

of these materials and supplies (and, of course, the associated cost of handling the same both in the storeroom and in connection with transportation), properly belongs to construction and to maintenance.

Another item which has not been carefully handled in the general accounts, is the matter of "deposits." For many years we have had an account for deposits to guarantee payment of bills, but within the last few years many companies have been assisted in financing extensions by prospective customers, and it has been necessary in nearly every investigation of rates to ascertain independently the division of this deposit account among the two classes. The reason for this is that, in determining the rate base, the moneys deposited with the company to guarantee the payment of bills are not deducted because we require the companies to pay interest on these deposits; but the deposits to assist in financing line extensions must be deducted, as the very purpose of such deposits is to relieve the company, for the time being at least, of the burden of carrying unproductive investment.

In conclusion, I am afraid that Mr. Reed is trying to make too much of a mystery out of material which is now understood by many commission engineering and accounting experts, basing this opinion probably on the fact that a number of the commissions do not have this class of assistants. As the commissioners in many states may have been appointed or elected because of their political affiliations they may not be competent themselves to analyze these matters but must depend on what is handed to them by the utility companies, or by the attorneys for complainants.

I believe in uniform systems of accounts. I believe fully in the allocation of costs in such a manner as to record for prompt use the cost of the various classes of service, and where necessary the cost to different areas, particularly if there are geographical reasons for special provision for the service in certain areas. I believe further, however, most thoroughly in the association with the figures regarding dollars and cents of the figures concerning the physical data, that is, the KWH pounds of coal, car miles, etc.

While my comments may seem harsh and over-critical, I want to say at the same time that Mr. Reed's paper shows that he has given this matter

very considerable study. On this account he deserves great credit for his work.

**Judson C. Dickerman.** From the standpoint of a public utility commission staff member who has had to wrestle with the problem of the fairness of a particular rate for a class of service in an elaborate rate structure or of the relative fairness of the several rates one to the other, Mr. Reed's discussion is pertinent. Interested civic-minded people and the law as usually interpreted consider that utility rates should be based substantially on the costs of the service given and not on the possible competitive market value. Preferential and manifestly below cost rates for certain classes of services, viewed in the light of past experience of the company, were for years tolerated on the hypothesis that thereby new business would be possible for the utility which, when fully developed, would become normally profitable and of advantage to all consumers. So the then existing ordinary consumers had to meet, largely in the rates they paid, the losses incurred by this business taken at probably lower than complete costs. While such language was glibly employed by both management and commissions, it was not supported by any systematic cost finding exhibits, but rather found its justification in the seeming growing prosperity of the companies as shown by increasing net revenues, and by the decline in certain specific costs per average unit. No actual cost findings were obtained to show whether the new low rate was earning a fair profit or whether the prosperity of the company was due rather to too high payments by the large majority of high rate light and small power consumers. The chief, and perhaps only, well defined cost unit thus used was the average cost of generation at the power station. What went on in the rest of the system was usually neglected. Yet if anyone attempted to use this average generating cost as a starting point on which to check up the relative fairness of the rate structure, he was immediately overwhelmed by assertions about the differences in load factor, time and hours of use, all intended to give the impression that the low rates for large power and the high rates for smaller users and for light had almost no relation to this lowered average cost of generation.

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If you carry a rate case to a commission, or if a company wishes to change a rate with the sanction of a commission, the procedure will revolve around two distinct presentations. First, do the earnings of the company as a whole result in a fair return on its valuation for rate making; and second, what will be the increase or decrease in the gross revenue as a result of the proposed change in the particular rate. The whole case will revolve around these two factors with never any systematic presentation of cost finding data. "Opinions" of officials may be presented that costs justify the defended rate, but as far as I have ever heard, no utility has ever introduced into a rate case evidence of costs for each class of service to which a definite schedule applied, or which had been kept as a regular part of their accounting system. To be sure, the interested officials gather hastily some facts, add a lot of estimates and state therefrom their opinions as if as valuable as systematically derived cost figures. From such a situation a rate case necessarily drifts into a discussion of the valuation of the whole property and general conditions of management, from which the fog arising quite obscures the real question, "Is this particular rate in accordance with the actual fair costs of rendering the service to which it applies?"

Mr. Reed has pointed out that, with a declining price level, unearned profits to the utilities from post-war values enhanced beyond the actual pre-war investments are about over, and only profits from successful economies in operation are possible.

Another factor of importance from a public viewpoint is that the industry has apparently been largely stabilized for some years in its load factor and in the distribution of business between large and small and between light and power consumers. To postpone longer definite cost finding for groups of consumers who take service under specific class rates has no excuse under the plea of development. The combinations of small units of the industry into greater ones justifies the expense and skill required.

One of the best reasons for insisting that all concerned adopt this valuable procedure is that it already has been done successfully in guiding the policies of a large company.

As Mr. Reed declares, the details of the system he presents are not the last word but rather the first word. Convinced that public opinion demands

better proof than now exists of the costs underlying the various rate schedules and that the public believes such cost finding is feasible, some of the qualified persons identified in both the ownership and regulation of our utilities should devise and put into effect adequate and understandable systems.

It is interesting to note the absence in Mr. Reed's method of any reference to demand, peak, time of use and length of use. His use of average costs per KWH of production, transmission, etc., is also interesting. He seems to recognize certain costs as based on the average KWH and others as on a consumer basis. The ordinary utility rate maker will, with a gesture of despair, declare that the vital problems of day or night use, large and small demand, and all the other fetishes that have been inherited from the past, make cost finding impossible, or at best largely a matter of opinion. But here is presented evidence of a capable management having used a method in controlling its business, both internally as a matter of management and externally in devising its rate schedules, and ignoring such demand, peak and size factors. Possibly these factors should be considered in formulating the steps and working out other characteristics of the rate schedule set up, but they are not necessary in getting at the actual cost results of operation for various subdivisions of consumer classes. It is, of course, to be noted that Mr. Reed did not carry his description into the capital accounts, but we assume the same principles would hold.

In conclusion, I might say that this year I have had an opportunity to examine at first hand the original sworn filed reports of many electric utilities under the jurisdiction of at least eight separate commissions from Maine to Missouri. As a whole they are far from comparable with each other and are more or less inadequate to meet even demands for clear cut costs under the present accounting divisions. Many reports fail to follow closely the definite requirements of the commissions' accounting report orders. No harm, and probably some good, can come by redesigning our whole public reporting system to produce real cost finding data.

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