## THE OTTAWA ELECTRIC COMPANY.

What is now the Ottawa Electric Company is the result of an amalgamation in 1894 of the Chaudiere Electric Light & Power Company, the Standard Electric Company, and the Ottawa Electric Light Company.

The Ottawa Electric Company generates electricity for light and power in two hydraulic and one steam stations at 2,300 volts, two phase 60 cycles. No. 1 hydraulic station is located on Head Street; in it are installed four 700 K.W., two phase Westinghouse alternators, three of which are direct connected to three sets of Smith-Vaile and Stillwell-Bierce water wheels. Each set of wheels is composed of three 39-inch runners, and develops 1,000 horse-power under 25 feet head, each operating at 180 revolutions per minute. The fourth 700 K.W. unit recently installed is connected to a set of three Dayton-Globe water wheels of 1,000 horse-power. There are two exciter sets comprising a D.C. generator, 125 volts, 56½ K.W. driven by, and direct connected to a pair of 15-inch water wheels; 500 volts direct current for elevators is obtained from a 300 K.W. rotary converter.

The switchboard in this station comprises four generator panels, two exciter panels, D.C. and A.C. panels for the rotary, and one A.C. power panel. The head of water at this station varies from 25 feet to 29 feet.

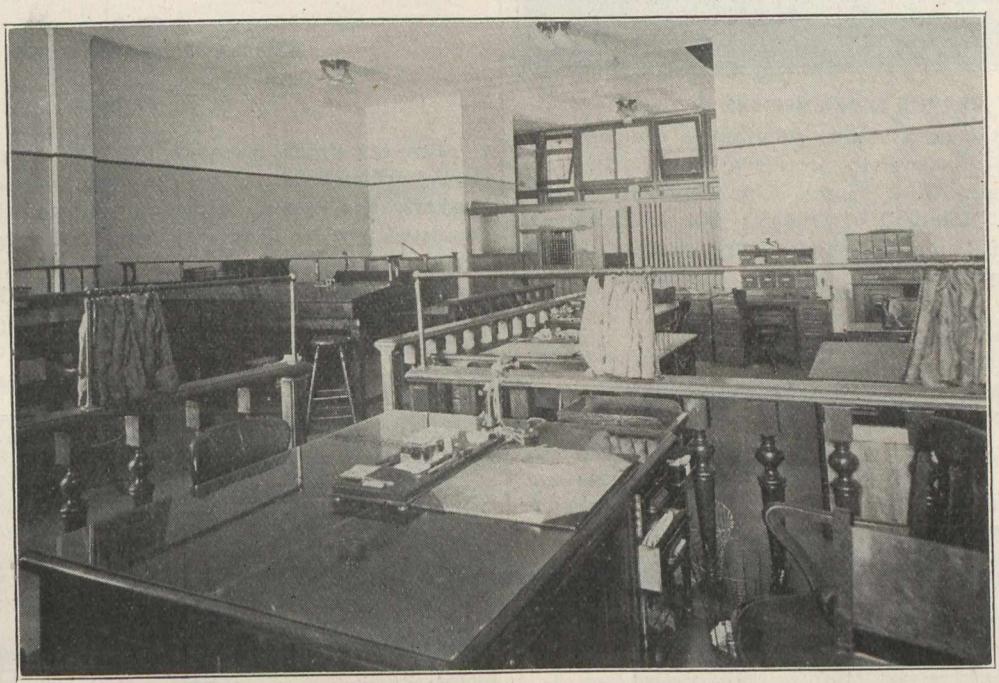
No. 2 station now being remodelled will be the main receiving and distributing station, and is located on Amelia Island. Here are to be installed two 1,300 K.V.A. Westinghouse two phase revolving field, 2,300 volt, generators direct connected to two units of S. Morgan-Smith water wheels 1,760 horse-power each, operating under 33 feet head at 180 revolutions per minute. One K.W. D.C. 125 volt exciter direct connected to a set of water wheels of 150 horse-power and a motor driven exciter set. The motor is two phase 2,200 volts 180 horse-power, and the exciter is 120 K.W., 125 volts.

The switchboard equipment consists of two exciter pedestals, two machine pedestals, two machine instrument posts, and one post carrying exciter instruments and synchroscope. There are also two receiving panels for power generated in other stations, and two phase distributing panels for lighting and power circuits. Lombard governors with remote electric control are installed in both No. 1 and No. 2 stations. Provision has been made in No. 2 power house for duplicating the present installation.

The steam reserve of No. 2 station is located on Britannia Street. A Westinghouse-Parsons turbo-generator set of 1,500 K.W. is used here together with the necessary switchboard apparatus. Steam is obtained from six Babcock and Wilcox tube boilers of 2,400 horse-power capacity. This unit has given excellent service; during a period of low water in the fall of 1908 it was not shut down for three months, and during that time it carried loads as high as 2,400 K.W. for considerable periods.

It has always been the aim of the Ottawa Electric Company to provide uninterrupted service to its customers, and this station has materially assisted in carrying out this purpose.

There is also installed in No. 3 station two Goldie-McCulloch compound engines of 1,200 horse-power belted to a 750 K.W. 500 volt D.C. generator for railway service and used by the Ottawa Electric Railway as a steam reserve when required.



ACCOUNTING DEPARTMENT.

The company has the city thoroughly covered with its lines, which extend also into the suburbs in all directions for several miles.

The peak load in winter approximates 6,000 kilowatts for all classes of service, and the K.W. hours generated per day during the winter average about 70,000. The rate for lighting is eight cents per K.W. hour with a discount of 10 per cent. for fifteen days. Alternating current power is sold at $25 per horse-power per year, and $30 per horse-power per year for direct current on flat rate. There is also a combination rate for power of $1 per month per horse-power of motor capacity installed, and in addition one cent. net per K.W. hour on meter. A considerable number of customers avail themselves of this rate which has proven simple and satisfactory. Serving a population of 85,000 the installation is equal to 16,550 kilowatts.

The company recently remodelled its office building throughout; the photographs of the offices are here shown. So great has been the growth of the business that it has recently been found necessary to take over the entire building