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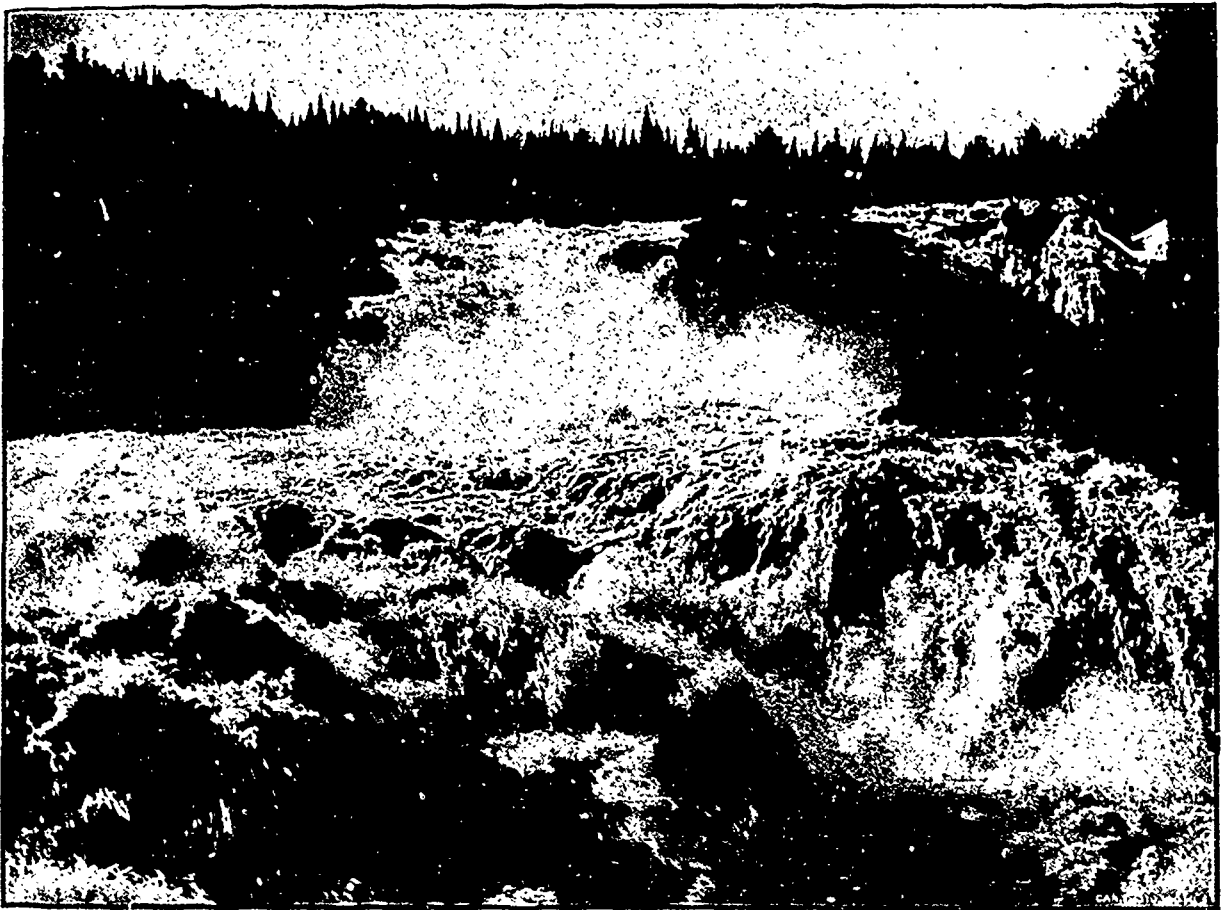
**ELECTRICAL POWER TRANSMISSION
PLANT AT THREE RIVERS,
QUEBEC.**

By H. R. LEYDEN.

THE first long distance electrical power transmission plant to be installed in Canada has now been in operation for six months, with most satisfactory results both from engineering and financial standpoints. This plant

power is applied to the old system with surprisingly few changes in the old method of distribution.

The old plant consisted of two single-phase alternators of 1,500 and 750 incandescent lamps capacity, and of two series arc dynamos, one of 35 and the other of 50 lamps capacity. All the dynamos were belted directly to high-speed steam engines. There was also a suitable boiler plant, using bituminous coal for fuel. In connection with the electric lighting plant, there was a pump-



NO. 1—THE WATER FALL.

has been installed by the North Shore Power Company, and transmits power from the water fall at Grande Chute, on the Batiscan river, over a distance of seventeen miles, to the city of Three Rivers. The present development is for 600 horse power delivered at the end of the transmission line, but the plant has been laid out with the view of increasing this largely for future demands. The most interesting feature in connection with this transmission plant is the novel method in which the new two-phase power is applied to an old electric lighting plant, which had previously been in operation, using single-phase alternating apparatus and a series arc system driven by steam power. The new

ing plant having capacity for delivering 1,000,000 gallons every twenty-four hours, which supplied the water service of the city. Both the lighting and the pumping plants were owned by the municipality of Three Rivers, and had been operated by them for over six years. A careful system of accounting has shown, however, that even with higher rate for service than are charged elsewhere by private companies, this municipal plant was running behind every year. The city authorities, therefore, decided to dispose of the plant and stop the continued outlay necessary to supply the yearly deficits in their lighting and pumping account. The plant was accordingly sold to the North Shore Power Company at