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increases in rates under such circumstances are out of the question, and the end of the losses is by no means in sight.

Paid Power Barons.

"The explanation of this condition lies in the sacrifice of the systems to those interested in the financial operations of the power barons of Quebec. For the year ending Oct. 31, 1934, we paid for purchased power, all of which was in excess of our requirements, and was virtually, if not actually, unused, as follows.

Gatineau Power Company....\$3,864,705.18 260,000 h.p. at \$15.

W.S. Funds.

Beauharnois Light. Heat & 1,192,500.00 75,000 h.p. at \$15 for 12

54,000 h.p. at \$15 for 1 mth.

129,000 h.p.

MacLaren-Quebec Power Co. 400,000.00 20,000 h.p. at \$15 for 8 mths. 20,000 h.p. at \$15 for 4 mths.

40,000 h.p. Grand Total:

Gatineau 260,000 h.p. Beauharnois .. 129,000 h.p. MacL.-Quebec 40,000 h.p.

429,000 h.p. \$5,457,205.18

"This expenditure of nearly five and one-half million dollars for Quebec power during 1934 was unnecessary, and with it, much of the high cost of the transmission lines by which it was conveyed.

"In 1933, the previous year, these costs amounted to something less, but still a huge sum, as follows:

\$4,976,450.87

Huge Sum.

"We have paid to these three companies for unwanted power since the first contract commenced to Oct. 31, 1934, the huge sum of \$22,526,006.14.

"But bad as is the past, the future is even worse. A considerable portion of the unwanted power purchased last year was for part time only, as deliveries under the contracts commenced from time to time. Next year the full 429,000 h.p. mentioned will be on a full-time basis, at a cost of \$6,-435,000.

"But that is not all. There are still further huge blocks of power deliveries which have not yet commenced. They are as follows:

MacLarens-Quebec, July, 1935, 27,000 h.p. at \$15 for four

months\$135,000.00 Beauharnois, October, 1935. 67,000 h.p. at \$15 for one

month 83,750.00

Grand total, 94,000 h.p...\$218,750.00 "That is to say, the Niagara System will be required to pay for unwanted power in the year 1935, as follows:

Last year's cost, 1934\$5,457,205.18
Addition for full-time and

addition for further deliveries\$1,196,544.82

"And still the story is not told, for still further deliveries take place in 1936, as follows:

MacLarens-Quebec, July, 1936,

Beauharnois, October, 1936, 54,000 h.p. at \$15 for one

month 67.500.00

"So that the calculation on next

year's power costs for unwanted power to these three companies will be as follows:

Cost this year, 1935\$6,653,750.00
Addition for full-time and
further deliveries 1,423,750.00

Total, 1936\$8,077,500.00

Tremendous Total.

"The deliveries end in October, 1936, so that there are no further amounts to be added, but the total cost will be in excess of that for 1936, because some of the 1936 power was for part time, while in 1937 all the power is contracted for for all the time, and the grand total which these companies are entitled to take from the power users or taxpayers of Ontario for power for which there is no present and little prospective use, is the sum of \$9,525,000 per year for thirty years.

"Worked out from the beginning to the conclusion of their contrects, these companies are entitled to take from the people of the Niagara district a gross in payments of \$326,326,-006.14, or \$40,000,000 more than the present entire investment in the Com-

mission's whole system.

"Now let us see what all this means. The deficit in 1934 was \$2,869,828. The addition to the power costs over 1934 was \$1,196,545.82. So that disregarding what decreases in other expenses may be made or what increase in sales of power may be effected, the deficit next year will be \$4,066,373. (1935).

"In 1936, on the same basis, the deficit will be \$5.490,123; in 1937, \$6,937,623, and when in 1938 the sinking fund of the Dominion Power & Transmission Company of \$145,000 is added the deficit on this basis will be \$7,082,623.

"It may be that during the coming years some saving will be effected, but they will be a small percentage of the grand total of expenses. The major savings are already effected.

Increased Consumption.

"It seems probable, too, that there may be some increase in the consumption of power. This prospect, however, must not be over-rated. It must not be forgotten that Hydro commenced business in a virgin field. Its rapid growth is accounted for in the addition of new municipalities, company systems and new individual customers to its system.

"There are now no further municipalities, other than a few rural municipalities to add, unless some new towns spring up, which is unlikely in the Niagara district. There are few people, indeed, in the municipalities served who have not electric light in their houses. True, there has been some increase in the rural lines in 1934, and we have offered inducements to the farmers to use electricity by giving free energy for washing machines, radios and sanitary systems, but, after all, the growth which one may reasonably expect in the rural field is comparatively small when one is discussing horsepower in the hundreds of thousands and lesses in the millions of dollars.

"The growth in rural consumption in the year 1934 over that of 1933 was onl, 1,577 h.p. at October peaks, and 2,270 h.p. in August peak. It is quite obvious, therefore, that the growth of load must henceforth depend for the most part on the increased demand of customers already in existence, supplemented perhaps by a certain increased commencial and manufacturing activity which might follow the clearing of the channels of trade.

"If the conditions in the next three years do not improve in the matter of power sales, the revenue will be approximately \$20,000,000 for the Niagara System. In 1938 we are obligated to pay \$9,525,000 for the power of these three companies, or one-half our entire revenue.

"There will be growth, but the hon. gentlemen will be perhaps amazed when I tell you that the Niagara system generates, has had purchased and thrust upon it 724,000 horsepower as of 1938 in excess of the 833,000 horsepower which it now requires.

When the full deliveries are complete in 1938 we will then have 1,557,000 horsepower on the basis of our present generating capacity, plus purchased power. Our present requirements at peak are 833,000 horsepower, so that if our requirements do not increase we have overpurchased by 724,000 horsepower, or practically double our present requirements.

Sees High Rates.

"Unless it be reasonably expected that the consumption of electrical energy in the Niagara System will double in the next few years, the people of the great central portions of our Province may look forward to excessively high rates, together with heavy financial losses for a good many years to come, provided, of course, that this House is content to sit idly by and permit this condition to continue.

"The Commission has from the Niagara River (generated and purchased) and Chats Falls 996,000 horsepower, and its maximum firm uninterrupted demand for the year 1934 was (November) 833,000 horsepower, leaving a spare capacity of 163,000 horsepower. Now 163,000 horsepower is a reserve plant capacity very nearly 20 per cent. of the yearly peak demand. Just how large a reserve it is may be judged from the fact that it is equal to the capacity of the three largest generators in the Commission's owned plants.

"So that the House and the country may have no misgiving as to the accuracy of my statements and the authority upon which they are made, may I read the signed statement by Dr Hogg, chief hydraulic and operating engineer, and Mr. R. T. Jeffrey, chief municipal engineer, both of the Hydro-Electric Power Commission of Ontario?

Text of Letter.

"'Mr. T. Stewart Lyon:

"'Acting on your instructions, we have made a study of load conditions existing on the Niagara System during the month of November, 1934, with the object of determining what amount of power the Commission may expect to be required to supply in addition to the power than can be supplied from plants on the Niagara River and the Chats Falls plant (total) during the next two or three years.

"On attached sheets is set out the primary power peak load for November, 1934, amounting to a total of 900,000 horsepower for the Niagara System. As this peak load includes interruptible power, this has been deducted, allowance being made for diversity between firm power peak and interruptible power of aproximately 20 per cent. or 15,000 horsepower.

"In calculating the capacity of the generating plants on the Niagara River, the normal capacity (continuous), of 830,000 horsepower has been reduced to 810,000 horsepower on account of low river water levels, which may maintain during the next two years.

"'From the capacity of Chats Falls has been deducted transmission losses