

of approximately 10 per cent. No allowance, whatever, has been made for spare generating capacity, and this phase of the proposition will have to be considered in connection with arrangements for future power supply for this system.

"Our study of the load conditions now existing on the Niagara System shows that, under the conditions, as above set out, the plants on the Niagara River operated in conjunction with the (total) Chats Falls plant have sufficient capacity to supply the loads, under present power sale agreements of the Commission. The cutting off of interruptible power (67,000 horsepower) at the time of peak load, will increase the load factor of the firm peak load, and within two years if conditions (commercial) improve, it may be necessary to cut off part of the power now being supplied to operate electric steam boilers. This will not be necessary, however, until the system load has increased by at least 100,000 horsepower as there is a margin at present based on November load conditions, spare capacity of 160,000 horsepower, plus 40,000 horsepower already being paid for under the McLaren Purchase Agreement, and we are advised that the balance of the power to be supplied under this agreement can be supplied on short notice, making a working margin of spare capacity of 285,000 horsepower.

"The DeCew Falls plant, if reconstructed, will be a low load-factor development, and can only be of maximum service to the Niagara System when operated as a peak load plant, and, it appears that the next development to be proceeded with to meet the requirements of the Niagara System should be a high load-factor development at some point on the Ottawa River, on the Niagara River or the St. Lawrence Development, the final decision in regard to this matter will depend on the status of Interprovincial or International relations.

"We wish to call your attention particularly to the fact that in the estimates, as set out herein, no allowance has been made for reserve plant capacity, and without such adequate reserve, a major accident might very seriously reduce the generating capacity of the system and cause reductions in firm power loads over a considerable period of time.

"Respectfully submitted, R. T. Jeffery, T. H. Hogg."

Adequate Supply.

"Summarizing the situation as it presents itself to us, we find that at no time during the year 1934 did the demand for uninterruptible power exceed the Commission's resources, exclusive of power purchased from Gatineau, Beauharnois and MacLarens, and at no time, in order to supply our physical wants, was it necessary to call for a single horsepower from these three companies. Notwithstanding this fact, we paid to these three companies during this last year the sum of \$5,457,205.18 for unwanted power.

"We further find that in consequence of these payments the Commission suffered in its Niagara System a deficit of \$2,869,828 (1934), and that it depleted its reserves that amount, and that its contingency and obsolescence reserves, which stood in 1931 at \$14,631,725.88, decreased to the sum of \$6,526,237.

"We find that with an increased cost of purchased power of \$1,196,554.82, it is not likely that increased sales and reduced expenses this year will reduce the loss for 1935 to less than that of 1934, thus completely wiping out the Commission's contingency reserves, and making it necessary to either call further increase rates to the municipalities or to still further deplete the capital of the Commission.

"We find that, based on the expenditures and receipts of 1934, the deficit in 1938 and subsequent years will amount to the high sum of \$7,082,623 per annum. It is confidently hoped that with vigorous management the deficits will not be so great, but the prospect is by no means cheerful."

Eastern System.

Proceeding to a consideration of the Eastern System, bounded by Lake Ontario, the St. Lawrence River, the Province of Quebec, the Ottawa River and the Niagara System, Mr. Roebuck stated that there was no serious power surplus in this district such as existed in the Niagara System.

"The system," he said, "has suffered from acts of gross incompetence, or worse, but notwithstanding the burden imposed, the finances of the system have not been ruined, though rates have been made unnecessarily high, and the system suffered a deficit as of Oct. 31, 1933, of \$31,313.61.

"Thanks, however, to a vigorous policy on the part of the new Commission, a decided improvement is to be observed in the finances of 1934. Owing to further deliveries, the cost of power purchases has increased by \$62,747.72 over last year. We paid all interest charges on all system capital, set up regular amounts for sinking fund, and in addition set up full charges for renewals fund, as well as the regular charges for contingencies and obsolescence. We have reduced the cost of operation, maintenance and administration expenses from \$843,965.70 to \$831,134.92, a saving of \$11,960.78, while we have increased revenue from \$2,971,491.65 in 1933 to \$3,181,107.23 in 1934."

Traces History.

Tracing the history of the Eastern System, the Attorney-General recalled the signing, in 1927, of the contract for the purchase of 100,000 horsepower from the Gatineau Power Company.

"The contract," he commented in passing, "was contrary to good principle, and ill-advised, in view of the fact that the Commission had available potential developments elsewhere.

"It was little short of criminal to tie up the system for forty years to a Quebec private development. And yet the agreement is in marked contrast to still worse deals which were to follow. The deliveries were not greatly in excess of the system's powers of absorption. The deliveries commenced on Oct. 1, 1928, and are to be increased by 6,000 each year, so that in October last, at the end of its seventh year, the Commission was obligated to take, and could absorb, 42,000 horsepower.

"Standing by itself, the first Gatineau contract may possibly be defended, though certainly not justified, but taken in conjunction with what followed it is indeed terrible.

Other Contracts.

"In June, 1929, the former Commission purchased what is known as the Madawaska System, formerly owned by Mr. M. J. O'Brien. The property acquired included two small plants, known, one as the Galetta and the other the Calabogie. The former has a capacity of 1,100 horsepower and is now closed. The second, the Calabogie, has a capacity of

5,400 horsepower. The total development horsepower is accordingly 6,500. As the cost of the purchase included, however, 85,000 horsepower which was then and is still undeveloped, and as the power taken from Gatineau by the Eastern System increases 6,000 per year, and is now only 42,000, it is obvious that 85,000 undeveloped and 6,500 horsepower developed, or 91,500 horsepower in all, was sufficient to have supplied the needs of the district to the present time and for many years to come. Had the purchase of the Madawaska power sites preceded the Gatineau contract it might have been justified as required, but coming as it did after the needs of the system had been supplied, it is indefensible. As I say, one of the plants, the Galetta, is closed, the 85,000 horsepower sites are undeveloped, and the interest charges on the \$1,800,000 price is \$108,000 per year, amounting over the past five years in interest charges to \$564,781.

"And finally a sinister aspect is given to the whole affair by a payment of \$50,000 by the Hydro Commission, approved by order in Council, to a promoter named John Aird Jr., for no apparent consideration in return. It is to be noted that these unnecessary purchases took place in an election year.

"Notwithstanding the errors for which the former Commission and the former Government are responsible, the Eastern System has grown to great proportions, and has now balanced its budget."

Georgian Bay System.

Proceeding to discuss the Georgian Bay System, Mr. Roebuck pointed out that the area involved was 9,600 square miles, served by eleven generating plants with a normal capacity of 26,100 horsepower. In 1933 there was delivered by the Georgian Bay System 27,859 horsepower, distributed among 149 municipalities. He submitted the following, revealing the present condition of the system:

"The consolidated systems show a financial status of considerable proportions. As of Oct. 1, 1933, that portion of the system vested in the Hydro-Electric Power Commission showed a capital expenditure on plant of \$8,427,278.77. Its renewals, contingency and sinking fund have been maintained at the Commission's usual standard so that the Commission's system shows reserves and surplus of \$3,149,976.57. The municipal systems as of Dec. 31, 1933, show a capital expenditure of \$2,726,804.74, with reserves and surplus of \$2,373,556.77. That is to say, the grand total of the assets of both Commission and municipal systems is the considerable sum of \$16,677,616.85. The total expense of operation for the year ending Oct. 31, 1933, was \$977,890.93, and the total revenue, \$1,033,863.50, showing a surplus of \$55,972.57.

"In the year ending Oct. 31, 1934, there were increased deliveries of power. Our expenses were, however, somewhat decreased, while our revenue was slightly increased. The total expenses for the year were \$946,088.03, while our revenue was \$1,041,783.14, leaving the system with a surplus of \$95,695.11. No disastrous power commitment has effected the financial standing of the Georgian Bay System. We buy no power, except from the Niagara System, and the consequence has been the healthy growth in the past, and a bright and satisfactory outlook for the future. When the consolidation of the system took place in 1925, the combined systems served seventy-four municipalities. In 1933 it served 148 municipalities."

Thunder Bay System.

Of the Thunder Bay System the Attorney-General said that power sources had been developed at Cameron Falls, on the Nipigon River, and at Alexander Landing, the two plants having a capacity of 123,500 horsepower.

"The load on the system was, however," continued Mr. Roebuck, "only 90,450 horsepower. In consequence the system has a considerable excess of power, and until this can be absorbed is not in first-class financial condition. The Commission's problem, therefore, is the sale of power. The revival of the pulp and paper business would solve the problems of the financial operation of this system. From Oct. 31, 1932, to Oct. 31, 1933, the system had a deficit of \$95,683.25, and in the following year the deficit was \$53,745.45.

"From the Commission's point of view this is not particularly serious, for the loss is split three ways in accordance with the amount of power purchased between the three municipalities of Port Arthur, Fort William and the Village of Nipigon, a small amount only coming from the system's contingency reserves. There is a considerable mining development taking place on the north shore of Lake Superior, in the Sturgeon River district, and the Commission's load is steadily increasing. The Northern Empire Mines and the Little Long