

THE CANADIAN ENGINEER

An Engineering Weekly.

AN EXAMPLE OF SOUND, ACCURATE AND FAIR PUBLIC REGULATION OF A PUBLIC SERVICE COMPANY.

In these days of increasing agitation in favor of the control or supervision of public service corporations and of large combines, many new problems are developing in regard to the methods of managing and valuing such concerns. It seems that the ultimate end most desirable in all lines of industry is combination to effect economy of operation and public control to prevent the pooling of prices or unfair rate making.

An example of public regulation that is a model in its accuracy, soundness and fairness, is that recently accomplished in Massachusetts by the State Highway Commission and the telephone companies. A record of this investigation contains valuable information for the investor, for the telephone user and for the telephone operating company.

The specific charge against the New England Telephone and Telegraph Co., which was brought in Sept. 1906 was over-capitalization and excessive and inequitable rates. The Commission's handling of the charge of over-capitalization involves the straightening out of a tangled situation that is typical in these days of properties formed by a progressive consolidation of small companies. The New England Telephone Company is the result of a combination of a good many smaller companies, each of which had certain records of construction outlay, operating expense, etc. It was found, however, that the accounts of the final company were entirely inadequate as a basis for valuation. The Commission, therefore, had their engineers make a detailed inventory of all the company's physical property in the six New England States. Every pole, every foot of wire, every instrument, the exchanges and their equipment, lands, buildings, and property of every sort, was properly inventoried and valued.

From this inventory it was found that the Telephone Company had actual property amounting to \$100 for every \$84 worth of securities issued. To this valuation was added what was considered a just value of intangible or overhead charges, including cost of engineering, salaries, interest, etc., during construction operations. In telephone construction the total charge that should be made against capital account over and above the actual expenditures for physical property has been determined as about 20 per cent., being apportioned as follows: 10 per cent. for preliminary engineering expenses and engineering supervision during construction; 4 per cent. to 6 per cent. for taxes; 1 per cent. to 2 per cent. for insurance; and from 5 per cent. to 10 per cent. for the cost of selling the securities.

The readjustment of the telephone rates might seem at first sight to concern only the telephone using public, but it was clearly demonstrated by investigation of the Massachusetts Commission that this readjustment of rates was of vital interest to the holder or intending investor in public service securities.

The principles upon which the Commission proceeded in fixing the telephone rates were those first applied by Prof. Jackson in his study of the Chicago telephone problem in that city. The whole idea of this system is to make each branch of telephone service stand on its own legs. It de-

veloped in the course of the investigation that the actual cost in Boston and vicinity, of handling each call was in the neighborhood of 2½ cents. It was further shown that not infrequently large users of telephones, secured their service at rates as low even as ½ cent a call, the loss to the company being of course made up by the small users. Up to the time of this investigation the system of accounting of the telephone company was such that it could only tell in a lump sum the amount of its income and the amount of its expenses. One of the most important recommendations from the point of view of the investor which was made by the Commission and adopted by the telephone company was the installation of a system of accounting devised by Prof. Jackson and a firm of expert accountants in the Chicago investigation, by which the necessary facts could be obtained to show the exact expense and income of each class of service.

The danger of not knowing where the leaks are occurring is of vital interest to parties holding securities of any corporation. On the extension of the non-paying systems of service the company would immediately commence losing money without being aware of how it was going. This point was very clearly illustrated by the fact that the New England Company installed a new system of accounting as recommended by Prof. Jackson and made a year's trial run, ending in March, 1910. The new accounts show that the company was furnishing certain classes of telephone service at a heavy loss and that the classes of service upon which it was making a profit did not return sufficient to overbalance the losses. Although the company has been paying 8 per cent. dividends upon its stock together with the interest upon its bonds it was found that in order to do this the company had neglected to set aside proper reserves for depreciation, reconstruction, and obsolescence of its plant. In other words, as the company had been conducting its business it was approaching the time when it must face the expenditure of millions of dollars for renewal of plant without having any reserves provided to meet these expenditures. It is evident that it was headed straight for trouble.

The investigation of the Highway Commission has established the company's accounting system upon a sound adequate basis, has made the owner of its securities feel more secure, has removed the probability of mischievous legislative interference, and has established a system of rates which will undoubtedly greatly increase the business of the telephone company, much to the advantage of the user of every telephone owing to the extension of this service. Probably no more sound, judicial and scientific investigation of the sort has ever been carried through in this country and from every point of view it would seem to be a model deserving of close study and of imitation by other communities.

One of the most striking features of this entire investigation has been the spirit of co-operation exhibited between the telephone company on one hand and the Commission and their engineers on the other. The entire expense of the Commission during the investigation was borne by the telephone company by means of a special tax, but this was only a portion of the total expenses borne by the telephone company during this investigation.