

plants into the NEPCO power supply pool. Rather, if the Commission is to roll together the load of the total New England Electric System and also the System's power supply, it should do it on the basis of adjusting cost of service to reflect modern replacement for the obsolete Massachusetts Electric and Narragansett plants.

A study has been made by Messrs. Herbert Westfall of R. W. Beck & Associates and Alvin Rowe, Jr. of Van Scoyoc & Wiskup, Inc. to determine the size of the adjustment involved, and they have concluded that modern replacement would reduce the cost of NEES' power supply by \$15,591,000, or an average of 1.5 mills per kwh. A summary of their results is shown on Schedules A, B and C attached hereto. Their workpapers are available to the Staff and Company representatives.

The obsolescent condition of these plants has been known for at least five years. In this particular study, it is assumed that management planned five years ago, on the basis of then known technology, to replace this capacity so as to best serve total New England Electric System ("NEES") requirements. While there may be a number of different ways this can be accomplished, based upon available information, it was decided to use a 630 mw base load generator at Brayton Point as a fair choice for this testing purpose, having a fixed capacity cost of \$19.30 per kw year.

It was assumed that this new unit would be operative in 1966 as a replacement for the obsolete Massachusetts Electric and Narragansett generators, and for all purchased power except the single-unit purchases. The reconstructed System was then dispatched against the 1966 actual NEES load.

The result was a total savings of \$15,591,000, using the company-proposed 6½% rate of return, although we consider it excessive. On this basis, average cost of power supply is reduced from 8.7 mills per kwh to 7.2 mills per kwh. This by no means represents the low limits of the power supply cost of service, and continuing studies are expected to refine this cost further. The study is sufficient to demonstrate to the Commission the need for a formal investigation because of the magnitude of the additional rate reduction involved.

The \$15,591,000 excess does not allow anything for further amortization of the unamortized portion of the generating facilities involved. We are satisfied that NEES' record of performance cannot justify such amortization; but rather, that the record will show a failure of management to discharge its obligation to keep its equipment modern and its costs down. The prudence of installing some of this equipment is very questionable under then contemporary standards, and the imprudence of continuing their use long after obsolescence is obvious. What stockholders may not have recovered in the form of excessive returns in the past they may now have to lose. But there is no guarantee of any particular profit level in public utility equities, and the reason returns on the order of 8 to 10% are allowed to equity holders is because of the risk involved. And, there are times that the holders of any high return paper (for example, a 10% 2nd trust on real estate) must recognize that a loss has eventuated. Here it has happened, and the amount involved can be absorbed.

Regulation should provide economic results for a monopoly industry comparable to that which competition would produce in ordinary industry. In ordinary industry, when machinery becomes obsolete, so that the manufacturer can no longer meet the prices of his competitors, he must write off the old equipment, take his losses, and install such modern equipment as will enable him to reduce his costs and remain competitive.

The lack of competition has enabled NEES these last years to charge wholesale rates some two to three times higher than the national averages, while continuing to utilize obsolete equipment. If NEES were competing against the national market, however, NEES could not have survived without modernizing, top to bottom. A regulatory agency should fix rates which would cover the full cost of service, including adequate return, *only* of a modern plant; it should not allow recovery against each piece of equipment simply because it is still intact.

However, if the Commission were to decide to the contrary that the unamortized portion of these obsolete plants must be restored to the stockholders, there would still be a further rate reduction of well over \$10,000,000 a year. Reports to the Commission indicate that the net depreciated plant involved is in the order of \$48,000,000. Retired at this point, this would become a tax loss and deduction in the same amount (adjusted for the difference between tax and book depreciation) and, therefore, a tax saving of some \$24,000,000. This would leave another \$24,000,000 to be recovered through rates; and, spread over ten years, this would amount to \$2,400,000 a year. This would still leave a handsome \$13,000,000 or more rate reduction.