..... | 100.00 | .03 | 1.54 | 1.62 | 53.76 |
| Kilowatt hours generated by non-generating stations..... (thousands)... | 5,228 | - | 5,138 | - | - |
| Kilowatt hours generated by generating stns.... (thousands)... | 28,332,802 | 7,747 | 431,131 | 459,546 | 15,234,384 |
| Kv.A. capacity of generating stations..... | 6,570,284 | 6,304 | 135,847 | 118,564 | 3,228,695 |
| Ratio of output to maximum capacity..... p.c.... | 49.81 | 14.03 | 36.23 | 44.25 | 54.55 |
| Average kilowatt hours per Kv.A..... | 4,312 | 1,229 | 3,174 | 3,876 | 4,718 |
| GENERATING STATIONS | | | | | |
| COMMERCIAL STATIONS | | | | | |
| TOTAL | | | | | |
| Kilowatt hours generated..... (thousands)... | 21,285,710 | 6,594 | 176,942 | 400,254 | 15,162,693 |
| Kv.A. capacity..... | 4,750,076 | 5,287 | 66,991 | 94,061 | 3,203,170 |
| Ratio of output to maximum capacity.....p.c.... | 51.71 | 14.24 | 30.15 | 48.57 | 54.73 |
| Average kilowatt hours per Kv.A..... | 4,481 | 1,247 | 2,641 | 4,255 | 4,734 |
| Hydraulic Stations | | | | | |
| Kilowatt hours generated..... (thousands)... | 21,046,059 | 230 | 44,759 | 375,308 | 15,162,463 |
| Kv.A. capacity..... | 4,617,314 | 407 | 13,076 | 80,975 | 3,202,981 |
| Ratio of output to maximum capacity..... p.c.... | 52.62 | 6.45 | 39.08 | 52.91 | 54.73 |
| Average kilowatt hours per Kv.A..... | 4,558 | 565 | 3,423 | 4,635 | 4,734 |
| Fuel Stations | | | | | |
| Kilowatt hours generated..... (thousands)... | 239,651 | 6,364 | 132,183 | 24,946 | 230 |
| Kv.A. capacity..... | 132,762 | 4,880 | 53,915 | 13,086 | 189 |
| Ratio of output to maximum capacity..... p.c.... | 20.61 | 14.89 | 28.00 | 21.76 | 13.95 |
| Average kilowatt hours per Kv.A..... | 1,805 | 1,304 | 2,452 | 1,906 | 1,217 |
| MUNICIPAL STATIONS | | | | | |
| TOTAL | | | | | |
| Kilowatt hours generated..... (thousands)... | 7,047,092 | 1,153 | 254,189 | 59,[illegible] | 71,691 |
| Kv.A. capacity..... | 1,820,208 | 1,017 | 68,856 | 24,503 | 25,525 |
| Ratio of output to maximum capacity..... p.c.... | 44.82 | 12.95 | 42.15 | 27.63 | 32.07 |
| Average kilowatt hours per Kv.A..... | 3,872 | 1,134 | 3,692 | 2,430 | 2,809 |
| Hydraulic Stations | | | | | |
| Kilowatt hours generated..... (thousands)... | 6,7[illegible] | - | 249,522 | 26,802 | 67,159 |
| Kv.A. capacity..... | 1,641,819 | - | 66,271 | 10,263 | 23,425 |
| Ratio of output to maximum capacity..... p.c.... | 47.21 | - | 42.98 | 29.82 | 32.73 |
| Average kilowatt hours per Kv.A..... | 4,136 | - | 3,765 | 2,612 | 2,867 |
| Fuel Stations | | | | | |
| Kilowatt hours generated..... (thousands)... | 256,460 | 1,153 | 4,667 | 32,490 | 4,532 |
| Kv.A. capacity..... | 178,389 | 1,017 | 2,585 | 14,240 | 2,100 |
| Ratio of output to maximum capacity..... p.c.... | 19.13 | 12.95 | 20.61 | 26.05 | 24.63 |
| Average kilowatt hours per Kv.A..... | 1,438 | 1,134 | 1,805 | 2,282 | 2,158 |
| TOTAL HYDRAULIC STATIONS | | | | | |
| Kilowatt hours generated..... (thousands)... | 27,836,691 | 230 | 294,281 | 402,110 | 15,229,622 |
| Kv.A. capacity..... | 6,259,133 | 407 | 79,347 | 91,238 | 3,226,406 |
| Ratio of output to maximum capacity..... p.c.... | 51.19 | 6.45 | 42.34 | 50.31 | 54.57 |
| Average kilowatt hours per Kv.A..... | 4,447 | 565 | 3,709 | 4,407 | 4,720 |
| Kilowatt hours generated by water power..... (thousands)... | 27,829,017 | 170 | 294,260 | 402,068 | 15,229,622 |
| Kilowatt hours generated by auxiliary plants..... (thousands)... | 7,674 | 60 | 21 | 42 | - |
| TOTAL FUEL STATIONS | | | | | |
| Kilowatt hours generated..... (thousands)... | 496,111 | 7,517 | 136,850 | 57,436 | 4,762 |
| Kv.A. capacity..... | 311,151 | 5,897 | 56,500 | 27,326 | 2,289 |
| Ratio of output to maximum capacity..... p.c.... | 19.82 | 14.55 | 27.65 | 24.00 | 23.76 |
| Average kilowatt hours per Kv.A..... | 1,594 | 1,275 | 2,422 | 2,102 | 2,080 |
| CONSUMPTION OF ELECTRIC ENERGY (THOUSANDS OF KILOWATT HOURS).... | | | | | |
| Total kilowatt hours generated..... | 28,338,030 | 7,747 | 436,269 | 459,546 | 15,234,384 |
| Kilowatt hours imported from the United States..... | 666 | - | - | 7 | 222 |
| Kilowatt hours imported from other provinces..... | - | - | - | 6,063 | 108,450 |
| Kilowatt hours exported to the United States..... | 1,908,756 | - | - | 20,277 | 451 |
| Kilowatt hours exported to other provinces..... | - | - | - | - | 3,452,158 |
| KILOWATT HOURS FOR CONSUMPTION IN CANADA..... | 26,429,940 | 7,747 | 436,269 | 445,339 | 11,890,447 |
| Domestic service..... | 2,310,891 | 2,908 | 39,084 | 26,989 | 311,420 |
| Commercial light..... | 1,109,008 | 1,913 | 21,172 | 17,476 | 270,928 |
| Small power..... | 535,647 | 608 | 13,717 | 6,050 | 135,274 |
| Large power..... | ≠ 19,260,077 | 864 | 312,581 | ≠371,164 | ≠10,294,197 |
| Street lighting..... | 204,088 | 339 | 5,172 | 4,842 | 39,918 |
| Free service (other than street lighting)..... | 17,136 | 11 | 58 | 294 | 12,464 |
| Losses..... | 2,993,093 | 1,104 | 44,485 | 18,524 | 826,246 |

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

TABLEAU 14 - ENERGIE ELECTRIQUE GENEREE, 1939.

| Ontario | Manitoba | Saskatchewan | Alberta | British Columbia and Yukon | |
|---|---|---|---|---|---|
| | | | | | TOUTES USINES |
| 8,007,127 | 1,775,257 | 167,242 | 251,806 | 1,998,652 | Total kw. heure générés.....(milliers). |
| 28.26 | 6.26 | .59 | .89 | 7.05 | Pourcentage du total pour le Canada..... |
| | | | | | Kilowatt-heure générés par les usines |
| 77 | 8 | - | - | 5 | non-génératrices.....(milliers). |
| 8,007,050 | 1,775,249 | 167,242 | 251,806 | 1,998,647 | Kilowatt-heure générés par les usines génératrices " |
| 1,843,269 | 436,671 | 138,718 | 139,944 | 522,272 | Capacité des usines génératrices en Kv.A..... |
| 49.69 | 47.60 | 14.65 | 23.37 | 43.69 | Proportion de la production à la capacité maximum..... p.c.. |
| 4,344 | 4,065 | 1,206 | 1,799 | 3,827 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | USINES GENERATRICES |
| | | | | | USINES COMMERCIALES |
| | | | | | TOTAL |
| 2,165,189 | 1,180,683 | 53,251 | 156,347 | 1,983,757 | Kilowatt-heure générés.....(milliers). |
| 452,200 | 290,517 | 46,758 | 76,936 | 514,156 | Capacité en Kv.A..... |
| 54.66 | 48.20 | 13.00 | 23.20 | 44.04 | Proportion de la production à la capacité maximum..... p.c.. |
| 4,788 | 4,064 | 1,139 | 2,032 | 3,858 | Moyenne des kilowatt-heure par Kv.A..... |
| | | | | | Usines Hydrauliques |
| 2,165,008 | 1,179,647 | - | 143,321 | 1,975,323 | Kilowatt-heure générés.....(milliers). |
| 452,025 | 289,350 | - | 68,262 | 510,238 | Capacité en Kv.A..... |
| 54.68 | 48.36 | - | 23.97 | 44.19 | Proportion de production à la capacité maximum..... p.c.. |
| 4,790 | 4,077 | - | 2,100 | 3,871 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | Usines à combustible |
| 181 | 1,036 | 53,251 | 13,026 | 8,434 | Kilowatt-heure générés.....(milliers). |
| 175 | 1,167 | 46,758 | 8,674 | 3,918 | Capacité en Kv.A..... |
| 11.80 | 10.14 | 13.00 | 17.15 | 24.58 | Proportion de production à la capacité maximum..... p.c.. |
| 1,034 | 888 | 1,139 | 1,502 | 2,153 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | USINES MUNICIPALES |
| | | | | | TOTAL |
| 5,841,861 | 594,566 | 113,991 | 95,459 | 14,890 | Kilowatt-heure générés.....(milliers). |
| 1,391,069 | 146,154 | 91,960 | 63,008 | 8,116 | Capacité en Kv.A..... |
| 47.95 | 46.44 | 15.58 | 23.67 | 20.95 | Proportion de production à la capacité maximum.....p.c... |
| 4,200 | 4,068 | 1,240 | 1,515 | 1,835 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | Usines Hydrauliques |
| 5,840,636 | 590,672 | - | 1,586 | 14,253 | Kilowatt-heure générés.....(milliers). |
| 1,390,147 | 143,250 | - | 850 | 7,613 | Capacité en Kv.A..... |
| 47.96 | 47.07 | - | 21.32 | 21.37 | Proportion de production à la capacité maximum.....p.c... |
| 4,201 | 4,123 | - | 1,868 | 1,872 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | Usines à combustible |
| 1,225 | 3,894 | 113,991 | 93,871 | 637 | Kilowatt-heure générés.....(milliers). |
| 922 | 2,904 | 91,960 | 62,158 | 503 | Capacité en Kv.A..... |
| 15.17 | 15.31 | 15.58 | 23.71 | 14.45 | Proportion de production à la capacité maximum.....p.c.... |
| 1,329 | 1,341 | 1,240 | 1,510 | 1,266 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | TOUTES USINES HYDRAULIQUES |
| 8,005,644 | 1,770,319 | - | 144,909 | 1,989,576 | Kilowatt-heure générés.....(milliers). |
| 1,842,172 | 432,600 | - | 69,112 | 517,851 | Capacité en Kv.A..... |
| 49.61 | 47.92 | - | 23.94 | 43.86 | Proportion de production à la capacité maximum..... p.c.... |
| 4,346 | 4,092 | - | 2,097 | 3,842 | Moyenne de kilowatt-heure par Kv.A..... |
| 8,005,132 | 1,770,207 | - | 144,708 | 1,982,850 | Kw.-heure générés par force motrice hydraulique ...(milliers). |
| 512 | 112 | - | 201 | 6,726 | Kw.-heure générés par les usines auxiliaires.....(milliers). |
| | | | | | TOUTES USINES A COMBUSTIBLE |
| 1,406 | 4,930 | 167,242 | 106,897 | 9,071 | Kilowatt-heure générés.....(milliers). |
| 1,097 | 4,071 | 138,718 | 70,832 | 4,421 | Capacité en Kv.A..... |
| 14.62 | 13.82 | 14.65 | 22.65 | 23.42 | Proportion de production à la capacité maximum..... p.c.... |
| 1,282 | 1,211 | 1,206 | 1,509 | 2,052 | Moyenne de kilowatt-heure par Kv.A..... |
| | | | | | CONSOMMATION D'ENERGIE ELECTRIQUE (EN MILLIERS DE KW.H.) |
| 8,007,127 | 1,775,257 | 167,242 | 251,806 | 1,998,652 | Total de kilowatt-heure générés..... |
| - | 267 | 33 | 137 | - | Kilowatt-heure importés des Etats-Unis..... |
| 3,446,095 | - | - | 2,304 | - | Kilowatt-heure importés d'autres provinces..... |
| 1,886,642 | 874 | - | - | 512 | Kilowatt-heure exportés aux Etats-Unis..... |
| 108,450 | - | - | - | 2,304 | Kilowatt-heure exportés à d'autres provinces..... |
| 9,458,130 | 1,774,650 | 167,275 | 254,247 | 1,995,836 | KILOWATT-HEURE CONSOMMES AU CANADA..... |
| 1,374,325 | 320,827 | 41,198 | 42,210 | 151,930 | Service domestique..... |
| 549,713 | 80,571 | 24,956 | 34,968 | 107,311 | Eclairage commercial..... |
| 251,480 | 51,583 | 22,713 | 32,086 | 22,136 | Petite force motrice..... |
| ≠ 5,610,395 | ≠ 1,101,771 | 52,233 | 96,904 | ≠ 1,419,968 | Grosse force motrice..... |
| 98,856 | 19,029 | 7,760 | 8,626 | 19,546 | Eclairage des rues..... |
| 709 | 69 | 9 | 1,473 | 2,049 | Service gratuit (autre que l'éclairage des rues)..... |
| 1,572,652 | 200,800 | 18,406 | 37,980 | 272,896 | Pertes |

≠ Exclut les exportations par d'autres provinces et/ou aux Etats-Unis.

TABLE 15 - FUEL, 1939.

| Provinces | Bituminous Coal Charbon bitumineux | | | |
|---|---|---|---|---|
| | Canadian - Canadien | | Imported - Importé | |
| | Quantity Quantité | Value Valeur | Quality Quantité | Value Valeur |
| | Tons Tonnes | $ | Tons Tonnes | $ |
| CANADA | 311,684 | 1,117,327 | 5,179 | 24,324 |
| Prince Edward Island | 8,087 | 44,614 | - | - |
| Nova Scotia | 101,748 | 394,083 | - | - |
| New Brunswick | 47,224 | 185,818 | 1,558 | 5,466 |
| Quebec | - | - | 908 | 5,962 |
| Ontario | 50 | 140 | 2,713 | 12,896 |
| Manitoba | 4,090 | 17,255 | - | - |
| Saskatchewan | 108,168 | 416,420 | - | - |
| Alberta | 38,086 | 47,197 | - | - |
| British Columbia and Yukon | 4,231 | 11,800 | - | - |

| | Fuel Oil and Diesel Oil Mazout et huile diesel | | Wood Bois | |
|---|---|---|---|---|
| | Quantity Quantité | Value Valeur | Quantity Quantité | Value Valeur |
| | Gal. Gal. | $ | Cords Cordes | $ |
| CANADA | 8,106,279 | 555,482 | 7,875 | 23,244 |
| Prince Edward Island | 136,626 | 14,394 | 200 | 900 |
| Nova Scotia | 121,526 | 12,462 | - | - |
| New Brunswick | 33,799 | 3,433 | - | - |
| Quebec | 348,277 | 28,529 | - | - |
| Ontario | 240,753 | 22,019 | 500 | 700 |
| Manitoba | 276,930 | 36,683 | 4,946 | 16,524 |
| Saskatchewan | 5,619,271 | 323,500 | 59 | 108 |
| Alberta | 279,208 | 42,386 | 2,170 | 5,112 |
| British Columbia and Yukon | 1,049,889 | 71,876 | - | - |

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

TABLEAU 15 - COMBUSTIBLE, 1939.

| | Lignite Coal Charbon Lignite | | Gasolene Gazoline | | Kerosene Kérosène | |
|---|---|---|---|---|---|---|
| | Canadian - Canadien | | | | | |
| | Quantity Quantité | Value Valeur | Quantity Quantité | Value Valeur | Quantity Quantité | Value Valeur |
| | Tons Tonnes | $ | Gal. Gal. | $ | Gal. Gal. | $ |
| | 132,350 | 198,837 | 25,991 | 5,456 | 328 | 89 |
| | - | - | - | - | - | - |
| | - | - | - | - | - | - |
| | - | - | - | - | - | - |
| | - | - | 36 | 11 | - | - |
| | - | - | 671 | 127 | - | - |
| | 373 | 1,280 | 629 | 195 | - | - |
| | 30,840 | 31,714 | 15,478 | 2,945 | 236 | 66 |
| | 101,137 | 165,843 | 7,661 | 1,727 | 90 | 21 |
| | - | - | 1,516 | 451 | 2 | 2 |

| | 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. | $ | $ | $ |
| | 5,580,000 | 66,960 | 327,096 | 9,829 | 15,529 | 2,017,077 |
| | - | - | - | - | - | 60,008 |
| | 5,580,000 | 66,960 | - | - | 2,623 | 476,128 |
| | - | - | - | - | - | 194,717 |
| | - | - | - | - | - | 34,502 |
| | - | - | - | - | - | 35,882 |
| | - | - | - | - | 2,538 | 74,475 |
| | - | - | - | - | - | 774,753 |
| | - | - | 327,096 | 9,829 | - | 272,115 |
| | - | - | - | - | 10,368 | 94,497 |

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

DATE DUE
DATE DE RETOUR

| | | | |
|---|---|---|---|
| OCT 26 1984 | | | |
| 220-00EC | | | |

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Ministre du Commerce.

CANADA

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SECTION DES TRANSPORTS ET UTILITES PUBLIQUES

RECENSEMENT INDUSTRIEL

1939

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(Préparé en collaboration avec le Bureau Fédéral
de l'hydraulique et de lénergie Electrique,
Ministère des Mines et Ressources)

OTTAWA
1941

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