report and to invite experts from the manufacturing companies to offer recommendations at the next meeting.

A very interesting discussion resulted, which showed that the concensus of opinion favored incandescent lamps properly spaced, but the method of wiring and control was not determined. Finally the Engineering Department was asked to write the City Engineering Department of Boston for a copy of the report made by them covering the experiments and tests they conducted previous to accepting Tungsten and Magnetite lamps as their standard.

It was also decided to approve the report of the Engineering Department and appoint the committee suggested, leaving to the committee the arrangements for the trip, but requesting the report be made as soon as possible.

High vs. Low Voltage Synchronous Motors.

As Mr. Sothman was able to attend this session the subject was again brought up for final discussion, and it was finally decided that owing to the small sizes of motors needed, the fairly temporary use for these motors, the present state of the art of designing high voltage synchronous motors, and considering that for small sizes the low voltage sets are cheaper, be it resolved that the meeting recommend the use of the lower voltage units.

During this discussion the question of pump motors for London was taken up, and it was decided that synchronous motors should be used, and if separate power and light circuits are used from the Commission's station to the city station, the motors should be on the power circuit.

The meeting then adjourned.

Mr. Ross called the meeting to order at 9.10 a.m. on Wednesday, the same delegates being present with the exception of Alderman Stewart of London.

13,200 Volt Insulators.

The delegates gave their demands as follows: Berlin 1,000; Guelph 1,000; Woodstock 100; St. Mary's 350; and London 3,500. The number needed by Stratford, St. Thomas, and Preston would be secured. It was then resolved that the Commission secure quotations on 3,500, 7,500 and 13,000 f.o.b. some central point.

Under the same heading discussions were held on Cross Arms, Steel vs. Wood Pins, and Braces and Bolts.

Cross Arms.—Were considered to be too special to bulk orders, each municipality having special requirements as to length and spacing, but it was decided cross arms should be long leaf yellow pine and painted with two coats of good paint. Treated cross-arms not considered necessary.

Steel vs. Wood Pins.—This was settled in favor of a good wood pin. Mr. Sothman preferred an all steel pin, and asked to be placed on record; Mr. Ross voiced the sentiments of the other representatives, by deciding on wood pins for any voltage below 20,000 volts.

Braces and Bolts.—The Commission was asked to secure tenders on standard braces and through bolts.

Auditing.

Under this heading the Engineering Department presented copies of accounting systems and reports from the Public Service Commission of New York State, the Railroad Commission of Wisconsin, the Gas & Electric Light Commission of Massachusetts, and the Ontario Railway and Municipal Board.

These were considered, and then it was resolved that the towns authorize their auditors to meet and draw up a system of accounting to be submitted to a joint meeting as soon as possible.

Rates for Incandescent Lighting.

This discussion was opened by the discussion of lamp renewals. Berlin, Guelph and Woodstock furnish free renewals. It was considered advisable to furnish free renewals, but rates must be made to cover this. This began a discussion on rates. There were many variations of the Toronto plan considered, but they all amounted to some type of differential rate. The two plans considered best were to charge a monthly charge based on the number of rooms and a kw. hour rate, and, second, a fixed monthly charge based on the floor area of the house and a kw. hour rate. After a long discussion Messrs. Philip, Sifton and Archibald were appointed a committee to get an example of rates from all the municipalities and compare them, and compare estimated results of the various plans.

Grounding of Neutrals.

It was decided that all neutrals should be grounded.

Single vs. Three-Phase Transformers.

It was found that the manufacturing companies were not prepared to give full data on three-phase service and station transformers at the voltages required, so this question was postponed for discussion at the next meeting. Meanwhile any municipality desiring to expedite matters is to ask for tenders—and the Commission will secure general data on the subject.

Next Meeting.

It was decided that the next meeting was to be held at Preston, October 26th and 27th.

ORDERS OF THE RAILWAY COMMISSIONERS OF CANADA.

Copies of these orders may be secured from the Canadian Engineer for a small fee.

8218—October 1—Granting leave to the Manitoba Government Telephone System to place its wires across the track of the C.P.R. at Neepawa, Man.

8219—September 29—Authorizing the C.P.R. to construct industrial spur along the lane in block 10 and 16, and across 24th Street, City of Saskatoon, Sask.

8220—September 29—Authorizing the C.P.R. to construct bridge No. 6.7 on the Cascade Section of its line.

8221—September 30—Authorizing the C.P.R. to open for the carriage of traffic that portion of the double track of the Ontario and Quebec Railway, Smith Falls Section from St. Lazare to Dalhousie Mills.

8222—September 30—Authorizing the C.P.R. and G.T.R. to operate their trains across interlocker at Brampton, Ont.

8223—September 29—Authorizing the Corporation of the City of Toronto, Ont., to lay sewer on Howland Avenue under the tracks of the C.P.R. in said city.

8224—September 29—Granting leave to the Rural Municipality of Pipestone, Man., to place its wires across track of C.P.R. near Ewart, Man.

8225—September 30—Granting leave to the City of Winnipeg, Man., to construct for the purpose of a patrol road, suitable crossings where its right-of-way for its transmission power lines crosses the C.P.R.

8226—October 1—Authorizing the West Canadian Collieries, Ltd., to construct an overhead crossing across the C.P.R. at Bellevue, Alta.

8227—September 29—Authorizing the Arthabaska Water & Power Company of Victoriaville, P.Q., to lay water pipe under the tract of the G.T.R. Company about 1,000 feet west of Nicolet River Bridge, at Victoriaville, P.Q.

8228—October 5—Approving and sanctioning location of the Montreal & Southern Counties Railway Company from St. Denis Street, St. Lambert, to Chambly Road, Longueurl County, Chambly, P.Q.

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