E.W. Power

SD-EA.39

CANADA

DEPARTMENT OF TRADE AND COMMERCE

STANDARDS DIVISION

OTTAWA, November 13, 1950.

NOTIFICATION OF SPECIAL APPROVAL

The apparatus specified and illustrated herein has been granted special approval by the Standards Division under the provisions of The Electricity Inspection Act, Chap. 22, 1928, as amended, and may be admitted to verification in Canada subject to the limiting conditions below:

Apparatus Approved: Totalizing Metering Installations using the following equipment, manufactured by the Canadian Westinghouse Company, Limited, Hamilton, Ontario:-
Type "WRA" Duplex Recording Totalizing Demand Meters
Type "RT" Totalizing Relays
Type "CA-2" Polyphase Watthour Meters with Type "CD-3" Contact Devices
Type "K-3" Reactive Component Compensators
Any other device for which general approval has been granted or is subsequently granted.

Limiting Conditions: Before such an installation may be put into service for billing purposes, the Canadian Westinghouse Company Limited shall obtain written authorization from the Director of Standards for that particular installation. Copies of the authorization shall also be sent to the Utility Company involved and to the District Inspector in whose district the equipment is to be installed. Such authorization will define the components to be used in the installations and their ratings.

Sealing: The type "WRA" duplex recording meter, the type "RT" totalizing relays, and the type "K-3" reactive component compensators are authorized for use unsealed. The "CA-2" watthour meters shall be sealed in the usual way.

Description: In this system of totalized metering, each watthour meter (type "CA-2") is equipped with a contact device (type "CD-3") which transmits impulses at a rate corresponding to the energy being measured. Each impulse indicates a definite block of energy. The impulses from three meters may be totalized by the impulse totalizing relay (type "RT") which also records the number of impulses from each meter on a separate counter. The impulses received, or a proportion of them, are then transmitted by the relay. The latter impulses are received by the recording meter (type "WRA") which is capable of totalizing two circuits in each of its two sections. One section of the recording meter provides:- (a) a graphic record (on a roll chart) of the integrated block interval kilowatt demand from which the maximum demand and its time of occurrence for any billing period may be obtained; (b) a record on a clock-type register of the totalized integrated energy; (c) a cyclometer dial record of the total number of impulses received in each circuit. The second section provides a similar record of the integrated block interval reactive kilovolt ampere demand, the totalized integrated reactive kilovolt amperehours, and the reactive kilovolt amperehour impulses. The impulses which supply this second section originate in type "CA-2" meters equipped with type "K-3" compensators so that they measure reactive kilovolt amperehours. The impulses of these meters are transmitted, totalized and re-transmitted through type "RT" relays in a similar manner to those of the kilowatthour meters. The use of type "RT" relays is only necessary where more than two circuits are being totalized by each section of the type "WRA" meter.

Authorization Given To:	Date	District
British Columbia Electric Railway Company, Ltd.	Nov. 10, 1950	Vancouver

R. W. MacLean,
Director,
Standards Division.

W.J.S. Fraser
for E. F. Power,
Assistant Director (E.& G.),
Standards Division.

WESTINGHOUSE TYPE "WRA" IMPULSE DEMAND METER