

Catalogue No. 57-002
Vol. 5, No. 86

Nov. 1970

CONTENTS

| | Page |
|--|------|
| 1. Electricity Bills for Domestic, Commercial and Small Power Service 1969, Catalogue No. 57-203 | 1 |
| 2. Preliminary Electric Energy Statistics, September 1970, Catalogue No. 57-001 | 2 |
| 3. Natural Gas Pipe Line Mileage 1969, Catalogue No. 57-205 | 4 |

1. Electricity Bills for Domestic, Commercial and Small Power Services 1969, Catalogue No. 57-203

The 1969 Electricity Bills Report which will be released in about 3 months is based on rate schedules supplied by the power companies and municipalities responsible for the distribution of electric energy in 173 Canadian municipalities. It consists of the actual cost to consumers of definite quantities of electricity for specific uses. The cost to the consumers includes not only the amounts accruing to the distributor but also all federal, provincial and municipal taxes on such purchases. Discounts for prompt payment have been deducted from gross bills wherever granted.

6503-521

Changes in Bills During 1969

There were no changes in domestic, commercial or power bills in Newfoundland, Prince Edward Island, Manitoba or British Columbia. Changes in the other provinces were generally upward.

A provincial health tax calculated on a sliding scale was responsible for the increase in Nova Scotia.

In New Brunswick, 5 of the 11 municipalities in the survey experienced reductions in the domestic category, and 2 had no changes. Rates fluctuated in the balance of the municipalities with Saint John showing a marked decrease in the cost of house heating. Commercial rates in Bathurst show an increase, while in Fredericton there was a decrease in commercial rates and a mixture of higher and lower bills in the power category. Commercial rates in the 8 municipalities served by the New Brunswick Electric Power Commission are now standardized as are rates in the power category.

The only change in Quebec was a marked increase in the power rates for the city of Grand'mère.

There were increases in domestic service bills in 12 of the 58 municipalities in Ontario. The rate structures in 6 other municipalities were revised in such a manner that both increases and decreases resulted within each municipality, while North Bay showed a decrease in house heating rates. Changes in commercial (general service) rates were noted in 18 municipalities. Five showed a mixture of higher and lower bills depending on billed loads and energy consumption, while one municipality showed a decrease within its rate structure. The remaining 12 revised their rates upward. Power also showed an increase of rates in 13 municipalities while a mixture of higher and lower bills occurred as a result of rate changes in 4 municipalities.

An across the board increase in Saskatchewan was the result of a 1% increase in provincial taxes.

The only change in Alberta was an increase in commercial and power rates in Medicine Hat.

2. Preliminary Electric Energy Statistics, September 1970 Catalogue No. 57-001

Net generation in September 1970 rose 4.8% to 15,758,604 thousand kwh. from 15,030,667 thousand kwh. in September 1969. Increases in net generation occurred in all provinces except Newfoundland, British Columbia and Northwest Territories where there were decreases of 1.3%, 23.9% and 0.5% respectively. Again labour disputes in several large industries in British Columbia were responsible for the decline in electricity consumption and thus in generation in that province. The largest increases in generation occurred in Prince Edward Island and Yukon Territory where they amounted to 15.3% and 59.4% respectively. Hydro generation increased 1.8% in September over the same period last year, while thermal generation increased 15.1%.

Imports increased 51.9% and exports increased 19.4% compared with September 1969. Firm energy consumption increased 4.2%.

Total generation for the twelve month period ending September 30, 1970 amounted to 200,606,660 thousand kwh. compared with 199,878,723¹ thousand kwh. for the twelve month period ending August 31, 1970.

Seasonally adjusted net generation in September 1970 amounted to 17,695 million kwh. compared with 17,436 million kwh. in August and 17,276 million kwh. in July. Firm energy consumption amounted to 17,235 million kwh. on a seasonally adjusted basis. The comparable figures for August and July were 16,784 million kwh. and 16,689 million kwh. respectively.

Preliminary Electric Energy Statistics

(thousand Kwh)

| | September | | |
|---------------------------------------|------------|------------|------------|
| | 1968 | 1969 | 1970 |
| Net generation - Hydro | 10,348,752 | 11,603,768 | 11,815,631 |
| Thermal | 3,320,569 | 3,426,899 | 3,942,973 |
| Total net generation | 13,669,321 | 15,030,667 | 15,758,604 |
| Energy imported from U.S.A. | 347,934 | 166,866 | 253,522 |
| Energy exported to U.S.A.: | | | |
| Firm | 58,499 | 67,309 | 67,103 |
| Secondary | 215,844 | 440,489 | 539,380 |
| Total exported to U.S.A. | 274,343 | 507,798 | 606,483 |
| Net energy used in Canada | 13,742,912 | 14,689,735 | 15,405,643 |
| Secondary energy used in Canada | 198,283 | 104,799 | 208,001 |
| Firm energy used in Canada | 13,544,629 | 14,584,936 | 15,197,642 |

3. Natural Gas Pipe Line Mileage, 1969, Catalogue No. 57-205

Total mileage of all natural gas pipe lines in service in 1969, including lines operated by producing and gas processing companies amounted to 56,623.4 miles, up 4,224.1 miles (8.1 per cent) from the previous year. Mileage of gas gathering systems totalled 6,515.7 miles (up 10.4 per cent), transmission systems 17,928.0 miles (up 8.4 per cent) and distribution systems 32,179.7 miles (up 7.4 per cent).

| Mileage in miles | 1969 | 1968 | Change, 1969 over 1968, in miles and per cent |
|-----------------------|----------|----------|---|
| Total | 56,623.4 | 52,399.3 | 4,224.1 (8.1 per cent) |
| Gas gathering systems | 6,515.7 | 5,901.2 | 614.5 (10.4 per cent) |
| Transmission systems | 17,928.0 | 16,436.0 | 1,492.0 (8.4 per cent) |
| Distribution systems | 32,179.7 | 30,062.1 | 2,117.6 (7.4 per cent) |

GAS UTILITIES

TABLE 1. Natural Gas Pipe Line Mileage by Province, as at December 31, 1962-69(1)

| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|-----------------------|----------|----------|----------|----------|----------|----------|-----------------------|----------|
| | miles | | | | | | | |
| <u>Gathering</u> | | | | | | | | |
| New Brunswick | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 | 6.4 |
| Quebec | - | - | - | - | - | 1.3 | 1.3 | 1.3 |
| Ontario | 1,314.6 | 1,048.9 | 1,042.5 | 1,101.6 | 1,166.6 | 1,163.0 | 1,142.1 | 1,192.5 |
| Manitoba | - | - | - | - | - | - | - | - |
| Saskatchewan | 297.5 | 308.5 | 388.8 | 559.4 | 683.5 | 714.2 | 794.1 | 805.0 |
| Alberta | 2,540.0 | 2,919.6 | 3,070.7 | 3,119.9 | 2,978.4 | 2,978.9 | 3,350.3 ^F | 3,843.0 |
| British Columbia | 409.1 | 409.0 | 409.1 | 418.4 | 484.5 | 512.6 | 610.3 | 667.5 |
| Totals | 4,567.6 | 4,692.4 | 4,917.5 | 5,205.7 | 5,319.4 | 5,376.4 | 5,904.5 ^F | 6,515.7 |
| <u>Transmission</u> | | | | | | | | |
| New Brunswick | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| Quebec | 25.0 | 25.0 | 25.0 | 25.0 | 112.2 | 120.7 | 147.7 | 147.7 |
| Ontario | 3,140.7 | 3,265.1 | 3,365.4 | 3,389.9 | 3,479.2 | 3,558.4 | 3,518.0 | 3,612.4 |
| Manitoba | 496.0 | 631.1 | 731.4 | 919.3 | 956.4 | 1,021.9 | 1,145.5 | 1,226.7 |
| Saskatchewan | 2,566.0 | 2,831.8 | 3,081.0 | 3,288.2 | 3,628.8 | 3,911.4 | 4,332.2 | 4,503.5 |
| Alberta | 4,293.1 | 4,310.5 | 4,775.5 | 5,019.3 | 5,165.0 | 5,327.3 | 5,620.0 | 6,053.8 |
| British Columbia | 1,310.4 | 1,311.5 | 1,319.0 | 1,551.0 | 1,579.5 | 1,660.3 | 1,758.4 | 2,370.5 |
| Totals | 11,844.6 | 12,388.4 | 13,310.7 | 14,206.1 | 14,934.5 | 15,613.4 | 16,535.2 | 17,928.0 |
| <u>Distribution</u> | | | | | | | | |
| New Brunswick | 32.3 | 32.4 | 32.5 | 32.4 | 32.4 | 32.4 | 32.4 | 32.4 |
| Quebec | 1,143.9 | 1,202.5 | 1,262.7 | 1,295.4 | 1,360.7 | 1,417.0 | 1,487.5 | 1,571.9 |
| Ontario | 10,864.9 | 11,700.3 | 12,296.6 | 12,699.3 | 13,315.3 | 13,737.2 | 14,496.7 | 15,058.4 |
| Manitoba | 946.5 | 1,117.1 | 1,178.6 | 1,354.3 | 1,343.5 | 1,443.1 | 1,521.6 | 1,665.3 |
| Saskatchewan | 1,425.0 | 1,535.9 | 1,636.5 | 1,740.3 | 1,788.6 | 1,913.6 | 2,030.6 | 2,126.2 |
| Alberta | 3,099.6 | 3,224.2 | 3,383.4 | 3,486.9 | 3,623.2 | 4,295.4 | 5,780.6 ^F | 6,721.2 |
| British Columbia | 3,427.5 | 3,646.7 | 3,843.3 | 4,052.5 | 4,264.4 | 4,466.1 | 4,610.2 | 5,004.3 |
| Totals | 20,939.7 | 22,459.1 | 23,633.6 | 24,661.1 | 25,728.1 | 27,304.8 | 29,959.6 ^F | 32,179.7 |
| <u>Totals</u> | | | | | | | | |
| New Brunswick | 52.1 | 52.2 | 52.3 | 52.2 | 52.2 | 52.2 | 52.2 | 52.2 |
| Quebec | 1,168.9 | 1,227.5 | 1,287.7 | 1,320.4 | 1,472.9 | 1,539.0 | 1,636.5 | 1,720.9 |
| Ontario | 15,320.2 | 16,014.3 | 16,704.5 | 17,190.8 | 17,961.1 | 18,458.6 | 19,156.8 | 19,863.3 |
| Manitoba | 1,442.5 | 1,748.2 | 1,910.0 | 2,273.6 | 2,299.9 | 2,465.0 | 2,667.1 | 2,892.0 |
| Saskatchewan | 4,288.5 | 4,676.2 | 5,106.3 | 5,587.9 | 6,100.9 | 6,539.2 | 7,156.9 | 7,434.7 |
| Alberta | 9,932.7 | 10,454.3 | 11,229.6 | 11,626.1 | 11,766.6 | 12,601.6 | 14,750.9 ^F | 16,618.0 |
| British Columbia | 5,147.0 | 5,367.2 | 5,571.4 | 6,021.9 | 6,328.4 | 6,639.0 | 6,978.9 | 8,042.3 |
| Totals | 37,351.9 | 39,539.9 | 41,861.8 | 44,072.9 | 45,982.0 | 48,294.6 | 52,399.3 ^F | 56,623.4 |

(1) Includes pipe line mileage of producing and processing companies.

^r Revised figures.



1010659033

TABLE 2. Gas Pipe Line Mileage by Size of Pipe and Province, as at December 31, 1969

| | | Total natural gas industries(1) | | | | | | |
|-----------------------------------|----------|--|---------|---------|---------|---------|-------------|-------|
| | | Outside diameter of pipe in inches | | | | | | |
| | | 0-2.9 | 3-5.9 | 6-8.9 | 9-12.9 | 13-20.9 | 21 and over | Total |
| | | miles | | | | | | |
| Gathering: | | | | | | | | |
| New Brunswick | 6.4 | - | - | - | - | - | 6.4 | |
| Quebec | - | 0.5 | 0.8 | - | - | - | 1.3 | |
| Ontario | 781.6 | 270.6 | 99.8 | 17.2 | 20.1 | 3.2 | 1,192.5 | |
| Manitoba | - | - | - | - | - | - | - | |
| Saskatchewan | 66.7 | 306.2 | 320.7 | 73.8 | 32.8 | 4.8 | 805.0 | |
| Alberta | 425.9 | 1,517.6 | 1,410.2 | 345.8 | 131.4 | 12.1 | 3,843.0 | |
| British Columbia | 47.9 | 222.1 | 79.4 | 161.1 | 71.5 | 85.5 | 667.5 | |
| Canada | 1,328.5 | 2,317.0 | 1,910.9 | 597.9 | 255.8 | 105.6 | 6,515.7 | |
| Transmission: | | | | | | | | |
| New Brunswick | - | 4.2 | 0.2 | 9.0 | - | - | 13.4 | |
| Quebec | - | - | 65.4 | 23.2 | 59.1 | - | 147.7 | |
| Ontario | 91.6 | 251.2 | 697.7 | 513.8 | 485.2 | 1,572.9 | 3,612.4 | |
| Manitoba | 32.7 | 274.3 | 153.2 | 29.9 | 12.5 | 724.1 | 1,226.7 | |
| Saskatchewan | 867.3 | 816.9 | 671.5 | 695.8 | 425.7 | 1,026.3 | 4,503.5 | |
| Alberta | 434.0 | 972.2 | 1,033.8 | 1,161.9 | 1,078.7 | 1,373.2 | 6,053.8 | |
| British Columbia | 77.4 | 325.6 | 313.1 | 543.2 | 6.2 | 1,105.0 | 2,370.5 | |
| Canada | 1,503.0 | 2,644.4 | 2,934.9 | 2,976.8 | 2,067.4 | 5,801.5 | 17,928.0 | |
| Distribution: | | | | | | | | |
| New Brunswick | 6.3 | 14.0 | 11.1 | 1.0 | - | - | 32.4 | |
| Quebec | 231.6 | 409.7 | 640.7 | 155.2 | 125.2 | 9.5 | 1,571.9 | |
| Ontario | 7,297.8 | 4,246.1 | 2,656.8 | 703.2 | 107.6 | 46.9 | 15,058.4 | |
| Manitoba | 1,220.1 | 272.0 | 125.6 | 26.1 | 21.5 | - | 1,665.3 | |
| Saskatchewan | 1,420.1 | 478.9 | 175.4 | 34.6 | 17.2 | - | 2,126.2 | |
| Alberta | 5,156.3 | 969.3 | 421.0 | 119.1 | 55.5 | - | 6,721.2 | |
| British Columbia | 3,351.3 | 1,029.4 | 365.2 | 104.4 | 102.0 | 52.0 | 5,004.3 | |
| Canada | 18,683.5 | 7,419.4 | 4,395.8 | 1,143.6 | 429.0 | 108.4 | 32,179.7 | |
| Grand totals | 21,515.0 | 12,380.8 | 9,241.6 | 4,718.3 | 2,752.2 | 6,015.5 | 56,623.4 | |
| | | Manufactured and liquefied petroleum gases systems | | | | | | |
| | | Outside diameter of pipe in inches | | | | | | |
| | | 0-2.9 | 3-5.9 | 6-8.9 | 9-12.9 | 13-20.9 | 21 and over | Total |
| | | miles | | | | | | |
| Distribution: | | | | | | | | |
| Quebec | 2.9 | 52.7 | 67.2 | 10.5 | 2.7 | - | 136.0 | |
| British Columbia | 142.1 | 82.1 | 14.7 | 4.3 | - | - | 243.2 | |
| Canada | 145.0 | 134.8 | 81.9 | 14.8 | 2.7 | - | 379.2 | |
| Grand totals, all utilities | 21,660.0 | 12,515.6 | 9,323.5 | 4,733.1 | 2,754.9 | 6,015.5 | 57,002.6 | |

(1) Includes pipe mileage of producing, gathering, processing and utility companies. Some size categories include estimated figures.