

The P O W e r F i g h t

by
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1932
New Republic, Inc.
New York

reprinted by
Delta Spectrum Research

Author's Note

The author wishes to express his great appreciation to the many people with whom he has discussed the subject since the publication of *Power Control* in 1928. Those who have at different times given specific help of various kinds on this book are Mr. F. L. Bird, Miss Vivi Berkman, Miss Evelyn Preston and Mr. Daniel Mebane. They share, of course, no responsibility for the presentation.

NEW REPUBLIC, INC.

Printed, March, 1932

Reprinted, October, 1934

Printed in U.S.A.

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CHAPTER ONE

THE POWER PRESSURE

DEMOCRACY is a social system where the people control their own destiny. Feudalism is a system where it is controlled for them. In the former they take risks. In the latter they have security, and others have the responsibility for maintaining that security. Today we have neither system. We appear to be shifting from democracy into an economic feudalism, retaining some of the worst features of both systems. We vote, and have the impression of being free and independent. Yet those votes have almost no effect on the economic arrangements, which stand aside from the political ones, and outrank them in importance. They are far more important to the prosperity of the country and the peace of the world. Even a great and prolonged business depression produces no far reaching plans for an overhauling of the industrial system through political means. There is a growing opinion that war for political ends, such as our war to save the world for democracy, is only "spilling blood over toys we have outgrown," that the economic rulers are the real rulers, and that the heads of governments are of that class for whom the people have invented the phrase "stuffed shirts."

To the extent that a man has no alternative place to seek work he is not free. He is dependent. To the extent that small business men find it impossible to compete with the rugged corporations of the country they are not free. To the extent that the white collar workers and the workers in overalls can find no other job than the one they have, or lose that job as punishment for striking, or lose it as

punishment for having a forty-fifth birthday, or as punishment for their political opinions or their refusal to curry the favor of their immediate superiors, they are not free. They are living in a feudal system, but in a feudal system which does not offer them even that ease which people had four hundred years ago, security in the job.

The main characteristic of the long mechanical progress of which we are so vicariously proud is dependence without security.

The interest of the "power fight" is essentially in the ways and means through which this particular industry has used our semi-feudal situation to attain its present situation in the world, how its success has solidified that situation, and what opposition it has called forth in the course of its triumphant progress.

1. *Mass Formations*

The most startling development in recent years has been the open entry of J. P. Morgan & Company into the field of electric power. They also went into the grocery business at the same time, thus justifying in part the retort elicited many years ago when the elder Morgan sailed back to our shores from Europe and remarked that he liked this country very well. The retort, it will be remembered, was, "Well, if the time ever comes when he doesn't like it, he can give it back to us." Morgan combined with Drexel and Bonbright, old working allies, to start the United Corporation, which rose rapidly to a control in 1930 of over 19 per cent of the total power capacity of the industry. On the Street the Morgan and Bonbright influence in Electric Bond and Share has long been known, and Electric Bond and Share (sister corporation of General Electric) owns part of the United. In view of the fact that hostile corporations are not allowed in on each other's ground floors, I believe it is correct to group United and Electric Bond and Share together. The latter group con-

trols over 12 per cent. In addition the National City Bank's influence in Consolidated Gas of New York is so strong that a direct affiliation with United is frequently discussed. This company controls over 6 per cent of the capacity. These allied interests together control 37.7%.

From here on it becomes more difficult to trace the threads of control. Taking as authoritative an account in the financial section of the *New York Times*,¹ the grouping of the Chase National Bank interests with the Harris, Forbes interests of Boston, late in 1930, was an event second only to the Morgan groups. According to that account a total of over five billion dollars in various forms of public utilities was centered under one sponsorship. The Chase Securities Organization has financed the Utilities Power and Light and has large holdings in the International Paper and Power Company. Harris, Forbes were national Paper and Power Company. Harris, Forbes were associated with several other banking groups, including the Chase group, in the Standard Power and Light arrangement with United States Electric Power in 1930. It has, according to this report, large holdings in the Associated Gas and Electric system, in International Paper and Power and in the Central Public Service. It also provides banking sponsorship for the Cities Service system and has headed financing for various groups including the Southern California Edison. Through its United States Electric Power it has affiliations with the American Waterworks and Electric Company and the Mellon-Koppers utility interests. Without including Cities Service, Southern California Edison, or American Waterworks and Electric, the sphere of influence of this banking group would, according to this report, cover 11.57 per cent of the industry's installed capacity. If these three groups were to be included a total of 17.83 per cent would be listed under its influence.

The degrees of control exercised by the banking groups vary from direct to quite indirect control. As far as the

problems of determining combination are concerned the only essential question is whether these various companies would be likely to act contrary to the guiding interests of the banking groups with which they are connected. To the extent that the answer is in the negative, it is reasonable to group them for working purposes into "spheres of influence," in the language of diplomacy. Following this procedure, with proper reservations, we see that a few large groups, more or less tightly connected, are emerging as economic empires within the country.

The following statement of the amount of installed capacity of individual systems is based on figures issued by the companies either through the *Electrical World* in May, 1931, or through Moody's *Manual of Public Utilities* in 1931. The grouping of units under the holding companies follows standard financial manuals. The grouping of the holding companies together, however, is subject to reservations made above. Detailed production by systems is given in Appendix A.

According to available information the control of the industry is exercised somewhat as follows:

1. Morgan-Bonbright-National City spheres of influence.		
	<i>Per Cent of Installed</i>	<i>Capacity</i>
United Corporation and allies.....	19.14	
Electric Bond and Share.....	12.05	
Consolidated Gas of New York.....	6.49	37.68
2. Chase National-Harris, Forbes spheres of influence.		
Standard Gas and Electric.....	4.87	
Utilities Power and Light.....	.95	
International Paper and Power.....	2.19	
Associated Gas and Electric.....	2.73	
Central Public Service.....	.83	11.57
3. Insull interests.....		
		10.31

These three groups, if current financial news is not incorrect, control systems having 59.6 per cent of the industry's production. The North American Company comes next with 8.70 per cent. In order follow the Pacific Gas and Electric, 3.52 per cent; the Southern California Edison (sometimes considered a Morgan interest), 2.95 per cent; Stone and Webster, 2.47 per cent; Duke Power, 2.45 per cent; United Light and Power, 2.19 per cent; Cities Service, 1.68 per cent and American Waterworks and Electric, 1.61 per cent. These eight groups control together 25.57 per cent of the installed capacity. Eight smaller groups, details of which are furnished in Appendix A, control together a further 4.45 per cent. Some of these smaller companies are held in part by some of the larger interests.

These private groups together account for 89.66 per cent of the installed capacity of the industry in 1930 of 31,836,243 kilowatts. The various larger government plants operating in that year represented an installed capacity of 789,730 kilowatts, which is 2.48 per cent of the industry's total. The remaining 7.86 per cent, not listed here, is spread among smaller private and municipal plants.

In passing it may be of interest to note the assets of some of these companies. Many of them are in the gas or street railway business in addition to electric power. Following, with a reminder of reservations, the former grouping, the assets of these companies as of the end of 1930 are as follows:

1. Morgan-Bonbright-National City groups	
United Corporation and allies.....	\$2,810,878,133
Electric Bond and Share.....	2,698,624,682
Consolidated Gas of New York.....	1,265,260,292
	\$6,774,763,107

In fact Philadelphia, Eastern Pennsylvania, New Jersey and New York City are supplied almost entirely by manufactured gas from the Morgan group. The threat of natural gas to that monopoly was considerable. Price-cutting might have started at any time. Instead, the United interests (Morgan) bought a large section of the stock of Columbia Gas and Electric, thus avoiding any price-cutting, and any particular benefit the consumer might have derived from the fact that one of the great natural resources was at the gates of the greatest industrial area of the country. As *Fortune* commented, "There is not much likelihood of fratricide between the Manufactured Gas and the Natural Gas—no, at least, as long as each can so pleasantly and profitably contrive to become his brother's book-keeper."

Now this tendency toward control of allied industries is not confined to the electric power industry. In general the banking groups have tended to broaden the base of industrial control. They do not mind if people switch from gas to electricity if they also have a finger in both industries. They do not mind so much if passengers switch from street cars to busses and if freight switches from railroads to trucks if they also have control over the busses and trucks. While we have made some feeble attempts to control the elimination of competition inside an ordinary industry, we have made no attempt whatever to restrict the elimination of inter-industry competition between utilities.

Another, somewhat minor form which the growing power control has taken is that of owning its chief customers. One of the largest of these is the electric railway industry, and preliminary studies indicate that about a third of it is affiliated with the power industry. If you can sell power to the street car lines instead of having them generate it themselves you are assured of a large demand. If you own the street car lines you can, within limits, sell

the power to them very profitably. Control has, in some cases, gone beyond street cars into other industries which are large power consumers. During the past few years Insull bought into the cotton textile industry in Maine. A New England subsidiary acquired four textile companies in Augusta and Lewiston, operating 9,362 looms and 354,000 spindles. This led the *Electrical World*, the organ of the industry, to comment: "Through the purchase of industrial firms by the parent holding company in a power group, a portion of the investment is today being diluted in some of these enterprises from a strict light and power distribution. . . ." It pointed out that not only investors but consumers of the subsidiary operating utilities were concerned in such expansion. Certainly if such textile mills received lower power rates than nearby competing mills it would be a case close to the kind of discrimination which brought the railways into dispute.

The financing by which this concentrated control was established in the power industry is now fairly familiar. The public contributed the bulk of the investment in the industry and received in return bonds and preferred stock, giving no control. Sufficient common stock to secure the real control was held by insiders. Using their common stock holdings as a base they set up holding companies, one on top of the other, always retaining a sufficient share of the common stock, the voting stock, to control the top company and all the subsidiaries. In this way relatively little capital was needed to control a great deal of investment. The Federal Trade Commission reported that in the case of the Standard Gas and Electric an investment of less than one million dollars was sufficient to control over \$370,000,000. The ratio is 1:370. In the Commonwealth Power (Morgan) the ratio is 1:25. This holding company arrangement, no matter what else

is claimed for it, makes it exceedingly easy for control to be concentrated into a very few hands.

There is, perhaps, little point in speculating as to the exact number of individuals who may still be said to have an active effective voice in this ten billion dollar industry. If the first five groups control around 72 per cent of the production, something like seven billion dollars of power investment may be said to be in the hands of the leaders in those groups, perhaps ten men. That is a very rough-and-ready way of getting at it, however. The Federal Trade Commission offered another way when it pointed out that voting control of twenty-three holding companies was in the hands of twenty-five men. The properties controlled represented an investment of \$1,860,000,000. On this basis the whole industry would be in the hands of 135 men. These Commission figures date back, however, to 1925 and 1926 and since that time not less than a quarter of the whole industry has submitted to unification. The number of real controllers would then be close to one hundred men.

Not even these liberal estimates give a full picture of the influence of the power group in the country. A study in 1929 took 184 directors in various utilities in the Morgan-Bonbright-National City group and 18 directors in the two major Insull utilities and placed them according to other industrial connections.⁴ It found that these 202 men held 586 directorates in the power and gas utilities, 91 in oil and coal, 158 in railroads, 43 in electric railways or busses, 537 in financial houses, 479 in other industrial or commercial companies, 22 in engineering or construction companies, 28 in commercial electric companies, 33 in mining and 7 in communications. In view of the influence of banking in modern large scale industry, the connections of these power officials with banks and financial houses is significant. They average 2.9 positions in the electric power industry and 2.6 financial posi-

tions. A group such as this can fairly be described as having a very important say in the major financial and industrial life of the country. Their connections may explain, to some extent, the attitude which the business groups have, on the whole, taken toward the utilities.

While such narrowing of control has been going on there has also been a great deal of shirt-fronting to the public about the establishment of ownership by the consumers of the industry. For some reason it was felt necessary to keep the public from seeing what was really going on. On the whole the public was encouraged to buy those securities which carried no control whatsoever. The real control was getting into a very few hands. Still, today, spokesmen for the utilities talk about the way in which they are democratizing industry. What they have been doing with the utility may be good or bad, but it is certainly not what they say they have been doing. John T. Flynn in his *Investment Trusts Gone Wrong!* characterized the procedure this way: "The democratization of this industry was seen to be at hand and the great point was that ownership of the utility corporations was being diffused among a multitude of small stockholders. All the time precisely the opposite tendency was at work."⁵ The real say about the industry was passing away from the small stockholders.

Just what effect these holding companies have on the consumers will be dealt with later, but one illustration is in point here to show how important it is for the controlling groups to mobilize sufficient public influence to keep the utility commissions powerless while they are carrying on their many marriages.

The almost successful attempt of one banking house (W. C. Langley and Company) to secure an unusual favor from the New York State Public Service Commission was brought out in 1930, shortly before the chairman of that Commission resigned to join the banking house. It was

brought out by a special commission appointed to investigate public service procedure in that state.⁶ The minority report, not challenged in this respect by the majority of the special commission, gave a description of holding company procedure which should be kept in mind. The holding company in question was the Long Island Capital Corporation, the operating subsidiary was the Long Island Lighting Company. The report states:

"The Long Island Capital Corporation program . . . appears to us an example of one of the dangers in the holding company idea. The evidence shows that this corporation was created primarily to bolster up the value behind the highly speculative common stock of the Long Island Lighting Company. . . . Briefly summarized, it shows that the E. L. Phillips interests, associated with W. C. Langley and Company, controlling probably a large majority of the 3,000,000 outstanding shares of the Long Island Lighting Company, petitioned the Public Service Commission to permit the newly created Long Island Capital Corporation to take over 1,600,000 or more shares of the Long Island Lighting Company by exchange of an equal number of shares of the Capital Corporation. . . . The books of the (Long Island Lighting) company showed these shares at \$3,000,000, or \$1 a share, and including their full equity in the property, their book value did not exceed \$1.70 . . . at the time the petition was presented to the Public Service Commission their market value was in the neighborhood of \$.70."

In short here was a holding company proposing to set up shop on the basis of acquiring \$2,720,000 book value of stock of the operating company, and, with nothing else in its treasury, issue its own bonds, preferred stock and common stock to the extent of \$22,000,000 at least. The banking group and holding company group were speculating on the market value of the common stock of the operating company staying at \$.70, or some 43 times more

than the real money invested in it and accumulated in the surplus account.

The report continues: "The purchasers of the senior securities of the Long Island Capital Corporation would have a lien not on property but on the highly inflated common stock of the Lighting Company, and the soundness of their investment would depend to a large extent upon the continued willingness of the Public Service Commission to allow the Long Island Lighting Company to maintain rates high enough to provide profits approximating those which the company is now making. . . . It is too clear for argument that the sanctioning of this plan by the Public Service Commission would later bring strong pressure to bear on the Commission to perpetuate the present net earnings of the Long Island Lighting Company and so to help it sustain the artificial market value of the \$1 common stock. Any other course would mean that the Commission was exposing innocent investors in the senior securities of the Long Island Capital Corporation to gross exploitation."

Here the bondholders and preferred stockholders of the holding company would be the ones to suffer if the very high rates charged to consumers by the Long Island Lighting, and its high profits, were cut down by the Commission supposed to do exactly that. A situation, similar to many others, was being created where the body protecting the consumers against monopoly would have been rendered ineffective. The report continues: "Yet Chairman Prendergast, the sitting Commissioner in the case, recommended the granting of this request, after brief hearings in which there was no representation of the public and practically no cross-examination of Messrs. Phillips and Langley. The case is an outstanding instance of the danger when commissioners are not thoroughly alert to the public interest."

Here the interest of the consumers happened to be at

one with the interests of some of the potential buyers of the holding company's securities, nevertheless the chairman of the most expensive and one of the strongest state commissions in the country moved as far as he could quietly to disregard these interests for the benefit of the banking group which he later joined.

In the tremendous concentration of control over wealth, in the huge stake for which they were playing, sums running into hundreds of millions of dollars a year beyond what the consumers might be expected to pay, it is not difficult to see how important it is to the power industry to keep the state public service commissions working in a manner satisfactory to them. They have become the ardent advocates of the regulatory system. It plays into their hands.

2. *The Pressure on the Press*

The men who organized this job of entrenching the system which is so favorable to them, and of molding a public opinion to their uses, have been doing it with public money. Their expenses for these purposes come not from capital contributed by investors but from the sums paid by consumers in their light and power bills. Under the regulatory system which they are trying to entrench still more firmly, they are generally allowed such expenses as are needed for advertising and propaganda. State regulatory bodies which are, to say the least, indifferent about the matter, often let them charge rates sufficient for a profit even after such expenses for molding public opinion have been paid.

Here the emasculating of the initiative of the local managers and owners, resulting from concentration of ownership and control, had its first effect. These men, living in a community directly affected by their rates and by the propaganda expenses they charged up against rates, might have felt themselves in the position of semi-public servants,

administering public funds. They were conducting an industry which the Supreme Court had held to be a governmental function. They might have felt under some obligation not to use those funds for non-operating purposes. They might have felt responsible to the consumers for giving service and for letting that service be weighed on its merits. But the responsibility had passed from them to men in the holding companies who did not come into direct contact with the localities being served, who were not officers of companies performing a governmental function but simply officers of companies controlling the others. It was these men who made and stood behind the plans for expending such sums as seemed necessary for their purposes. The others were forced to carry them out.

One of the organizations they used to carry on this work was the National Electric Light Association. To this, companies contributed according to their production. It thus received its main support from the big groups. Its director, since promoted into another industry of equal importance to the power companies in controlling public opinion, the National Broadcasting Company, gave a very plain statement of the attitude which the big companies wanted the others to take about the expenditure of public moneys. The work of influencing public opinion in schools, press and civic groups had been going on for some time. The men of the industry were having conventions all over the country, at its gayest resorts, their expenses being paid from funds contributed by the public. In these circumstances he announced that there was no limit.

"All the money being spent is worth while. And may I leave this thought with you executives. Don't quit now. At the next convention have more young ladies here so as to do the job right, and let off more men from the departments, so they may come here. Don't be afraid of the expense. The public pays the expense. Let us continue with big meetings!"

The sums spent by the utility industries for advertising have been estimated to be between twenty-eight and thirty-five million dollars a year. The amount has been growing steadily. Through the N.E.L.A. another million was raised for its various purposes. The large companies also had public relations departments, but the fact that many of them operate entirely inside the boundaries of one state has prevented the Federal Trade Commission from going into many of their expenditures. With these sums, all contributed by consumers under the impression they were paying for electric light, considerable could be done to keep intact the system which was so favorable to the controllers of the industry. Almost everything that could be done was done.

One of the most important forces in the country is the press, and many ways were used to influence it and make it serve the purposes of the industry. That story has been brought out by painstaking work on the part of the Federal Trade Commission. Some of their findings I summarized in *High Power Propaganda*.⁸

A rural press service which reached 14,000 rural newspapers was subsidized. General Electric, Insull, United Gas Improvement, Electric Bond and Share and American Telephone and Telegraph leaders started it. Two other rural syndicates were later also subsidized. Much was made of the advertising fund available to the companies and its influence on editors of small papers. The classic remark on the subject was made by the utility director in Missouri, J. B. Sheridan. He said: "Unquestionably, when you talk advertising to most newspapermen they warm to you." He wrote one of his friends: "Gee, Mr. Buck, what the country press is worth to people who are honest and use it honestly is beyond calculation. I have spent as much as \$300 in three years 'entertaining' editors. . . . All of them are God's fools, grateful for the smallest and most insignificant service of courtesy. . . . If we could

stimulate a little local advertising for some of the leading newspapers, I think we will have the newspapers and the operators so closely associated that it will be impossible to split them in the near future."

The power people had two things to go on in this work: some communities were so glad to get power that they would take it as they would a gift horse, without looking at any teeth; second, the small papers are hard up. As the Illinois director put it: "We are trying to promulgate the idea rapidly among the newspapers that public utilities offer a very fertile field for developing regular, prompt-paying customers of their advertising columns. When that idea penetrates the United States, unless human nature has changed, we will have less trouble with the newspapers than we had in the past."

There were few states where the buying process reached such a point as in Georgia. Here the utility people seem to have persuaded the editors that all news about the utility problem had to be paid for. The industrial representative of the Georgia Railway and Power Company wrote: "Our greatest distress before we started the Committee was the printing by newspapers free of charge of propaganda written by public ownership fanatics. We answered those articles with paid advertisements and then insisted that the newspapers require the public ownership fanatics to also pay for the space they wanted. The result is that out of 250 newspapers in Georgia only four will publish anything at all from the public ownership people. . . ." The power to insist was the power to destroy. In Ohio it was pointed out to editors that they should be against municipal plants because municipal plants never advertised. It was an appealing argument.

The method of controlling community opinion through having local utility managers bring pressure on the editors and through handling advertising funds in a way to appeal to what they called the human nature of the editors, in-

volved some finesse, some slight of hand in darkened rooms. The Hofer service to rural papers simply involved fooling editors and their reading public as to the self-interested source of editorials. The N.E.L.A. publicity men, grouped in states and regional divisions, set about the business of fooling editors and public in regard to the news. Their achievements along this line have been characterized as "impudent impositions" by *Editor and Publisher*. It said editorially: "For years this journal has sought to have this flagrant abuse of public confidence in the press whipped out by organized newspaperdom. Journalism has roundly endorsed our theory, but the practice has been permitted to grow and snarl into a public scandal. In the light of the impudent impositions of the 'Power Trust' agents, newspaper men might now proceed really to deal with the wreckers and spoilers of the people's interests and democratic government."

The impositions were partly on the press, but in a larger way were all on the public. The publicity director in the Carolinas, S. E. Boney, whom *Editor and Publisher* characterized as one of the prizes, sent his own reports out on the North Carolina State circuit of the Associated Press, and the Washington-Atlanta trunk wire circuit of the same association. His neatest trick was to have editors, prominent political men such as Governor McLeod, Senator R. M. Stewart of Lancaster, Colonel Dawson, formerly chairman of the State Democratic Committee, judges and presidents of men's and women's clubs sign, with minor changes, statements he had written himself. Thus, he secured authority for his views and spot news value. The people who helped him do this were pleased at seeing their names in print, together with their pictures. He would then write around to the editors telling them that certainly the views of such prominent people warranted editorial comment.

A similar procedure was apparently adopted with a

pamphlet signed by the late Haley Fiske, President of the Metropolitan Life Insurance Company, in which he told the policy holders to lay off any attack on the utilities. Twenty-five to thirty million copies of it were circulated. In the letter from George Oxley, the general publicity director of the National Electric Light Association, transmitting that pamphlet to the directors of the State Committees, he sincerely trusted that they would not in any way mention the N.E.L.A. in connection with it, although the association "furnished the ideas, the facts upon which he based his message;" everything, in short, except the paper, the ink and the name.

The main job was to get the newspapers to print stories from the weekly or monthly news sheet sent around by the publicity director, and to have it printed in such a way as to fool the public into believing that it was not propaganda news sent out from a source very directly interested in decrying municipal plants, Ontario, the Boulder Dam and Muscle Shoals bills and any tightening of regulation. To the extent the editors would print and comment favorably in their editorials on this material the directors considered themselves successful. Alfred Fischer, the director in Michigan, accepted congratulations on this process, which was described as "learning them there dumbbells how to do the vox populi . . . and do the dear public fall for it!"

Judge Healy, in charge of the investigation, asked the national publicity director, Oxley: "I want to ask you if you think that the editorial information brought about in this way is fairly presented to the public without knowing to what extent the people in your industry have had something to do with its getting into the editorial columns?" Mr. Oxley made what was probably the only answer possible: "To say anything else would be a reflection upon the integrity of the editorial opinion of the country." That reflection had been made steadily for eight years.

The utility directors of publicity knew that they were, in the current phrase, getting away with murder. There were several written admissions of it. One was printed in a pamphlet by Willard Cope, vice-chairman and executive-secretary of the committee in Georgia: "It is possible to interpret the work of a public relations director in two ways. You may look on him if you wish (and many within and without the industry do) as the head of the Alibi Department, the Fixer—the undertaker's assistant, suave of manner, discreetly clothed, who moves about here and there during the inquest trying to put the best possible face on the murder. It may be that this is the proper view of him. Indeed it is quite possible to get such a focus that this will be the picture the negative prints. . . ." Cope, who spent about \$30,000 a year in Georgia, was the one who destroyed every pen mark, paper and checkbook in his office before the Federal Trade deputies visited him, and all record of the sums—which probably came to a quarter million he had spent in eight years—was removed from sight. He had apparently learned how to avoid inquiries after the murder.

While, on the whole, the work of the utility committees in controlling the press met, at first, with little objection on the part of the editors, the purchase of newspaper properties met strong objection. The International Paper Company, affiliated with the International Paper and Power Company, one of the big companies, sent two young newspaper men into the South with almost unlimited credit and expense accounts. They bought up the *Augusta Chronicle* in Georgia, the *Columbia Record* and *Spartanburg Herald-Journal* in South Carolina, and negotiated for many others. The International Paper itself bought the *Boston Herald* and *Boston Traveler* in Massachusetts. It also purchased an interest amounting to \$1,600,000 in debentures and preferred stock and 10,000 shares of common stock in the

Chicago Journal in Illinois, one of the Bryan-Thompson papers. Mr. Archibald R. Graustein, President of the company, bought in his own name \$250,000 of preferred stock and 5,000 shares of common in the *Chicago Daily News*. The company took part in an offer for the *Cleveland Plain Dealer* in Ohio, which was not accepted, and for *Il Progresso*, an important Italian paper published in New York City. The company also secured an interest in three papers of the chain owned by Frank Gannett, the *Brooklyn Daily Eagle*, the *Kickerbocker Press* and *Evening News* of Albany and the *Ithaca Journal-News*, all in New York State. This interest was bought back by the owner of the chain shortly after the utility connections of the International Paper Company had become clear.

The investigation established that the paper company was affiliated with the power company, that the investment of the power company and its subsidiaries amounted to almost half a billion dollars, and that 54 per cent of its revenue came from its power properties. Mr. Graustein stated that the paper company had had a deficit for the year 1928, that it needed to secure a market upon which it could rely, and that the purchase of the papers was to secure such a reliable market. He also made a statement which is of interest in the whole problem of concentrated control.

"As a matter of fact, the manufacture of newsprint requires, as we have said, so large an investment, and the supply of newsprint absolutely every day is so vital to the paper that some community of financial interest is natural and not infrequent. . . . More than that, competitors of the International have assisted in financing of newspapers and the poor showing of International in 1928 is partly ascribable to the loss of a large account through financial assistance extended by a competitor."

The influence of such competitors on the press has not been discovered by the Commission, although at least one

other paper company has large power interests in New York State.

The ownership by the power company in these papers was not disclosed by their statements to the postoffice. The public was not informed, until the investigation brought it out, that the power company had an interest in the papers it was reading. The company maintained that it did not influence and did not intend to influence the editorial policies of the papers. The editors and publishers involved stated that they had in no way been influenced. The editor of the *Spartanburg Herald-Journal* announced that he was surprised to learn that the International Power and Paper Company had financed the purchase of the papers, and resigned. The editor of the *Columbia Record* accepted Lavarre's statement that he was the real owner. The editor of the *Augusta Chronicle* announced that he had been left his freedom. Mr. Frank Gannett made the statement, which can hardly be challenged, "All readers of the Gannett newspapers know that we have consistently opposed the aggressions of the so-called power trusts. No papers in the country have more vigorously advocated retention of all water-power resources by the government, and we will continue to do so." He broke the connections with the paper company shortly afterwards. The International Paper and Power later disposed of its holdings in the Boston papers.

The extent to which the business interests in the community influence a paper was described by Mr. Robert Lincoln O'Brien, former editor of the *Boston Herald*, shortly after the sale of that paper had been discovered. He remarked:

"Highly as I appraise the management which Mr. Graustein has set into motion, frankness compels the acknowledgment that there are certain by-products of the whole affair that seem destined to have a far-reaching effect upon the political life of the community and may even transcend State limits.

Intelligent people need not waste much time in discussing whether an ownership finds any way of relating itself to the news policies of newspapers, to say nothing of the editorial opinions. No one need go further than to contrast the reporting only last week of the Graustein testimony in the *New York Herald Tribune*, whose managing owner, Ogden Mills Reid, is also a director of the International Paper and Power Company, with the reporting of the same events in the *New York Times*. In one place the story was minimized and obscured; in the other it was set forth in fullness and detail. . . .

To put the case concretely, the *Worcester Evening Post* has been conducting a drive of great vigor and enterprise for a reduction of electric light rates in that city. Does anyone suppose that even the high-minded men to whom the destinies of the *Herald* and *Traveler* have been wisely committed will direct their editors to instigate a corresponding onslaught in Boston? It is no disrespect to these excellent men to say that no one would expect this of them. . . .

But the political relations are not so easy to dismiss. If the *Herald* remains the chief vehicle of Republican opinion in this community may not the party leadership be ultimately affected thereby? Would aspirants for distinction in Republican ranks feel safe in selecting for themselves such an issue as the *Worcester Post* has made in our neighboring city? Would they not be afraid of losing caste with the newspaper upon whose favoring publicity they must chiefly depend? May it not be possible that this very alliance will vitally affect the attitude of the Republican party upon the great issues of public utilities? . . .

Is not our newspaper of opinion throughout the country destined to pass out in this era of big business control? The time may come when the newspaper will dodge the appearance of political interest or the expression of a political preference, much as would a great insurance company or a great dry goods store, because it would 'hurt business.' This is a possibility."

The antagonism of the editors of the country to the method of outright purchase was increased somewhat by certain events which had been taking place in the State of Maine. The Insull interests have control of most of the power in the state. They were attempting to have the

law which prevents export of power removed from the books. The Republican party was split into two camps on the question. In 1927 Dr. Ernest Gruening, formerly an editor of the *Nation*, became editor of an evening newspaper in Portland, the *Evening News*. Up to that time there had been only one morning and one evening paper there, both controlled by the same man, Guy P. Gannett. He is also vice-president of the Fidelity Trust, of which Walter S. Wyman, the Insull representative in Maine, is president. His papers were in favor of exporting the power. The new *Evening News* began to demand that rates in Maine be lowered before Insull began to ship all the power out of the State. It endeavored to show that Insull would sell current in Boston for less than in Maine. It pointed out the extremely high dividends of the Insull holding companies, to demand that there be a referendum on the matter of exporting power, and otherwise to make itself objectionable to the power people.

There followed a refusal on the part of the important department store advertisers to use the paper which seemed to amount to a boycott, and which *Editor and Publisher* characterized as "the ugliest situation we have noted on the newspaper map of the United States in a long time." One of the department store owners is a director in the power company and the Fidelity Trust. Dr. Gruening has charged that another smaller advertiser had his notes called by the bank as soon as he began to advertise in the *News*. The representative of the local power company, an Insull interest, told his representative, "I am extremely sorry, but my orders are not to give the *Portland Evening News* a line of advertising. I got these orders from Mr. Gordon. Mr. Gordon gets his orders from Mr. Wyman. Mr. Wyman gets his orders from Mr. Insull. Go to Chicago." The paper is not sold in the Augusta House at the capital, a hotel owned by Mr. Wyman.⁹

When the activities of the International Paper and

Power Company became known, one of those Insull papers, the *Portland Press Herald* wrote: "The successful newspaper today must publish the news, regardless of whether or not it harmonizes with the opinion of its owner. . . . No newspaper which is being published as a commercial enterprise could be influenced to suppress or 'doctor' the news." Very shortly after that the former President and counsel of the Central Maine Power Company declared that the referendum measure, upon which the voters were being asked to express their opinion of exporting power, was clearly unconstitutional, and would crumble at the first test. The *Evening News* pointed out that this was such important news that it was published by all but four dailies in the State. Those four were the two Insull papers in Portland, the *Walderville Sentinel* and the *Kennebec Journal*. They suppressed it.

3. Non-Partisan Politics

The utilities have been and are definitely in politics. They gained their original franchises, in many cases, through political manipulation and bribery. They keep their present favored position under regulation through an active participation in the political life of the community, which knows no party bonds. This is nothing new. Years ago Theodore Roosevelt, defending himself in a libel suit, pointed out that the founder of the Consolidated Gas of New York, Anthony Brady, always contributed to the Democratic and Republican campaign funds. In 1926 Samuel Insull of Chicago contributed largely to the fund which helped to elect Frank Smith, the chairman of the Regulatory commission, to the United States Senate. He also contributed to the opposition party, which led George Brennan, who was running against Mr. Smith, to remark, "Many power industries and financiers give to both parties and even to factions in both parties. They have to. If they gave to just one all the time, what do you suppose

would happen when one of the others got into power?"

The extent of the political activities of the power industry has never been gone into in any detail. The Federal Trade Commission was authorized only to inquire into any contributions made by the companies to the election of United States Presidents and Senators or for the purposes of combating government ownership. In many states corporations are not allowed to contribute to political expenses. It is done through individuals, who may give in the name of persons other than themselves. Two things did develop, however. The first was that the power industry, together with the gas and electric railways industries, had established what was called the Joint Utility Committee to represent them at Washington. This organization had \$400,000 to spend at the time the Walsh resolution for an investigation of the utilities and also the Boulder Dam bill were before Congress. The other discovery was that the state organizations of the N.E.L.A., usually labeled information bureaus, were in politics. Some of the larger companies apparently had their own political agents at work, but many of their eggs were scrambled in the state or regional committee of the N.E.L.A. This was nothing new, either. The famous insurance investigation of 1906 discovered that "the large insurance companies systematically attempted to control legislation in this (New York) and other states. . . . The three companies divided the country outside of New York and a few other states so as to avoid a waste of effort, each looking after its chosen district and bearing its appropriate part of the total expenses."¹⁰

The economic interests at stake knew no party division. It may be said that in the North they were predominantly Republican. In the South they were Democratic. Senator William J. Harris of Georgia informed the Senate: "I am not unmindful of the great political influence which the Water Power Trust wields in my State. . . . I know

that they can give me trouble in my next campaign if they wish. . . . In the election of Frank Smith to the Senate from the State of Illinois by the use of hundreds of thousands of dollars in a corrupt campaign, the traction and power trusts in that section showed what they could do. They bought a Senatorship for this man Smith who had served their interests instead of serving the public. . . . From what I hear from Senators and others there has not been such propaganda and lobbying against any measure since I came to the Senate as there has been against the Walsh resolution."¹¹ The Northern connections of the Georgia utilities are usually considered to be in the other party. In New York State, by some happy chance, the power trust men in the Republican up-state counties are also of that party and their colleagues in Democratic New York City are mostly Democratic, although they contribute to such activities as their up-state friends wish to carry on.

Some of the men in charge of the information committees wished to stay out of politics, but were very often over-ridden. Then they went along. One of them wrote from Illinois to the national director: "The Legislature is in session here and it looks like a very stormy session and I could use a little J. Walker to very good advantage, and it occurs to me that you could do me a very great favor, if the first time you are coming West you would call on a friend of mine in New York and bring me half a dozen." The idea that there was a shortage of whiskey in Springfield is one of several possible interpretations. In Pennsylvania a special Public Policy Committee dealt with the Legislature, receiving funds directly from the member companies. A sum of \$113,000 was spent there between 1922 and 1928, a large part of it, apparently, to defeat the Giant Power bills. About \$19,000 was spent by the chairman of the Public Policy Committee, Walter H. Johnson of Philadelphia, for which no receipts or vouchers were obtainable. He was President of the N.E.L.A. in

1924. He claimed not to know what was done with the money paid over to him. It was secured in a roundabout way and handed to him in cash.

In 1930 the utilities were interested in defeating Senator Norris of Nebraska for reelection. Walter W. Head, chairman of the Nebraska Power Company, an Electric Bond and Share interest, financed a survey to see if Senator Norris could be beaten. A Lincoln attorney, Victor Seymour, received the money. He was asked by the Nye Committee on Campaign Expenditures whether he had any contact with the Senatorial campaign. He replied: "None whatever. No personal contact—no connection."

When the survey paid for by the utility discovered that Senator Norris could not be beaten openly by another candidate, a certain other George W. Norris, a grocer of Broken Bow, filed in the Republican primaries, obviously in order to split the vote with the Senator. Having filed he collected some money from his backers and skipped the state. The money to induce him to file was furnished by W. M. Stebbins, the chief Republican rival of the Senator. Mr. Seymour, who at first denied all knowledge of this back alley method of defeating Senator Norris not only helped choose the grocer, but wrote his announcement for him and handed over to him the cash with which to leave the state. Mr. Seymour was then assistant vice-chairman of the Republican Senatorial Committee in charge of the Republican election campaign throughout the country.

As everybody knows, a small technicality prevented the trick from being effective. The Court held that the grocer Norris had filed too late for his name to go on the ballot.

This was not the end of the campaign, however. Mr. R. H. Lucas, executive director of the Republican National Committee, foregathered with Senator Norris's opponents and flooded the state with savage attacks on the Senator,

intended to react in favor of his Democratic opponent. The order for the printing of these attacks in Washington was concealed under a fake name. Later the Nye Committee secured from Mr. Lucas the statement that he had paid the printing bills out of his own funds. However, he had authorized the bank to hold a balance from the Republican National Committee against his personal loan.

There is certainly very little that is clean or open or aboveboard in this attempt to defeat a man who had saved the country from the greatest power grab in history. The campaign involved also violations of the primary law against contributions of over \$1,000 from individuals by former Governor McKelvie and Mr. McCloud, Republican National Committeemen from Nebraska.

Illinois invented what was apparently the most successful trick in the political arena. Rob Roy McGregor, assistant director, outlined in a letter his method for defeating a Senator who favored government ownership of power plants.

"This, of course, is not an attempt at writing a speech. My idea would be not to try logic, or reason, but to try to pin the Bolshevik idea on my opponent."

He was asked by the Commission: "You simply tried to raise a prejudice against the men that proposed it (Government ownership) and tried to pin the Bolshevik idea on him?" The answer was, "Yes, sir."

This committee, started by Samuel Insull and directed by men known as his right hands, was plunged into some confusion when Insull's contribution to the Frank Smith campaign fund became known. Letters interchanged show that they were afraid that a meeting of municipal officials at Rockford might discuss the matter, and suggested that "some of the municipal officials might be gotten to go and offset that sort of thing."

It circulated 19,000 copies of a speech calling all public

ownership advocates "reds" or "communists," and worked against the Boulder Dam bill, as well as against many state bills.

The method of using men who have been in political life is common. The director of the Nebraska bureau wrote about Thorne Brown, defeated in his campaign for reelection to the State Railway Commission, "Our people were particularly interested in him and lost immeasurably in his defeat." They appointed him director. The director of the N.E.L.A. during the inauguration of the great propaganda and school campaign, M. H. Aylesworth, had been chairman of the Colorado Commission. The publicity head of the N.E.L.A., George F. Oxley, was formerly secretary of that Commission. The present director of the N.E.L.A., Paul S. Clapp, came from the Department of Commerce. The director of the Arkansas bureau was formerly Governor of that State. The counsel of the Joint Utility Committee came from the Department of Commerce. In the Boulder Dam matter the former Governor of New Mexico was retained. In the fight on the Walsh resolution ex-Senator Lenroot of Wisconsin received \$20,000. He appeared several times before a committee of his former colleagues, the Senate Committee on Interstate Commerce. Senator Norris of Nebraska commented on this choice: "Did they hire him because he was a lawyer? Why, God bless you, no! They knew he was not a lawyer. They had good lawyers of their own. They had another reason for hiring him. As a matter of fact, ex-Senator Lenroot up to the time he left this body never tried a real law suit in his life. He was not admitted to practice before the Supreme Court of his own State. They were not looking for a lawyer. They were looking for an ex-Senator."

Where favorable decisions have to be secured from municipalities there are still some slips. In July, 1929,

the Fort Dodge Gas and Electric Company of Iowa pleaded guilty to illegal expenditures in a municipal campaign in that city and was fined \$800 on each of several counts. In February of that year the *Nashville Banner* made this comment on a local occurrence:

"The Kentucky-Tennessee Light and Power Company in 1926 secured a thirty-year lease of the Paris plant upon the consideration of \$30,000 annual rental, assumption of \$355,000 bond issue of the city to be paid off over a period of 30 years and the option of purchase upon payment of \$45,000. Judge Harry B. Anderson, of the Federal Court, after receiving elaborate testimony taken at the hearing in Jackson, held that the contract was obtained by the bribery of former city attorney George H. Freyer, of Paris, to whom it was shown \$2,000 had been paid by agents of the power company.

The thread of ownership or control leads directly from Paris to New York. The Kentucky-Tennessee Light and Power Company is but another of these euphonious sounding concerns with Southern names and Chicago or New York ownership. It is a subsidiary of the Associated Gas and Electric Company, one of the big holding companies of the country.

The taxpayers of Paris were led to believe that they were getting a big price for their property; and it required a hard fight in the courts to uncover the fact, as Judge Anderson asserts, that they were grossly deceived and would have been defrauded of a heavy sum."

The work of reaching the public was done in many cases under cover of some other organization. In one case some 450,000 copies of a pamphlet bearing the imprint of the Investment Bankers' Association were paid for by a power company. Another means of reaching the public was through the lecture platform. Here prominent speakers, secured by the utilities, were given opportunities to lecture, and their speeches were made news.

At a time when several national measures, such as Muscle Shoals and Boulder Dam were before Congress, one of the women's organizations, the League of Women Voters, after considerable study, decided that the policy

of government ownership and operation was the one to support. Its meetings were watched and reported. Women employed by the utilities were urged to join it and similar organizations with a view to placing utility speakers before their meetings. At this time the N.E.L.A. contributed a sum of \$80,000 to another women's organization, the General Federation of Women's Clubs. This money was used over a three-year period for a survey of household appliances. In Ohio the utility director reported:

"The Ohio Federation of Women's Clubs is at present time conducting a campaign for 'adequately equipped homes.' This is taking the form of a state-wide school essay contest. . . . Behind this campaign is the Ohio Committee on Public Utility Information which has done the actual organization work. A fund of \$12,000 was raised. . . ." The Federation apparently at no time has criticized the power industry or taken any stand on public power matters.

The situation was somewhat complicated by the fact that while Mrs. John D. Sherman was President of the Federation an arrangement was made with the N.E.L.A. by which it provided a revolving fund to underwrite certain articles she was preparing for the magazines. Through an advertising agency it paid her \$600 a month for twenty-four months, a total of \$14,400. The receipts from any articles accepted by magazines were to be refunded to the N.E.L.A. It received in that way a sum of \$116. The net subsidy to the President of the Federation was \$14,284. She kept the money. This was in addition to the \$80,000 contributed to the Federation.

The importance of the banking interest has been mentioned in the preceding chapter. The N.E.L.A. has a special committee whose function seems to be that of lining up the nation's banks, especially in rural communities, be-

hind its legislative program of opposition to government ownership. The chairman of the Public Relations Section, James F. Owens, reported in 1927: "This year that committee will broaden its activities so that a contact shall be made with every banker in the country. No man outside of an editor has greater influence on the public opinion in the communities we serve than the local banker, and, above all, he should know our industry and the job we are doing."

The President of the Philadelphia Company, a holding group in the Standard Gas and Electric system, A. W. Robertson, wrote one of the N.E.L.A. officials, "Too much emphasis cannot be laid on the desirability of having local public utility officers kept in personal contact with local bankers. This is a vital factor of this partnership relation between the banker and the utility." But here again, the most initiative has apparently been shown by the California utility men. The President of the Pacific Gas and Electric, A. F. Hockenbeamer, wrote a letter to Mr. Robertson, which he requested be kept confidential, for "we have already been suspected of undue connivance with bankers." It will be remembered that in California there is an active public ownership fight.

"Owing to the fact that for about 25 years we have operated an interconnected system, serving a large number of communities and requiring one or more bank depositories in each of these centers, we 'discovered' the country banker quite a number of years ago.

The bankers as a rule are economically minded about as we are, but, nevertheless, we came to the conclusion about 15 years ago that as a practical incentive to get them to work with us there is no substitute for deposits. A worthwhile account, therefore, has been the keystone of our policy and to assure its application it is our practice to regulate balances in country banks from the head office.

I may add, in passing, that we have at this time accounts with 230 country banks scattered all over our territory and, while our policy keeps an average of around a million and

a half dollars tied up in balances in these country depositories, we believe it is worth while; first, because the service they render to us as banker is worth something, and secondly, because it cements their friendship and cooperation. Incidentally, we require no interest on these deposits.

A second step on retaining friendly relations with our country bankers has been to have our local managers keep in close touch with them. This they do, and I feel safe in saying that our district managers not only enjoy the friendly acquaintance of the presidents of these banks, but of all the directors, usually influential business and professional men, and of practically the entire personnel.

Before beginning our first customer campaign in 1914, we saw to it that every one of our bankers was fully informed as to the stock we were about to offer and what our plans were for disposing of it. Every banker was also told at that time that any checks drawn on his bank in payment for any stock sold by us would be immediately redeposited with him and the money left there as long as we did not need it. This removed the fear of deposits being drawn down to pay for stock. Some of this money stayed in the banks for quite a long time, and the result was, with one exception, the bankers became, and still are, boosters of our stock, and an effective influence in spreading its sale."

Not only the bankers were appealed to by these small bribes (which increased the cost of electric energy) but a similar appeal was made directly to the consumers. They were urged to become investors in the stocks of the utilities. After they held stock the companies figured that they would care little whether the rates were as low as they might be. No one would then be able to interest them in the rights of the poorer people who were not in a position where they could become investors. This idea gained a large hold on the Pacific coast, notably in California. The Pacific Gas and Electric Company declared that the purpose of customer ownership was to stop socialistic doctrines that invaded the right of private initiative. This was urged upon the N.E.L.A. at Chicago in March, 1928, by its former President, R. H. Ballard, who in addition to stressing the importance of customer owner-

ship as a means of combating the growing tendency for public ownership, complimented "the present owners" of the N.E.L.A. upon the progress the association was making. Somewhat the same thing was said by Mr. Chester Corey, Vice-President of the Harris Trust and Savings Bank of Chicago: "The political value of the customer ownership of the stock of public utilities is well understood and many instances could be cited of the appreciation of the politicians of the unwisdom of favoring legislation adverse to the safety of the investments made in small units by a very large number of their constituents." Here again was the appeal to a financial interest other than the one of lower rates.

The interest of the investment bankers, of course, was direct. We see the vice-president of Bonbright and Company, one of the houses behind the United Corporation, writing to the counsel of the Joint Utility Committee at the time the Walsh resolution was defeated, "My heartiest congratulations on the vote in the Senate yesterday. . . . I know how much this was due to your personal work and strategy, and I think it is a great triumph. The point of it is to tell you how much we up here appreciate your share in yesterday's proceedings."

The farmers were the object of considerable attention. Many of the states organized committees to investigate the possibilities of extending rural electrification. Utility men were on them and they were financed by the utilities. In some cases, a report claiming that the situation was not ripe or that Ontario was not making a success of rural electrification, was forthcoming. In other cases a rich inactivity resulted. But the utilities stayed interested. Aylesworth wrote to Richardson, then still in Pennsylvania, "I am very much interested in the resolutions adopted by the Grange. This is a radical executive committee and I do not believe they will have much influence,

but we must get busy at once. I have been working on some of our people in the States where these people reside, and have been unable to get up very much interest until now. I am sure that we will be able to convince them that they are on the wrong track." We find Willard Cope of Georgia writing Sheridan of Missouri, "If Missouri is in any way like Georgia . . . it might be a good idea to consider directing your fire on the farmer and countryman as we are doing. In Georgia the farmer is absolutely in control." The subsidizing of agencies covering rural papers as well as the activities of the directors in connection with the rural press have been cited in an earlier section. In the case of Muscle Shoals the farmers' representatives were used.

The whole story of how general public opinion was influenced runs into tons of letters, constant watching of every opportunity to place men favorable to the utilities in spots where they could say something, write or do something that would bit by bit establish a favorable opinion, an uncritical, accepting opinion.

4. *Private Initiative in Public Education*

The interest of the power men in the public school system has probably brought forth more criticism than all the rest of their activities combined. There is a feeling that this is one thing too precious to be touched by self-interested people. We have seen it controlled before and we know the results well enough not to want any more of it. Professor Maurice Clark puts the situation clearly in *Social Control of Business*. "Education," he writes, "may fortify class prejudices, or break them down, rouse mental independence or lull it to sleep. It can go far to make bigots or adaptable coöperators, docile subjects or capable citizens, to spread a gospel of democracy and service, or to cultivate a self-conceited and self-satisfied snobbery, either of abstract culture, aristocratic privilege or com-

fortable middle-class complacency. It has been controlled in the interests of the church, of a militaristic aristocracy, of communism and atheism, and often it has worked wonders."¹² It is the hope that education will yet help people to live more intelligently in their personal and increasingly complex social lives, that it alone can work the necessary wonders in adjusting men and women to the new world, which is at the bottom of the common faith in democracy.

Two findings are of immediate significance here. The first is a statement of the Federal Trade Commission of the evident purpose of the power men in penetrating into the schools. The second is by the Secretary of the National Education Association, indicating why the teachers let it happen. The day of their prestige and standing in the community has, to some extent, already gone by. Like many of the smaller business men they are dependents. The Commission states:

"The various activities described above, namely, teaching public-utility economics in schools of various grades, through special lectures by officers or employees of utility companies, financing or assisting in financing, the establishment of courses and research organizations for the study and teaching of public utility economics in colleges and universities; compiling or financing the preparation of text books and reference materials of various grades suitable for use in schools from grammar to university, the text books in particular to be written or issued by well-known authors or institutions of learning, whose reputations for 'impartiality' lend credibility to the productions; and, finally, the payment of retainers or salaries to college professors and instructors whose favorable interest is desired, all obviously are a part of a plan not only to get into the curricula and text books of schools of all grades those things desired by the leaders of public utility industry but also to influence teachers, instructors, and professors to such an extent that the subject matter will be taught in the way desired by the industry. Furthermore, the expressions of desire to put into the mouth of the professor the words the industry wishes spoken and of the feeling that state universities often have considerable influence with state commissions are significant in connection

with the scope and nature of the plan to mold opinion for the economic benefit of the industry.

The right of the industry to present its case before the bar of public opinion is unquestioned, provided such presentation is made openly in the name of the industry, and therefore without even a semblance of deception such as may be involved in subsidizing authors, teachers, universities or research organizations in order that inspired text books or other materials may be given greater credibility issued over the names of supposedly impartial writers, research organizations, or institutions of learning. Where this is done, the general public may well question whether the scientific attitude and integrity of established institutions of higher learning are not being undermined. Truly no greater calamity could happen either to industry or to the public than for educators, or educational institutions, to become the paid mouthpieces of economic groups."

The second finding, by the secretary of the teachers' organization, Mr. H. W. Crabtree, summarizes the activities of the power men in somewhat similar language, saying, "The purpose, it was stated, was to provide useful up-to-date information and to prepare the next generation of voters to appreciate and stand for private ownership of utilities. . . . To let these agencies, because of their millions and the strength of their organizations, have the right of way at this time would mean that all other agencies must also have free access to the schools. . . ." The crux of this report, however, and the explanation for a large part of the success of the penetration, undercover and otherwise into the schools, lies in the following:

"Owing to the power of these agencies in some localities and states, it may be unwise and dangerous for a given educator to raise his voice against what is going on, but there is no such handicap on the actions of this Association as a whole. Perhaps individuals need this type of backing. . . ."

Before the work of education could be undertaken on a high power scale, it was necessary to have authoritative text books favorable to the utilities. It would seem that

in all the college and university faculties of the country there were almost no men who would write the really hundred per cent text books that were wanted. With two exceptions, the books circulated by the N.E.L.A. were subsidized by it or by associated companies. The latest of these is by Ernest Greenwood, entitled *Aladdin*. It was published by Harper's, who made the sale of 5,000 copies through the author a stipulation in the contract. The author was directly on the payroll of the utilities and his contract was assigned over to the N.E.L.A., which carried on the distribution. Another book widely circulated and quoted by the power people is *Niagara in Politics* by the late emeritus professor James Mavor of Toronto University. In 1929 the investigation brought out that the N.E.L.A. had in August, 1925, shortly before the appearance of that book, sent a check for \$1,000 to an official of the Southern California Edison, who had billed it "for checks mailed to mutual friend." This mutual friend who received his pay in this way was the author of that book, Mavor. The N.E.L.A. circulated 5,423 copies of it. Another report on the power system owned by the league of municipalities in Ontario was prepared by two engineers. It is generally known as the Murray-Flood report. They received for this work the payment of \$8,830. It appeared in time for the California companies to use it against the Water and Power Act.

The attempt to get text books favorable to them used in the schools and colleges took three forms. One was censorship of existing books, exercised through local utility men or chambers of commerce. The other was a survey of all the colleges of the country to locate men who were writing on utility matters with the hope of helping them with material and the promise of stimulating the circulation of a favorable book. Some care was used to keep these activities under cover. The Missouri director wrote: "The fact that a Committee of the Wisconsin

Utility Association reported on text books used in the Wisconsin schools did receive some publicity through the Associated Press I deprecate very much. It is a matter for executive session between leaders of the industry, writers of text books and printers thereof." That director had received his guidance directly from the general manager of the St. Joseph (Mo.) Gas Company:

"I think this is very good work but great care must be used to avoid going too far since if the public were to get the idea that textbooks were being used as propaganda for public utility companies, the reaction would be worse than the original misinformation. I presume that the Committee fully appreciated this phase of the question."

Interest and concern were aroused by the surveys made, and within the next two years, similar surveys were made in New York, Pennsylvania, the Carolinas, Ohio, Iowa, Wisconsin, and Colorado, and at a meeting in 1927 of state committee officials, directors of state committees which had not made surveys "were urged to read the books used in the public schools of their respective states."

The text book surveys drew numerous suggestions for remedying the situation. It was arranged to have one of the text books, *Community Life and Civic Problems*, by Howard Copeland Hill, a Ginn publication with a circulation of 500,000 and an annual sale of 150,000 copies, revised by Onken, the editor of the *Electrical World*, and Jackson, the counsel for the N.E.L.A. The only change referred to in the record which the author accepted was elimination of the information concerning Insull's contribution of \$200,000 in Illinois politics.

A comprehensive outline of the activities of these committees is given by Carl D. Jackson, Chairman of the Committee of Cooperation with Educational Institutions of the N.E.L.A., in a letter written to a Michigan Committee man in December, 1927:

"You remember the question was not brought up at our Chicago meeting. There are reasons why it should not be brought up. People connected with the higher institutions of education are very touchy on that subject. Something which has occurred since, about which I will tell you when I see you, has confirmed me in my belief that we were right in not taking that up at Chicago specifically. There seems to be a feeling abroad that in some way the Committee on Cooperation with Educational Institutions can immediately control the nature of text books. This subject, while it did not come up in Chicago formally and was not mentioned was a matter of a good deal of conversation among the Educational Committee members at their meeting in Chicago. The reports which I received in respect to what was said were not such as to encourage a very high-handed attempt to directly control what should go into any text books.

I think largely the books you refer to were the books used in the secondary schools, and I know that the N.E.L.A. has actively taken this up with the publishers but it seems to be the most practical way of trying to get at the matter.

I am strongly in favor of trying to get at the best way of getting proper text books in the secondary schools as well as in other places. Contact with the publishers appears to be the very best way of bringing this about, although it is quite possible that something may be done locally through the local Chambers of Commerce and that is being worked on at present."

Mr. Jackson was not the only one to feel that there might be opposition to these methods of replacing unfavorable texts. Regarding a survey of text books made in North and South Carolina, Committee Director Boney wrote: "Please for the present regard this as confidential, for we are hoping through quiet and diplomatic measures to have some of these inimicable text books discarded." Secretary Sheridan of the Missouri Committee also voiced an opinion to this effect: "You will agree with me that it would be most unwise to give this work any publicity."

Of the two books not directly subsidized by the utilities and yet circulated by them, one was *Public Utilities*, by Dean Raymond of Iowa, who was offered various kinds of

help in preparing the manuscript. This he submitted for criticism and suggestion, writing, "If it should prove satisfactory to your committee, of course, I should be pleased to have your assistance in marketing the book." The other one was *Guiding Principles of Public Utility Regulation*, by A. C. Spurr, who is employed by the organization which furnishes reports on public utility cases. It is subsidized by the utilities and several prominent power men are on its board.

There were several successful uses of professors as false faces. In Minnesota a Committee on the Application of Electricity to Agriculture was formed, which employed Professor E. A. Stewart, of the Department of Agricultural Engineering of the State University. The organization was supported to the extent of \$7,500 by the power companies. He was also given a trip to Europe at the cost of \$500 a month and expenses. He made another of the series of subsidized unfavorable reports on Ontario, representing himself as coming from the university. The Ontario officials pointed out several errors in his report,¹⁸ but he published it, with his title, as having been approved by them. The report has been widely circulated by the power companies.

Several other men were used in a way somewhat similar to that in which Stewart was used. In Alabama Professor J. S. Thomas, director of the university extension work, was quietly in charge of the utilities information bureau for some time, drawing \$2,532 for it. He went about the State lecturing to Rotary, Kiwanis, Civitan and other civic bodies. He was asked, "Was it disclosed at any of the meetings that you were receiving a monthly salary from the power company?" He answered, "I do not think so." A delicate irony lies in the fact that when he addressed the utility men he chose as his topic, "Trade and Culture." More openly, with the consent of his president, a professor of journalism at Tulane, H. M.

Blain, became director of the Louisiana-Mississippi Committee. One of his activities was to write himself questions about utilities and answer them in the papers.

There began to be some interest in this business of purchasing respectability by associating with university professors. In the old days business went to the church for its prestige. The great banking house of Fugger in the Middle Ages financed the expedition William Eck made into Italy in his attempt to get religious authority for his theory that it was ethical to charge interest on money. In the modern days business goes to the universities. One man interested in finding out how such prestige could be had wrote to Major Richardson, the director of the Joint Utility Committee, who had succeeded in having a utility man teach utility courses at the University of Pennsylvania. He received the reply:

"We laid the groundwork circumspectly and with care so that actual suggestions that such courses be started came from the faculties of the institutions themselves. The rest was routine."

The man in question, Mr. Grayson, who is a lawyer, was secretary of the New Jersey Public Service Information Bureau, as well as a professor at the Wharton School of Finance and had lectured under pay from the Joint Committee. His speeches, although paid for by the utilities and his written statements when reported in the press and given circulation by the utility directors usually stressed the professor part of his employment and left out the rest. For this he himself could probably be held responsible only in part—but the utilities thus secured apparently respectable, disinterested academic authority for their opinions on current economic and political problems.

A large part of the doubtful credit for beginning the utility drive on the secondary schools goes to the Illinois Committee, which Samuel Insull organized. It began the

inspection and classification of text books and the system of approaching school superintendents and boards with a view to having the unfavorable ones removed. There is no evidence of any considerable opposition by local superintendents and boards to such approaches. New England took the Insull lesson to heart and reported to the local companies: "More than three-quarters of this great number (of talks by utility people) were given before groups of high school students—once more emphasizing the fact that this is a most important way of getting correct information to the public. Those students will not only become your customers within the next few years, but at the present time are direct contact points with your present customers—their parents."

A great promise was held out to the utility men as a result of this educational work. One director informed the American Gas Association in 1925, "In the coming five years the work of the State Committees on public utility information should result in a very great change in the economic education of the American people. . . . Great educators have said, 'Give us the child at seven years old, and we care not who educates him thereafter, he will be ours.'"

The practice of sending doubtful and gamy information into the schools has been going on for over six years. There is an impression that it has stopped since the investigation. It has not stopped in full. The utility men see nothing wrong in what they have done, nothing wrong in what they have said to the children. Utility men have announced that no apologies are to be made, that the business is to go on as usual. As late as July, 1929, Mr. Martin Insull stated formally in the organ of the industry: "Our educational efforts in the schools have been purely factual and have dealt only with the physical and economic aspects of our business." Examination of some of the literature sent into the schools shows that the facts re-

cited as authoritative are from men who were bought and paid for, that they are hand-combed to prove that private ownership of the utilities and the present system of regulation are perfect, that some of the alleged facts have since been denied by the men to whom they were accredited, and that they deal at length with the theory of government.

The significant facts about this propaganda are two: In the schools, in the press, in political activities the utilities have played on the relative poverty and insecurity of the people with whom they dealt. Just as it was "unwise and dangerous" for an educator to raise his voice against what was going on, so it was the all important matter of making a living for editors to receive all the advertising they could, so also it was important for men in political life not to be opposed by the great wealth of the industry, so also it was important to local utility men not to antagonize their financial and industrial superiors by opposition to their activities. The second important fact is that it goes on because of their financial interest in retaining a docile and assenting public opinion behind their freedom from interference, and that as long as that financial interest remains there is no reason to believe the activities in schools, civic groups, press or politics will stop. They are one of the natural benefits that come to us from individual initiative and private ownership of power.

NOTES

¹ *New York Times*, August 2, 1930.

² Federal Trade Commission report, Senate Document 213, p. 238.

³ *Fortune*, July, 1930.

⁴ Committee on Coal and Power, *Report on Concentration of Control in the Electric Power Industry*, 1929. Out of print.

⁵ John T. Flynn, *Investment Trusts Gone Wrong*, Republic Publishing Co., 1930, p. 125.

⁶ Report of the Commission on Revision of the Public Service Commissions Laws, New York State, 1930, pp. 312-14.

⁷ M. H. Aylesworth, Vol. 7, p. 129, Federal Trade Commission investigation into Public Utility Corporations, record of the 13th Annual Convention of the Southeastern Division of the National Electric Light Association, Chattanooga, 1925.

⁸ *High Power Propaganda*, H. S. Kaushenbush, pamphlet, Republic Publishing Co., 1928.

⁹ Silas Bent, "The Battle of Portland," *New Republic*, March 20, 1929.

¹⁰ New York State Legislative Investigation Committee, Report, Vol. 10, p. 23, 1906.

¹¹ *Congressional Record*, February 15, 1928.

¹² John Maurice Clark, *Social Control of Business*, p. 252.

¹³ Reply by Sir Adam Beck, issued by the Hydro-Electric Commission of Ontario, Toronto, Ont.

CHAPTER TWO

THE TRIUMPH OF THE PRIVATEERS

I. *The Pound of Flesh*

A CERTAIN amount of decent human sympathy ought to be available for the young men and women who are employed by the utilities and then put into those positions described in the preceding chapter, where they are forced to become slick and crafty liars. It is not a very decent life for honorable people and some of them know it. The one man who spat it all out, in confidential letters to a friend, who called his superiors crooks, masquerading patriots and the like, ended his life not long after his own views became known to the country and to his superiors. It was an impossible situation for him. He had been brought up to expect something better. His trouble was idealism. Not all people are troubled that way. Future generations may have an easier time of it. If the teachers and ministers of the country would only stop giving the young people ideals about life they might get on much more comfortably.

There are, however, some comforts at present. The huge stakes the electric power industry has been playing for are not shared equally among the public relations men who create the public opinion which enables their superiors to win, but they are rather handsomely rewarded. Salaries as high as those of Governors of states are paid to many of them. They do not exactly starve for the cause they would like very much to believe is a good and true one. A reasonable share of what we pay for light dribbles into their pockets so that they may be fed and clothed and be amused and hearty the next day while making us continue.

the payments as usual. Now the jingling of the guinea helps the hurt that honor feels only when there has been a hurt. If there has been no hurt, it is so much velvet, as the phrase goes. In that case we are getting very little for our money, indeed.

What are the stakes in the electric power utility that cause huge sums to be spent in persuading people that the controllers of the industry are righteous and must be allowed to rule in their own fashion?

The industry is almost as important to the American people as shelter. For shelter people must pay rent or buy their homes. We can understand the size of the power stakes by analyzing the situation of people who want to buy a house instead of paying rent.

The people of the country, let us say, weigh the question of paying rent forever or of buying the industry out, the question of having a constant acrimonious and expensive lawsuit with the agents about the amount of the rent, over against owning their own power utility. They look at the figures. They see that the rent amounts to about $7\frac{1}{2}$ per cent a year on the amount claimed to be invested. In some states or cities a little less is charged, in others it runs as high as 10 per cent a year. The average is about $7\frac{1}{2}$ per cent.¹ How much does that come to in real money? In 1931 about 10 million dollars was invested in power property. The companies have other investments and assets which figure in their balance sheets, but ten billion may well represent the actual investment in power properties used in the public service. The rent at $7\frac{1}{2}$ per cent is \$750,000,000. Every year the property gets larger, and the rent gets larger. At the end of 30 years—in the year 1960—the rent will probably be at least \$1,500,000,000.

In short, if we keep on paying rent, the bill for the thirty years from 1931 to 1960 will add up to the very impressive total of about thirty-five billion dollars (\$34,800,-

000,000). That is a large sum for rent, and after paying that we go on paying more every year as the industry grows bigger.

With that rent bill ahead of us, we begin to weigh the question of owning our own home, or the power utility which serves us. How do we come out on that? We find that cities and states, or corporations organized by these governments, have to pay a rent for the money they want to use which is much less than $7\frac{1}{2}$ per cent every year. It is closer to 4 per cent. It is very rarely more than $4\frac{1}{2}$ per cent. That difference of three per cent a year looks small. But when it can be saved on large sums it makes an impressive saving.

How much saving does it really mean? Let us say for purposes of illustration that in 1931, at the beginning of the year, our states or cities or government power corporations organized by them, buy out the privately owned power industry and issue ten billion dollars' worth of bonds to pay off the outstanding private securities. For the use of that money they have to pay $4\frac{1}{2}$ per cent rent a year, \$450,000,000 in 1931. This is a saving of \$300,000,000 for that one year on the present rent. That saving is immediately invested in other government bonds and starts drawing interest. When the interest comes due it is immediately used to buy more government bonds and draw more interest, probably at 4 per cent. The next year, 1932, the saving is larger. The industry has grown to an investment of ten and a half billion. The rent under private ownership would be \$787,500,000. But we pay less. We pay \$472,500,000. Our saving is \$315,000,000. That is put aside also into a retirement fund, and invested in other government bonds, and collects interest.

In short, our outright savings for the thirty years from 1931 to 1960 would be \$13,920,000,000. These savings, however, have been drawing interest year by year, and we have reinvested the interest. During the thirty years that

interest has piled up, compounded, and our savings and interest combined amount to over twenty-five billion dollars, \$25,379,109,000.

Are we ready to buy the house now? We are, indeed. The industry has been growing. Instead of representing 10 billion dollars' worth of investment, it represents 20 billion dollars' worth. But we have a sum collected that is larger than that. We can retire all the public power corporation bonds, completely clear the industry of all necessity of paying rent. More than that, we have a sum of \$5,379,109,000 on hand. Every year it is collecting interest, and that interest is enough to pay for the necessary growth from year to year after that for 20 years.

At the end of thirty years we have paid off the mortgage and own the house. Under private ownership our rent would have been \$1,500,000,000 in 1960 and \$1,521,500,000 in 1961. Under our own ownership we collect the same rent in 1960, pay out \$900,000,000 for the actual use of money, and put aside in savings \$600,000,000. In 1961 our rent bill is 0. We are absolutely clear. From that time on to eternity we pay nothing for rent. Our children pay nothing for it. Their children pay nothing for the use of funds. We own the house free and clear.

What the power fight is about now becomes clearly apparent. The people who believe in owning your own home see that if they buy out the utility now, they can put aside enough out of their rent to pay off every penny of the indebtedness on the industry and have a reserve of over five billion on hand. They will not have to pay 54 billion during the 30 years after that. Instead, they will not have to pay one cent for rent.

The private owners have been exerting their social and financial and political pressure to prevent a public saving averaging, when the reinvestments of the savings at interest are included, \$845,970,000 for each of the next 30

years, and also to prevent a public saving (taking the form of rate reductions) which averages \$1,822,500,000 for each of the thirty years after that, 1961-1990.

Thus far the rugged individuals of the power industry have been successful in the fight. They have prevented the saving. They have also accomplished something more difficult, the greater moral victory of making it seem unpatriotic and radical for any citizen to stand up and try to save these sums for the people.

In order that these figures may be clear they are tabulated on pages 54 and 55. But it may be well to keep in mind several factors in this home-buying calculation. The most important is that there are no expenses which offset the public gains. In this calculation the operating expenses for coal, labor, taxes and the like are not changed. The high salaries now paid to the power officials are not changed. The depreciation charged to the consumers at present is not changed. The public would get such rate reductions as are possible through unification and engineering improvements, through abolition of regulatory expenses and lawsuits and of the political and advertising expenses now paid by the private owners. In this plan the reduction of rent on money would come only after the thirtieth year, and then the capital charges would drop to nothing. It is with that reduction of rent which we are concerned here.

In the first column, on the left of the following table, is given an estimated amount of investment in public service from 1931 through 1960. It rises at the rate of half a billion dollars for the first four years, at the rate of 400 million dollars for the five following years, and then the increase stands at 300 million dollars for each of the succeeding twenty-one years. If it turns out that the necessary increases are larger, the savings would be larger. The extra investment each year would be raised through bonds bearing $4\frac{1}{2}$ per cent interest. The rent charged on them, in this plan, is the same rent charged the con-

sumers at present under private ownership, $7\frac{1}{2}$ per cent. The savings would be put aside for a retirement fund.

In the second column is given the rent on the investment each year which would be charged under private ownership, and which is, under this plan, also collected each year from the consumers. It is charged at $7\frac{1}{2}$ per cent on the investment figure in the first column, year by year.

In the third column is given the sum actually paid each year by the city or state or governmental corporation for the use of the money borrowed to buy out the industry. It constitutes $4\frac{1}{2}$ per cent of the investment listed for that year in the first column.

In the fourth column are given the savings put aside each year into a fund to retire the debt. These savings are the difference between the second column and the third column.

In the fifth column a different calculation is presented. It shows the amount which the savings for each year would total if they were reinvested in government bonds and draw 4 per cent interest for the length of time still to be run through before the end of 1960. It counts on reinvestment of interest each year. If the interest were reinvested every half year the sum would be considerably larger. The present figures are in that respect conservative. Thus, at the end of 1931 there is a saving of \$300,000,000. Compounded at the rate of 4 per cent for 30 years that sum becomes \$972,990,000. The total at the bottom of the fifth column thus represents the savings plus the interest on that saving.

When the people of the country get around to buying rather than renting their power industry this plan will not, I take it, necessarily be the one they will put into effect. Under it the bulk of the financial benefit goes to those of us who will still be smoking a pipe and reading the papers in 1961 and to those who are now children.

The plan more likely to be adopted eases the rent burden on the present-day consumer to the extent of several hundred million dollars each year. The main reason for presenting this plan is to show very simply how much is at stake on one item alone, the cost of money to the consumers under private ownership.

The question at once arises: How does it happen that the electric power utility is allowed to collect such an ample return when money can be secured so much more cheaply, even by the companies themselves? They can raise a large part of the capital through bonds at 5 per cent, and additional sums through preferred stock at 6 or $6\frac{1}{2}$ or 7 per cent. Why must they have a 7 or 8 per cent return? The answer given by the companies is that they must protect their common stock dividends. They have to pay 8 per cent on their common. This is their claim. To make sure of being able to do that regularly they ask a little margin, a little more than 8 per cent for that stock.

At this point the commissions seem to have let down the public through indifference. They have rarely looked at the cost of money in the open market. They accepted the cost of money during the war, which was high, and allowed the utilities to charge the consumers the same high rent in all the years since then, during which the cost of money has been lower. This was neglect of the public interest. The public interest demanded that the service be given as inexpensively as possible. The cost of money is a large part of the elements of service. When a higher rent than necessary was given legal sanction by the state commissions they did two things which were bad. First, they made the consumers pay each year unnecessary sums. They allowed the establishment of claims for further payment on those sums for all time to come. In short, wherever in the last ten years of the money market the regulatory bodies allowed a rate of return of

(All column figures in millions)

TABLE I

	1	2	3	4	5
Total Investment End of Each Year	Annual Capital Charges under Private Ownership	Annual Sums Paid on Public Bonds	Annual Savings	Sum of Each Saving Plus Reinvested Interest to 1961	
1931	\$10,000.	\$750.	\$450.	\$972.9900	THE POWER FIGHT
1932	10,500.	787.5	472.5	982.3275	
1933	11,000.	825.	495.	989.5710	
1934	11,500.	862.5	517.5	994.7385	
1935	12,000.	900.	540.	998.0640	
1936	12,400.	930.	558.	991.6776	THE TRIUMPH OF THE PRIVATEERS
1937	12,800.	960.	576.	984.3072	
1938	13,200.	990.	594.	976.0212	
1939	13,600.	1020.	612.	966.9192	
1940	14,000.	1050.	630.	957.0540	
1941	14,300.	1072.5	643.5	939.9819	THE TRIUMPH OF THE PRIVATEERS
1942	14,600.	1095.	657.	922.7784	
1943	14,900.	1117.5	670.5	905.5326	
1944	15,200.	1140.	684.	888.2424	
1945	15,500.	1162.5	697.5	870.8985	
1946	15,800.	1185.	711.	853.6266	THE TRIUMPH OF THE PRIVATEERS
1947	16,100.	1207.5	724.5	836.3628	
1948	16,400.	1230.	738.	819.1800	
1949	16,700.	1252.5	751.5	802.1010	
1950	17,000.	1275.	765.	785.0940	
1951	17,300.	1297.5	778.5	768.2238	THE TRIUMPH OF THE PRIVATEERS
1952	17,600.	1320.	792.	751.5024	
1953	17,900.	1342.5	805.5	734.8845	
1954	18,200.	1365.	819.	718.4814	
1955	18,500.	1387.5	832.5	702.2315	
1956	18,800.	1410.	846.	686.1624	THE TRIUMPH OF THE PRIVATEERS
1957	19,100.	1432.5	859.5	670.2954	
1958	19,400.	1455.	873.	646.6336	
1959	19,700.	1477.5	886.5	639.2256	
1960	20,000.	1500.	900.	624.0000	
Total		\$34,800,000,000	\$20,880,000,000	\$13,920,000,000	\$25,379,109,000

7½ per cent or more, they were paving the way for an actual return much larger than that, increasing roughly at the rate of one per cent every ten years.

Let us take for illustration a large power company, capitalized at \$100,000,000. Some \$60,000,000 of this is in 5 per cent bonds, \$20,000,000 in 6½ per cent preferred stock and \$20,000,000 in common stock. The state commission, without much regard for the cost of money, allows a 7½ per cent over all return, \$7,500,000 a year. Of this \$3,000,000 goes to the bondholders, \$1,300,000 to the holders of preferred stock, and \$3,200,000 to the common stock equity. This is 16 per cent on the common stock. On this common stock the utility wants to pay 8 per cent dividends. Now 8 per cent dividends only require \$1,600,000 a year. If the state commission allowed no more than an 8 per cent return on the common, the total over-all rate of return would be cut to 5.9 per cent, the amount each year would be only \$5,900,000. The utility then persuades the commission that it needs something above and beyond that 8 per cent on the common stock, something for contingencies, something to protect that dividend payment in hard years, if any come along. There seems to be no other good reason for allowing an extra return. The commission, partly because money did cost a great deal during the war and a habit was started of allowing high rates of return, and partly because it wants to give the company a little protection on the payment of its common stock, allows the 7½ per cent over-all rate of return, which amounts to 16 per cent on the common.

The common stockholders are somewhat blasé after many celebrations of news of this kind from the commissions. There has been so much news of that kind that they even feel it is the duty of the commissions to see to it that they get the extra care and attention given them. They are paid their 8 per cent dividends. This leaves

\$1,600,000 at the end of the first year in surplus. This surplus, granted by the commission to protect the dividend, goes into new plant. As it goes into new plant it acquires the legal right to draw rent from the consumers for its use. This happens year after year for five years in much the same way, except for the fact that each year the amount going to surplus is larger. Automatically, without bothering to go to the commission for approval, the company keeps its rates high enough to secure a 7½

TABLE II

(All figures in millions of dollars)

	Annual Payments on Bonds Preferred and Stock	Common Stock Out- standing	Surplus Reinvested	Return on Common and Surplus
1926.....	\$80.	\$4.3	\$20.	\$.....
1927.....	80.	4.3	20.	\$3,200
1928.....	80.	4.3	20.	3,320
1929.....	80.	4.3	20.	3,449
1930.....	80.	4.3	20.	3,597
			1,997	3,737
	\$21.5		\$7.166	\$17,303

per cent return on its original investment plus its surplus. The situation for five years can be seen at a glance in Table II.

At the end of the five-year period the company has collected, not the \$37,500,000 which represents a 7½ per cent return for five years, but \$38,803,000, a gain to it of \$1,303,000. This the consumers have contributed, supposedly in order to protect the 8 per cent dividends on the common stock. Not only that, but the company has also established a claim on the consumers of \$7,166,000 more than was there before the five-year period began. In 1931 the consumers actually were paying an over-all

return of over 8 per cent on the total original investment, instead of $7\frac{1}{2}$ per cent.

This piles up. Professor James C. Bonbright has described the arrangement, which he found to be in effect in New York State, where an 8 per cent over-all return has been allowed. It works the same way in other states. He said: "The outcome of this situation is that a reserve designed by the Commission simply as a means of safeguarding the existing *eight per cent* dividend may be and will be used by the company, sooner or later, to justify a still higher rate of dividend. This process will go on indefinitely and will work cumulatively—for the higher the new 'reasonable' rate of dividends to which the company is entitled as its investment expands, the larger becomes the amount of excess earnings required in order to give an ample margin of safety for those dividends. The unfairness of this process of financial snowball rolling is not lessened, but only emphasized, by the fact that public utility companies are alert to increase their outstanding security issues at least as fast as their capital assets increase, thus maintaining the appearance of a very modest, stabilized dividend on each share of the outstanding stock.²

Here is one way in which the private owners make their service more costly to the consumers than it need be. Here is one way in which, with the aid of the commissions and some of the courts, they succeed in establishing claims which later generations of consumers have to pay.

It is also true that the utilities neglect to secure money as cheaply as possible. They can make arrangements with their holding companies or bankers to issue securities at less than par value, at a discount. The bankers or holding group can then distribute them for the higher prices obtainable in the market, and pocket the difference. In 1928 the New York Rapid Transit Corporation tried this. It proposed to issue \$20,000,000 worth of 5 per cent

bonds to bring in only \$16,000,000, a 25 per cent discount. Over half of these bonds were to be applied to properties which the City of New York had the right to recapture at 107½ per cent of the face value of the bonds. The City would, in the event of recapture, have had to pay \$3,023,700 on account of the debt discount. The operating company had made an agreement with the parent company to sell it the bonds. It was not allowed.³

Another way in which the utilities have shown a lack of interest in securing cheap capital was demonstrated in California in 1929. The commission there found that the electric and gas utilities were selling their new securities to stockholders at par, although there was enough accumulated surplus to make those securities worth more than their face value, and although they were being sold in the open market at more than par. If the companies had wanted to obtain the use of money in the cheapest way possible they would obviously have sold the securities in the open market or to stockholders at market prices. For example, stocks with a face value of \$50,000,000 would bring—if sold to stockholders at par—only that amount. Assuming a premium of \$5,000,000, they would have brought in the open market \$55,000,000. In this illustration the utilities obligated themselves to \$5,000,000 worth of securities more than was necessary, establishing at least a moral claim on the consumers for larger payments than would otherwise be necessary to make up the annual dividends on the new securities.

In only one state, Massachusetts, does the commission really watch the cost of money to the utilities and make an attempt to keep the rate of return in close relation to that cost. There has recently been some question as to whether this really lowered the return of the companies there, a matter to be discussed later. In New York State the minority of the recent Commission on the Revision of the Public Service Commission Law recommended that

as far as future investment in the utilities went there should be a separation of bonds, preferred stock and common stock and that the rates on the first two should be based on market price, and that the rate of return allowed on common stocks should only be sufficient to attract new capital.

Several further ways are open to utilities by which they are able to raise the cost of money to a point much higher than necessary, at the same time raising the cost of service to the consumers and making a good profit for the men in control. One way is to borrow money from the holding company on short-term loans at a much higher rate of interest than would have to be paid in the open market. In New York State it was brought out that such loans were made by affiliated interests during 1928 to operating companies of the Associated Gas and Electric Company group to a gross amount of \$41,839,335 at an interest rate of 8 per cent.⁴ During the same year the holding company men owed the operating utility an average of \$2,500,000 and paid no interest on it.⁵ Still another way is for a utility to borrow money at relatively high rates from the public and to turn around and loan to affiliated interests at a very low rate. It has been charged by reputable attorneys that the Consolidated Gas Company pursued this policy toward the National City Bank, with which it shares several directors. The charge was that it had loaned the bank \$19,200,000 in 1927 at the rate of 2½ per cent.⁶ The New York Public Service Commission refused to go into the matter. A somewhat similar arrangement seems to have been in effect in Philadelphia. The expert for the city stated that the Philadelphia Transit Company had loaned its reserve funds to the investment house of Dillon, Read and Company and then to the Mitten Management, at the rate of 3 per cent. At the same time it needed money and was forced to borrow through bonds and preferred stocks at

a much higher rate. The loss over a five-year period was put at \$500,000 to the city.

There is in reality no incentive for the utilities to get their capital as cheaply as possible. The financial houses or companies controlling them make a considerable profit on selling their securities for more than they turn over to the operating companies. In New York State, for example, the commission does not even look at the underwriting profit unless it exceeds 3 per cent.⁷ There is no competitive bidding for the privilege of marketing utility securities as there is with municipal securities.

The holding companies, which are only of indirect interest to the consumer in this respect, are affected in the same way. The controlling banking houses profit from them, too. The Federal Trade Commission pointed out that at the very time one of the Carlisle holding companies, the Mohawk-Hudson, was exchanging its securities with subsidiary companies at a fixed amount, the banking house of F. L. Carlisle was selling the same securities for much more in the open market, the difference amounting to \$4,500,000. It is such controls as these which now run all the way down the line through the operating utilities and accounts in part for the enormous differences between the cost of money to the private utilities and the cost to governments.

Control of such matters by the state regulatory commission has been fought steadily by the utilities and with great success. In only five states is there anything approaching complete control over security issues. In Vermont it is effected largely through a general statute preventing overcapitalization; in Arizona, California and Illinois it is through the regulatory commissions; in Texas it is effected through a commission dealing with securities.⁸ There is no complete commission jurisdiction over security issues and capitalization in Arkansas, Colorado, Connecticut, Delaware, Idaho, Iowa, Kentucky,

Louisiana, Minnesota, Mississippi, Montana, Nevada, New Mexico, North Carolina, Oklahoma, Oregon, South Carolina, South Dakota, Utah, Washington and Wyoming. In addition the commission authority in Pennsylvania, Rhode Island, Virginia and West Virginia is limited.

Even in those states which have some measure of control over security issues there are notable weaknesses. None of them make any strenuous attempt to squeeze out the old water in the companies before they approve the issue of new securities. In New York State, when the commission was under fire, it succeeded in having several of the utilities write off some of the old water, but it was a small per cent of the total. On the whole little has been done along this line. The hay that was made in the days before control over security issues was enacted has turned out to be good hay, an enduring claim against the consumers.

There are other weaknesses. As Maurice C. Waldorf has pointed out, when securities are used in part outside of the state, in the interstate business of a utility, then the utilities secure further freedom from control. The Georgia Commission has refused to take the jurisdiction granted it over stocks issued by foreign corporations or over bonds issued by a utility engaged in interstate commerce. Massachusetts and New Hampshire have no control over expenditures outside the state. Maryland rules that it had full jurisdiction in such cases over all securities issued by domestic companies, but the courts held that it had no control when the proceeds of stock sales were spent outside the state.⁹

We have seen here how the electric utilities are in a position where they can legally charge for the next thirty years close to \$14,000,000,000 more than would be charged through the use of government credit. Or, charg-

ing the consumers no more than the private companies, government ownership would reduce the charges for money to zero at the end of thirty years. In order to make secure the dividends on their common stock large extra sums are allowed them out of rates, above and beyond the actual cost of the money. These sums pile up cumulatively, and the amount of excess earnings required from the consumers to safeguard these dividends increases annually. But the operating utilities have now been put into a position where the managers do not themselves control such matters. The control is in the banking houses behind the holding companies. They are not always interested in securing money for the operating utilities in the cheapest market. They make some of their largest profits in ways expensive to the operating utilities. They constantly attempt to gain the benefits from both premiums and discounts. They are in a position to force operating utilities to accept short-term loans at high rates of interest, and then themselves to borrow from the operating companies at very low rates. They have fought control of security issues successfully in over half the states and are not inactive in attempting to repeal or weaken it in those states where it has been attempted.

2. *The Profitable Use of Imagination*

We are engaged in discovering the ways in which the power pressure has been successful in establishing and then maintaining a system which is highly profitable to the insiders. Their success in establishing their claims to high prices for the money they raise is only one of those ways. Another way, which has drawn more fire, has been through the use of imagination. They have not had their eyes entirely on the ground. They have looked into the deep blue sky and seen things there which are worth some scores of millions of dollars to them every year. They have made their dreams come true.

Their entry into the fields of imagination started with the word "if" at about the time prices rose during the war. Their plea to the commissions and courts was this: "We have been earning seven or eight per cent every year on the money actually invested in supplying a public service. Now, if we had not built our power houses and lines before the war, but if we had built them during the war, or in the 1920's, then they would have cost more than they did. The land we own, the plant we built, the equipment we installed would now cost us more to replace, to reproduce, if it were suddenly wiped off the face of the earth by fire or earthquake, and we had to reproduce it. So our plant is more valuable than it was before. Who gets the benefit of that increase in value, the utilities or the consumers?" The commissions started saying that the consumers were the ones to get the benefits. The utilities appealed to the courts and, after years of hammering at them, received decisions which enabled them to capitalize their imagination.

The result of this is that the consumers are today paying the utilities a rent on hundreds of millions of dollars which were never invested. It is legal for the utilities to enforce such payments. But what it has to do with furnishing a necessary public service as economically as possible is something which the more simple imagination has a hard time figuring out.

The utilities do not, however, wish this product of their imagination to be taken too seriously, to be carried out to its just conclusion. That would mean that their rate bases would fluctuate very violently and rapidly, rising and falling with prices. The Interstate Commerce Commission once worked out the way the railroad investment figures would shift if the rises and falls of prices for steel and the like were to be reflected promptly in the rate base. Alongside of that may be put similar figures for the elec-

tric power industry, based on the same price changes for the same years without additions to the plant.

	<i>Railroad Industry</i> (Assumed 1920 base: \$18,950,000,000)	<i>Electric Power Industry</i> (Assumed 1920 base: \$4,400,000,000)
1920.....	\$41,400,000,000	\$9,609,600,000
1921.....	35,100,000,000	8,106,800,000
1922.....	28,300,000,000	6,569,200,000
1923.....	31,300,000,000	7,264,400,000

The attempt of the railroads to apply to their regulation the ideas which the other utilities have persuaded the state commissions and courts to accept in principle was described by the Interstate Commerce Commission as "a conception which, if carried into actual operation, could have no appeal except to stock market speculators. It would be difficult to conceive of any plan more conducive to the encouragement of unrestrained speculation in railroad shares than such a method of valuation. In all probability it would provide a feast superior to anything which the bulls and bears have enjoyed since the creation of stock exchanges."¹⁰

The following figures give some conception of the seriousness and extent of the utility pressure to disregard the actual investment in the public service and to turn instead to the broad and happy fields where hired advocates in economics and law can allow their imaginations the widest scope. These figures represent cases where the issue of actual cost was presented fairly clearly against the alternative of what it might cost to reproduce the given utility new if anybody wanted to do that. They are by no means an exhaustive list of cases, but are chosen at random from current news. They do seem to indicate a certain situation fairly clearly.

The first table (III) shows the book cost, as nearly as could be ascertained, and in the second column the valuation asked by the utility which was sometimes more than

found over book cost, as the courts and commissions see it.

It will be seen, as far as these cases are typical, that the utilities are now asking for double their book cost, a full 100 per cent more. It will also be seen that the courts

TABLE IV

	Book Cost	Final Valuation Allowed	Excess Over Book Cost (per cent)
Southwestern Bell ^a	\$ 22,888,000	\$ 25,000,000	9.2
Great Western Power ^b	11,766,000	11,815,000	0.4
Scranton Spring			
Brook ^c	24,286,000	43,650,000	79.7
Pacific Gas and Electric ^b	19,457,000	26,685,000	37.1
Indianapolis Water-works ^a	10,434,000	19,000,000	82.1
Indianapolis Citizens' Gas ^a	12,000,000	16,000,000	33.3
Cambridge Electric ^d	2,500,000	3,675,000	47.0
Indianapolis Bell ^a	32,000,000	36,000,000	12.5
	\$144,331,000	\$191,825,000	32.6

^a Supreme Court decision.

^b Including severance damages.

^c Pennsylvania Commission decision.

^d Massachusetts decision.

and commissions have been allowing some 32 per cent more.

Here, then, we have a situation in which the utilities are asking for something like one imaginary dollar to match every real dollar they invested. What they are successful in getting from such relatively effective governmental bodies as the California Railroad Commission, the Massachusetts Department of Public Utilities and the Supreme Court of the United States is one imaginary dollar to add to every three or four real dollars they invested.

the cost of reproducing the property new. The third column represents the percentage by which the company estimate exceeds the book cost. The second table (IV)

TABLE III

	Book Cost	Reproduction Estimate	Excess Over Book Cost (per cent)
Worcester Electric ^a	\$ 9,000,000	\$ 17,837,000	92.6
New York Telephone ^b	452,693,403	692,666,590	53.0
Southern Pacific ^c	613,000,000	1,375,000,000	124.3
Interborough Rapid Transit (N. Y.) ^d	430,424,959	898,793,648	108.1
Chicago Elevated ^e	60,000,000	160,000,000	166.6
Brooklyn-Manhattan Transit (N. Y.) ^f	140,000,000	274,000,000	95.6
Great Western Power ^g	11,766,000	30,000,000	154.9
Pacific Gas and Electric ^g	19,457,000	67,000,000	244.3
	\$1,736,341,362	\$3,515,297,238	102.4

^a Company's calculations according to decision of Commissioner Stone.

^b Valuation as of 1925.

^c Preliminary valuation as fixed by Interstate Commerce Commission and claimed by company.

^d Figures from company's brief before U. S. Supreme Court.

^e Corporation counsel's estimate and company's claiming value, *Public Utilities Fortnightly*, August, 1929.

^f Statements by counsel for Transit Commission and company's engineers, *N. Y. Times*, August 8, 1930.

^g Purchase proceedings, decision of California Railroad Commission.

shows again the book cost of such utilities where a final decision has been rendered by a court or commission, and in the second column, the amount allowed as a rate-base or valuation giving weight to the companies' claims. The third column represents the difference of the "fair value"

What the power fight is about now becomes still clearer. The private owners not only want the right to collect over thirty-four billion dollars during the next thirty years and an excess and unnecessary fifty-four billion during the thirty years after that; in addition they want the public to pay a return on twice as much as they have invested, and are apparently successful in making us pay a return on a hundred million imaginary dollars for every real three or four hundred millions that have been actually invested.

This particular success of the utilities has about given the death blow to effective regulation. The Massachusetts commission, the only one which has as yet not been forced to bow the neck to this new profiteering, described it as "promoting greed and gluttony on the part of the owners of public utilities." They said that they had had sufficient experience with municipal ownership in that state to prefer it by far to an acceptance of the theory of revaluation.

New York State recently looked at its commission. It has more complete powers to protect the consumers than most of the state commissions. It spends far more money every year in trying to do that than any of the others. The conservative Republican majority of the investigating body, chosen by the Legislature from among its leaders, said: "The way is open for inflation of claims by the companies, which, if court decisions be taken as a criterion, sometimes run into hundreds of millions of dollars."¹¹ The counsel for the investigators, Col. Wm. J. Donovan, reported: "Rate determination is largely a matter of guess work. In some cases experienced guess work, but guess work nevertheless."¹² The minority of the commission, those appointed by Governor Roosevelt, went into more detail in the matter of revaluation on the basis of changing prices. They said:

"The reproduction cost theory is the latest device of the companies for undermining regulation along the old over-capitalization lines. Like stock watering it tends to conceal from the public the high rate of profits and enables the companies to charge as high rates as their business judgment dictates. Valuation cases mean an unequal battle for the public and cause commissioners to fear to initiate rate cases. Over-valuation is the modern form of over-capitalization. It proves a simple matter for the companies, with millions of dollars of consumers' money to spend, to convince the Courts that their valuations are justified. Such valuations include accumulations of obsolete and inefficient plant valued at cost new, reserves which should have been used for the retirement of such comparatively useless property, good will or franchises capitalized under some new designation and many other fanciful additions discovered by engineering and accounting staffs.

Practical disregard of the consumer interest under the present system of regulation, and the subservieny of the Public Service Commission to the corporations, was revealed in a considerable amount of evidence.

We wish to call attention to the protracted New York Telephone rate case as an instance of the breakdown of effective regulation, resulting from the insistence of the company on a fictitious reproduction cost valuation and its dependence on the Federal Courts to guarantee rates based on such a valuation. . . . We consider this case the limit of absurdity in the valuation method of adjusting public utility rates. . . . The variety of conclusions (six) reached in the course of this case is dramatic evidence that the concept of 'fair value' as an objective, provable fact, is a judicial myth.

We see in the two appraisals offered by the New York Telephone Company, clear evidence of the fact that the utility corporations are using the valuation principle as a means of extorting the highest possible return from the public. Both of these appraisals aimed to show value on the basis of reproduction cost and both were supposedly made by the most competent valuation engineers. . . . Between them they cost the company more than \$1,000,000. Yet a comparison of the various items in these appraisals suggests that they amounted to a little more than a contest to see which group of engineers could make the highest guess. Stone and Webster won with a guess for the entire property more than \$106,000,000 in excess of that arrived at by the company's own engineers under

the direction of Mr. Whittlemore. (The two appraisals were \$586,037,000 and \$682,666,590.)

Such facts indicate to us that the public utility corporations have found in the concept of valuation for rate making purposes the most effective means of undermining effective regulation. The present crisis seems to have been brought about largely by their attempt to use reproduction cost valuation as a means of squeezing the last possible cent out of consumers. . . . Where commissioners have proved obdurate in their attempt to defend the public, the utilities have appealed to the Courts.

Appeals to the Courts have meant injunctions, followed by surcharges allowed by Justices not trained in utility economics. Long periods have elapsed in which the authority of the state to determine rates has been in abeyance. The companies have overwhelmed the consumer's side of the case as a result of their ability to spend millions of dollars of consumers' money in the preparation of their evidence. Inevitably the conclusion has been the establishment of precedent a little closer to the full demands of the corporations.

The effect of these decisions is not only to establish a precedent for still higher valuations and consequently larger tolls exacted, but to change the part of Public Service Commissioners. They grow ready to negotiate and compromise with the corporations, lose their sense of initiative and hesitate to undertake rate cases when they know that the result will inevitably be a protracted and unequal battle in the courts." 18

This comment on the success of the utilities in New York State must be read in the light of the fact that few other commissions in the country have equal powers or spend within a fifth of the money it spends annually in its futile attempts to protect the consumers.

After this report was made several bills were introduced into the Legislature in an attempt to patch up the system somewhat. The utilities fought the bills, and defeated the important ones. But even if they had all passed they would have taken from the utilities the right to capitalize the blue sky only in respect to future investment.

Again the nice point about this is that the insiders in

the utility field are the only ones who get the real benefit from it. They do not allow it to be carried to its logical conclusion. The theory of revaluing on the basis of price changes stops where the pockets of the holding companies and other common stockholders begin. It does not go on and work for the benefit of the people who loan money in the form of bonds or preferred stock. The argument largely advanced comes close to this: Property built during a period of low prices is worth more now than it was before. The investors in the industry can buy less with the money they receive from the industry as rent for their money than they could in the days of lower prices. Therefore they must be given by the industry enough money to buy as many shoes and yachts as they could buy when prices were lower. Their real money return must remain the same, or at least not drop any.

Here is a definite attempt to single out utility investors from bank depositors and investors in industry, and give them a special and protected preference. The man who put a hundred dollars into the bank in 1910 and drew it out in 1930 might find that he could buy only half of what he could have bought with that money in 1910. He did not go to the courts to have them make the bank give him an extra hundred dollars so that he might buy as much as he could have bought in 1910. But the utilities, on the other hand, feel that they have a right to a form of governmental insurance against any possible drop in the purchasing power of the dollar.

Up to this point it was an unusual and impudent demand, but not wholly implausible. But then it began to be funny. It developed that the owners of utility bonds and preferred stocks were not included in the raffle. Somehow they had failed to make the assumption that they had any right to such special favors. Although they had put in their money at the same time as the common stockholders, their five or seven per cent return was to stay the same

in the coinage of the realm. It was only the common stockholders, in some mysterious and unique way, who suffered and demanded justice and redress. It was they alone who were the widows and orphans in the case. They must be reimbursed for any loss in purchasing power of their money. No, more than that. They must be allowed to take the bitter with the sweet. They must be reimbursed for all the loss in purchasing power of all the bondholders and preferred stockholders as well. It must all go to them.

This is something to sit up and pay attention to. It is nothing less than alchemy, changing brass into gold. A power company in Missouri, let us say, was built, largely before the war. The plant cost \$10,000,000. Bonds were sold to the extent of half that sum, to pay 5 per cent. Preferred stock was sold to the extent of \$2,500,000, to pay 7 per cent. The remaining \$2,500,000 is in common stock. In 1930 the company gets into a rate case. It asks to be allowed to earn an 8 per cent over all return on twenty millions, which is, it claims, the estimated cost to reproduce the plant at 1930 prices. The commission allows an increase on the rate-base of 30 per cent, \$3,000,000. Although this is not as much as they wanted the common stockholders celebrated enormously. They were getting \$375,000 a year before the decision. After the decision they collect \$615,000, an increase of 64 per cent.

	<i>Before the decision</i>		<i>After the decision</i>	
	(equity)	(annual return)	(equity)	(annual return)
Bondholders ..	\$ 5,000,000	\$250,000	\$ 5,000,000	\$ 250,000
Preferred Stockholders ..	2,500,000	175,000	2,500,000	175,000
Common stock.	2,500,000	375,000	5,500,000	615,000
	\$10,000,000	\$800,000 (8%)	\$13,000,000	\$1,040,000 (8%)

The commissions are not unaware that this is the way the game works when it is played according to utility rules, but they have to play it. The New York Transit Commission in 1928 phrased it: "Until the rule as laid down receives some qualification, the commissions must act on the assumption that the law calls for a full return on the total value of the property regardless of the fact that the increase is shared in unequal proportions by those who have invested in the property—or rather that it is not shared at all by those who furnished nearly two-thirds of the capital."¹⁴

Many odd things happen when many men use many imaginations to make much money. In Albany, New York, the traction company asked for an increase in fares on the basis of an estimate of what it would cost to build its property all new, \$14,293,933. The state regulatory commission allowed them to collect rates on a figure of \$12,000,000. Shortly afterward, the whole company was sold for \$7,500,000, close to half of what they had claimed was their value, and only 62 per cent of what the commission had decided was their value. Immediately the new owners scrapped several of the lines which had contributed to the high valuation. They scrapped them as so much junk. The cities affected immediately said, which seems to be reasonable: With all those lines scrapped the company is worth less than it was before. The valuation should be lowered. But the commission absolutely refused to reopen the case. One of the New York commissioners told a story to the investigating body of a case where the United Traction Company put a reproduction cost new on two old cars put together and painted, with their ends cut off to form a center entrance car. Another New York Commissioner allowed the Plattsburg Gas and Electric Company some \$171,000 for a steam generating plant that had not been used for three years. A Buffalo engi-

neer placed a \$1,000,000 valuation on generator units in a power house, which he termed a reasonable estimate of what it would cost to build that kind of a unit. The only trouble with that was that they were out of use and scrapped and that, in the second place, no one had built or wanted to build that kind of generator for twenty years.¹⁵

Now this bullying and bulldozing of the commissions to the point where they are afraid to start rate cases, where they are reduced to secret negotiations with the utilities, as the recent chairman of the New York Commission explained, was not accomplished by taking the Supreme Court seriously. The utilities have been far from taking it seriously. That is their record. Over fifty years ago, when the Court held that utilities could be regulated by the states, it said that the job of regulation was up to legislatures, not to the courts. It was called "a legislative and not a judicial question" by the Supreme Court. The Court repeated itself to that effect several times in the following years. The utilities were not dismayed. They kept bringing suits, insisting on their contention that "due process of law" meant the review and possible disapproval by the courts of any action by the state legislatures or their agents. Finally, in 1890, the Court reversed itself and held that rate cases had to be reviewed by the courts whenever the utilities felt that the rates set by state commissions hurt the value of their property. This was the beginning of a series of great utility victories which led to the present result: the utilities spend time on the state commissions only to get a favorable verdict, or to delay action. When a real point is involved they rush over the heads of the commissions to the Federal Courts.

While their latest triumph is that of getting the Court to say that there was something in their imaginative idea of reproducing their plants (and then using such decisions to inform the commissions that they were not allowed to

pay attention to anything but that idea), they have not stopped in their efforts to convince the Court that they are right and it is wrong. Their latest concerns the questions of fixing boundaries to their imagination. A utility enters a town where the roads are as yet unpaved. It digs trenches and puts in mains of gas pipe or conduits to carry electric wire. Afterward the city, at its own expense, paves these roads and streets. The utility gets into a rate case. It tells the Court that if it had to build its plant new it would have to tear up the pavement and repave it after putting in the mains or conduits. That would cost money. The money that it would cost, it says, ought to be added on to the amount on which it can now and ever after earn an eight per cent return. When the Gas Company in Des Moines, Iowa, tried this out on the Court in 1915 the Court balked. That was going too far. It said there should be no allowances for the merely theoretical cost of paving over mains. That did not discourage the utilities. They have submitted the point several times since. No imaginary dollar is too unreal for them to disregard. And the Court, having gone as far down their alley as it has already done, may yet give in and go all the way. Professor Edwin C. Goddard puts it thus: "... The injustice of increasing the returns to the utility because the city at its own expense has laid a pavement over utility mains has been recognized by the courts. It does not, they say, add to the value of the utility. But if cost of reproduction is value then it does add to the value, and this may encourage the continued insistence by the utilities."¹⁶

Still another imaginative product, very recently put forth, was tried out by the New York Telephone Company with some preliminary encouragement. No doubt it will be heard from again in the near future. For that company, being permitted to collect rates on an estimated idea of what its own huge plant would cost to reproduce,

was not enough. It cast around and hit upon an idea for new worlds to conquer which it called by the engagingly technical name of "inexperience factor." What that turned out to be was this: The telephone company bought material from an allied supply company. Obviously that company was well equipped to furnish exactly what the telephone company needed. In fact, if one of these theoretical fires or earthquakes that have been so useful to the utilities came along, and that supply company were wiped out of existence, the telephone company would then have to pay more for its equipment, buying it from companies not accustomed to supplying it. So the telephone company duly and legally petitioned to have the estimated difference between the present cost of its supplies and their hypothetical cost in the event that all these catastrophes happened (not to it, but to a supply company) added to its own rate base. It got as far as persuading a special master, appointed by a Federal Court, to include \$17,393,214 in its present rate-base, and to allow an eight per cent return on it. That meant that consumers today and next year and forever would pay \$1,391,440 a year in rates to defray the imaginary costs of an imaginary fire. A superior court threw the idea out, but it may be only for the moment.

Most of the ways here described of using imagination to drain the consumers for the benefit of the common stockholders are, to all appearances, perfectly legal, but what they have to do with performing a governmental function in the most efficient way possible must also be left to the imagination.

3. *Profiting by the Birth Rate*

The population of the country has been increasing persistently and has been shifting from the farms to the cities. In the course of this increase and shift the cities,

counties and states have made a great many public improvements. The public improvements and the increasing number of people in the towns and cities have raised the value of land. The utilities have stepped in and claimed successfully that all the increase in values touching the land they held, belonged to them rather than to the consumers or the cities.

This claim has been pronounced perfectly legal. It has, again, nothing whatever to do with furnishing an essential service as cheaply as possible. It is simply the appropriation of values created by others. It is cashing in on all the taxes men pay to improve the city, on the time and money other men spend attracting industries, on the buildings put up by those industries. On all this progress the utilities claim a toll.

The social effect of such appropriation of community values by the utilities is indicated by Commissioner Eastman of the Interstate Commerce Commission in his comment on two cases coming before that commission from Chicago. He was in the minority in both cases. The first involved the sale of certain lands in Chicago to a railroad terminal company. He said:

"These lands were bought for the most part many years ago, but it is here proposed that they shall be sold, with our approval, to the Terminal Company at a price based on a 1926 valuation, controlled, I assume, by the values of the privately owned adjoining property. . . . In substance the transaction is equivalent to a huge marking up of book values with book profit of about 1,217 per cent in the case of the Santa Fe and 897 per cent in the case of the Illinois Central. . . ."

"I have fully stated my reasons for believing that the public served by the railroads cannot without gross injustice be compelled to pay a return upon the increment in assumed value of railroad lands over and above their fair cost, an increment which in general is constantly growing, especially in great cities like Chicago. Under public ownership of the railroad properties a claim that such a return should be paid

would be unthinkable, and there is no good reason why private companies when they undertake to perform a function of the State, which is the situation in the case of the railroads, should be given huge profits which are unnecessary to induce investment and which the State, if it performed the function itself, would not think of claiming."¹⁷

The second case in which Commissioner Eastman pointed out the social expensiveness of this legal utility practice involved a Chicago junction. Here the majority of the Interstate Commerce Commission felt itself forced to allow a rental of \$2,000,000 a year on property which the companies claimed was now worth \$33,000,000. Of this no less than \$23,800,000 was made up of claimed land values. He said:

"The provision of the public highways for rail transportation is a function of the State, according to numerous decisions of the Supreme Court. If this public work is to be performed by private companies, they should be fairly compensated . . . But it is not right nor just nor economically sound that these private companies should be given, in addition, an opportunity to earn a return upon a further amount which does not represent funds which have been invested, but which represent increments in the estimated value of property, particularly lands which they own or use.

The result of the latter policy is that the community gains no benefit whatever from the timely devotion of property to public highway use, but must always pay as if the property were being acquired anew each year in the most untimely and improvident fashion. If the State had itself acquired the property originally, a return upon such an increment in values would not only never be sought, but in due time the original debt would be retired and cease to be a burden.

Such gradual return of debt is sound and constructive public finance, but under the prevailing policy, when a private railroad company undertakes the same work, the corresponding burden upon the public never grows less, but on the contrary continually increases and with menacing rapidity where terminal lands in great cities are involved. The notion that a policy which produces such results is right, just and economically sound is not the product of clear thinking,

but rests upon assumed property rights which in truth have no solid foundation."¹⁸

The utilities must be marked up with a great success against the public in this policy of appropriating other people's labor. It is neither "right, just nor economically sound," but they have forced the commissioners to accept it. As the cities grow larger the sum of this appropriation, on which we pay an annual return, will grow larger and larger. We are made to face the future with the burden of our own progress saddled onto our backs.

4. *Appropriating the Consumers' Contribution*

It is not only the social contributions of the cities and states which the utilities are bent on appropriating for the benefit of their common stockholders, it is a large part of the direct annual contribution of their consumers. So far we have been discussing the cost of money charged by the utilities against the consumers, and the amounts of money, fictitious or real, on which they are able to force an unnecessary return to themselves. Every year the consumers pay in a certain amount, as part of their rates, to keep the plant furnishing them power and light or telephone service or gas in perfect shape. When a generator has been used up and the company wants to replace it, it has already collected from the consumers a sum large enough to pay for the new generator. Such charges as these are allowed by all the commissions, and are usually known as depreciation charges. They represent capital contributed in rates by the consumers, not raised by the companies through the issue of stocks and bonds.

This sum paid annually for this purpose by the light and power users is not small. According to the best figures available it was about \$125,000,000 in 1928 and about \$160,000,000 in 1931.¹⁹ It amounts to about 6½ per cent of the annual gross revenue. Every year this

sum is collected and piled up. It is supposed to be held in reserve to replace worn-out equipment. But sometimes it is used by the utility to buy new plant and equipment, extending the property. It is not known at present how much of the industry has been built up out of depreciation funds collected from the consumers.

The great drive has been to have all or a large part of these accumulated depreciation funds added to the rate base (subtracting some lesser sum in their place) and thus have the consumers pay twice, once when they contributed the funds and again in the form of interest on their own contributions. And it has gone further. They have tried, with some success, to have an imaginary value added to these funds as well as to those raised by themselves.

Here is another instance where the utilities found it profitable not to take the Supreme Court too seriously. Years ago the Court upheld the commissions in their understanding that the utility consumers did not have to pay twice for the same thing. In the *Cumberland Telephone* case (212 U. S. 414) the Court declared that the utilities had the right to earn a fair return on such of their property as they had invested themselves, but what the consumers had invested was to be deducted from the rate base in figuring out what could be collected by the utilities. The depreciation charges, in so many words, could not be included in the sum on which the consumers had to pay capital charges. But year after year the utilities have returned to the Court claiming that the property created out of these depreciation charges contributed by the consumers really should belong to the common stockholders of the utilities. Against this effort the commissions seem to be waging a losing fight. And the cities which have tried to get the commissions to act also seem to be losing. Thus, in 1927, the *West Virginia Supreme Court of Appeals*, in a case brought by the City of Elkins against the commission, refused, in fixing the rate base, to deduct

the depreciation reserve, and held that the public had no interest in it. The Supreme Court of the United States held to this effect in 1926, in the case of the Board of Public Utility Commissioners *vs. N. Y. Telephone Co.* (271 U. S. 23).

The main thought seems to be that of adding to the rate base as much of the reserves already piled up as possible. The railroads, which had been reporting depreciation on their equipment, as well as on their plant, claimed that it was no longer necessary to make such reports on their equipment. The Interstate Commerce Commission concluded that, in that event, the railroads had understated their income during the years up to 1922 by no less than \$1,181,383,000. This Commission reported at the same time that as early as 1921 the electrical utilities had attacked depreciation before the newly set-up Federal Power Commission. After reiterating that the Supreme Court had definitely upheld the doctrine that depreciation must be deducted, it added: "Notwithstanding these decisions of the Supreme Court, however, the railroads, gas and electrical companies are not ready to concede this doctrine, and hence their insistence upon the retirement method of accounting."²⁰

The "retirement method" is one which the electrical utilities have favored for years. It was adopted by the association of state regulatory commissions in 1923. The famous unsigned letter which appeared in 1929 and concerned the attempt of the power companies to rid themselves of the Federal Power Commission's Chief Accountant, William V. King, gave the utilities credit for having the state commissions adopt this particular method. In 1930 Professor James C. Bonbright of Columbia, acting as Commissioner in the New York State investigation, said of this system, now in effect in most of the states: "... We believe that the system . . . is subject to grave defects. For it permits these companies to charge

to operating expenses such annual reserves for retirement as they see fit, at the same time that it makes no definite provision that these reserves must be deducted in the determination of the rate base."²¹

The hope of the utilities is very clear here. It is that while there is some danger that they may not be allowed to add to the rate base all of the "depreciation reserves," they may, by calling them "retirement reserves" and collecting them on a slightly different basis from the consumers, win the right to appropriate most of them. In commenting on this situation in New York State, Professor Bonbright says:

"That the danger which we have mentioned is a real one, and that the electrical and gas companies may take advantage of the opportunities which the danger affords, is indicated by the testimony of Mr. Nickerson, Vice-President of the Consolidated Gas Company, and also by the testimony of Mr. Sloan, President of the New York Edison Company. When questioned on the nature of their retirement reserves, both of these officials insisted that the property which has been purchased by means of these reserves belongs to the company just as much as does any of the rest of its property, and they insisted that this property is entitled to a 'reasonable rate of return' for the benefit of the stockholders, despite the admitted fact that it had been secured by charges to operating expenses—charges which have been paid for by the customers."²²

What can be done in the direction of trying to take money that doesn't belong to you, has been laid out in fine broad lines by the telephone companies. The Interstate Commerce Commission commented that in rate cases before the commissions the telephone companies were conceding that their depreciation reserves should be disregarded and only the observed actual depreciation be deducted. "It was shown, for example, that one telephone company having a depreciation reserve equal to about 30 per cent of the recorded investment in the property is

contending for an accrued depreciation for valuation purposes of no more than 9 per cent; and this illustration is typical."²³ This was a proposal to appropriate not less than 70 per cent of the money contributed by the customers. The New York Telephone Company case furnishes a good public illustration of the intentions and purposes of the utilities in this matter.

In this case the Special Master appointed by a Federal Court found that there were \$71,000,000 in unexpended depreciation reserves, which had been used by the company for extending its plant. He quoted the state commission to the effect "that it is unjust to allow the stockholders of the company to get a return on property in which they have no money invested, but which is bought by the subscribers' money, and thereby depreciation is built upon depreciation, and there is every incentive for the company to build up large depreciation reserves and thereby increase the investment and return on property which is being financed by subscribers." With this view of the matter the Master was inclined to agree, but said that, "The decisions hold that, if unexpended reserve for depreciation is invested in the property, the company is entitled to a return upon property represented by the investment." Thereupon he allowed an 8 per cent return on it, \$5,680,000 a year.²⁴ The lower Federal Court decided that the Master was wrong, but the case has not yet reached the Supreme Court.

This cool attempt to appropriate \$71,000,000 at one blow drew the comment from Commissioner Bonbright that it was "the most extreme instance of unfairness to the public" on this question. He went on: "We call this situation to public attention because it constitutes, in our opinion, one of the most shocking examples of duplicity and bad sportsmanship that has ever been perpetrated upon the public by any large and reputable public utility in this country." The history of the incident is that the

former president of the American Telephone and Telegraph, owner of most of the telephone lines in the country, pledged the good faith of the company that it would pay no more than reasonable dividends, investing all earnings above this amount in capital improvements which would never constitute a claim for a boost in the returns of security holders. Depreciation funds, he pledged, would never be charged against the consumers. On the strength of these assurances the state regulatory commissions allowed unusually large depreciation charges to be taken from the consumers. Since President Vail's death the telephone companies around the country have gone on collecting these large charges, and have secured in that way hundreds of millions of dollars' worth of property. However, far from keeping the pledges on which these large charges were allowed by the commissions, the telephone companies now deny that these tremendous reserves represent, in any sense, property of the customers, and they insist on their right to earn a return on the entire estimated reproduction cost of their property.

It met with the opposition of the commissions. The company took one case from New Jersey to the Supreme Court, and won it. The utility was allowed to collect a return from the consumers on excess depreciation reserves piled up by the consumers, and to revalue those excess reserves in the well-known way. The more the New Jersey telephone subscribers paid to the company in excess of what it needed, the less certain the subscribers were of reductions in rates. In New York State the federal statutory court sustained the commission and deducted the whole depreciation reserve from the amount on which the customers have to pay a rent. The case has not yet gone to the Supreme Court, and there is a good chance that the utilities will win there.²⁵

If not stopped in some drastic way this appropriation of the consumers' contributions may be used to return to

the companies an even greater increment on the actual investment than the additions for cost of reproduction at present prices. The practice of the Court has gradually changed into one of allowing very small depreciation deductions. If it persists in this practice and at the same time permits companies to claim the very large depreciation reserves which seem to be called for in the recent Baltimore case, the utilities may be expected to succeed better than ever in playing both ends against the public. The Chicago Telephone Co. case of December 1, 1930, indicates a change of Supreme Court's position. (Smith vs. Ill. Bell Telephone Co., 51 Sup. Ct. 65.)

5. *The Miracle of the Bread and Water*

State regulation was established to prevent the utilities from exercising monopoly practices. It was our substitute for competition. But at present there is hardly a utility in the country that does not go into a rate case and claim that it shall be allowed a return annually on a sum representing the simple fact that it exists—by city or state permission. The cities gave franchises, the state commissions gave as their equivalent, certificates allowing the companies to serve the communities. These were their bread of life. Without them they could not have begun living. They have managed to turn this bread into water. In this day of scientific miracles, financial miracles such as this are too apt to go unnoticed.

Here again there was a humble beginning and then audacious pursuit. When the power utilities started there was a period of a year or two during which the buildings were going up and the wires being strung, when there was no income. Interest on money was paid out, without any income. These were necessary costs involved in getting going. The commissions properly allowed the utilities to capitalize these costs, although in most cases they had no evidence that such costs did not represent large

promotion fees to allied banking and contracting interests. Ever since that time we have been paying an annual return on those "get-going" costs. In the early days they may have represented as much as ten per cent of the utility's entire investment. But since that day there is no such situation in most cases. The utilities are constantly expanding, and keep on supplying power at the same time. Nevertheless, they continue to ask the commissions for ten per cent or more of their total investment, to be added to the actual or revalued investment so that the consumers may be charged a return on it in rates. This claim is sometimes called "going-value," and is sometimes based entirely on the idea of get-going costs, and sometimes on the idea of being active and operating businesses—through city or state grant of privilege. In the latter case, the attempt to capitalize the monopoly right, it is asked for over and beyond the get-going costs.

Here some of the commissions surrendered entirely, and did so unnecessarily. Others fought the claim with varying success. In New York State the commission arbitrarily allowed, in most cases, a going value of one tenth of the claimed investment to be added. In many other states it is not lower. Thus in Tennessee in 1928 the commission fixed a value on the Tennessee Eastern Electric and its traction company of \$2,725,000. The special commissioner appointed by the court allowed a going value of \$275,000. In the same year the Pennsylvania commission allowed the Equitable Gas Company, serving Pittsburgh, to capitalize \$17,000,000 as overheads and, on top of that, \$10,000,000 as going concern value. The total valuation was \$88,602,978, which made the going value alone 11.2 per cent.

What the companies carry on their books representing the equivalent of going value, whether in the form of "water rights," "intangibles" or "franchises" rarely appears until a rate case is started. The Chief Accountant

of the Federal Power Commission, William V. King (whom the power companies have been trying to get rid of), made a report to the Commission on certain companies licensed by the Federal Power Commission. This report was to be submitted by the Commission to Congress in an attempt to secure funds adequate for its work. At the request of one of the companies affected, the Niagara Falls Power Company, the report was withheld by the Secretary of the Interior. The report cites for that company a claimed investment of \$77,671,451, of which \$5,762,143 (7.4%) was for "intangible property," \$8,718,334 (11.2%) for "over-head costs," and \$32,000,000 for "water and rights," or 41 per cent. He stated: "This aggregate (\$77,671,451) represents what appears to be the claim for 'fair value' of the property which was transferred on the books at the time of the consolidation at \$34,500,000, and which appears to have represented not more than \$20,500,000 of actual investment."²⁶ Here an amount which is somewhere between 7 and 48 per cent of the total seems to represent a capitalization of "rights."

Another instance of the very considerable sums which companies attempt to add to their actual cost by way of capitalization of monopoly privileges was brought out by Mr. King in 1930 when the Montana Power Company (one of the Electric Bond and Share interests) was attempting successfully to get a license for the Flathead site in Montana. On the basis of the company's own figures he found that they had appraised their tangible property at \$45,746,598. However, the company added to this an item for "water rights, contracts, franchises, etc." of \$51,491,269, thereby increasing the total valuation to \$97,237,867. Of this the capitalized rights account for 53 per cent.²⁷

Here we have the utilities attempting to capitalize their monopoly privileges at anywhere from 7 to 89 per cent. Only when the commissions start rate cases are these

going values questioned, and even then, in New York State, Pennsylvania and Tennessee, they are often allowed as much as 10 per cent of their total. It is interesting to note that the California Commission apparently does not allow this, and that no appeals have been taken on this point from the commission to the Court. The reason may well lie in the active municipal competition in that state, which makes it undesirable for a private utility to charge rates as high as it might legally secure.

What this amounts to throughout the country is hard to estimate. If as little as 5 per cent has been added to the claimed capitalization of the utilities for such going value, it would add up to \$500,000,000, on which the return of $7\frac{1}{2}$ per cent would come to \$37,500,000 annually. In the light of the Montana Power Company and Niagara Falls Power Company figures, cited above, it may be much more than 5 per cent of the total claimed value.

The significant fact is that the commissions were apparently so soured by defeat on other points that they left this one go by default.

The late Dr. E. W. Bemis pointed out to the National Association of Railway and Utility Commissioners that the leading decisions of the Supreme Court from 1915 to 1926 had held, whenever the point was raised, that the only necessary measure of going value was the overheads usually associated with the physical value, and reasonable expenses for organization. Yet during those years the commissions allowed going value, in many cases, in addition to general overheads, apparently ignoring what the Court had said in the leading cases, the Des Moines Gas case in 1915 and the Galveston Electric case in 1922. In the McCardle case (McCardle vs. Indianapolis Water Co., 272 U. S. 400), however, the Court through Mr. Justice Butler held that 9.5 per cent for going value was not excessive. Dr. Bemis pointed out that this decision

was at variance with the Des Moines decision (Des Moines Gas Co. vs. Des Moines, 238 U. S. 153, 165), and that the majority of the Court did not rule on the specific point of going value in that it was not the deciding point in fixing the valuation at \$19,000,000. He concluded, "Since Mr. Justice Butler did not meet the reasoning in the Des Moines and Galveston cases and did not show how the Indianapolis case differed therefrom or on what basis a going value was allowed in the latter, it is still open to our public service commissions to measure going value as it was measured in the first two cases just mentioned, setting forth a clear analysis of these cases, and thus see whether the Supreme Court will again misinterpret or ignore them as in the Indianapolis case."²⁸

6. *Stacking the Cards*

One of the most dangerous things which the electric power utilities have been busy doing in recent years is that of loading the industry with securities which have no relation to the actual money invested in it. They have not only loaded the holding companies in that way, they have also loaded the operating companies. This can be taken as a concerted move to set up claims for the future which neither the state regulatory bodies nor the states and municipalities interested in purchasing the utilities will, they hope, be able to ignore. It is a process of stacking the cards so that they cannot lose either way.

In many cases the commissions have given such loading their approval, perhaps through sheer blindness to its significance. In some cases they allowed the sales to be made, the securities to be issued, exchanged and marketed, making the provision that such securities should never be governing in rate cases. If they are really under the impression that this will protect the consumer from the claims being established they are probably in

for a rude awakening. In fact, some of them seem to know it now.

The extent to which loading has been going on during the past few years is being uncovered by the Federal Trade Commission in the investigation which followed the costly but successful lobby of the utilities to prevent the United States Senate, under the leadership of Senator Thomas J. Walsh of Montana, from going into the matter itself. Some of it was uncovered by the investigating commission in New York State in 1930, some by the City Club of New York. Only a beginning has been made to date, and it is still too early to say that the average write-ups of 80 per cent found so far represent the trend for the rest of the industry.

In view of the great probability that these write-ups will soon constitute the base on which the utilities will be fighting to keep their rates high, the following figures will be of interest to the consumers in such widely separated states as Arkansas, Utah, New York, Louisiana, New Jersey, Mississippi, Pennsylvania, West Virginia, Tennessee, Ohio, Indiana, Virginia, Michigan, Washington, Texas, Minnesota, Kansas, Nebraska and Florida. More than half the population of the country is in these states.

In the table the name given is that of the holding or operating company effecting the transaction. In the first column is the actual value carried on the books of the companies which were bought or sold. When it represents common stock it includes the equity represented by surplus. In the second column is given the amount of securities issued as purchase price or entered on the books of the new company. The third column represents the extent of the write-up, the amount by which the new capital entries on the books exceed the actual book value or first cost.

In these cases the securities were carried on the books

of operating companies, mostly, at \$441,246,680. Sales or mergers of these operating companies were arranged by the holding groups controlling them. When the merger

TABLE V

	Book Value or Actual	Purchase Price or New Capital	Excess
1. Electric Power and Light (Arkansas).....	\$30,301,937	\$37,272,539	\$6,970,602
2. Electric Power and Light (Louisiana).....	9,190,757	19,076,594	9,885,837
3. Electric Power and Light (Mississippi).....	9,726,966	20,441,510	10,714,544
4. Buffalo, Niagara and Eastern (New York)...	54,878,574	107,836,022	52,957,448
5. Consolidated Gas (N.Y.)	102,401,398	154,575,000	52,173,602
6. Rochester Empire (N.Y.)	7,550,082	25,140,284	17,590,202
7. Mohawk-Hudson (N.Y.)	44,697,535	75,296,354	30,598,819
8. Electric Bond and Share (Utah)	6,433,118	29,433,118	23,000,000
9. American Power and Light (Mont., Wash., Tex., Minn., Kas., Neb., Florida)	55,284,426	123,725,358	68,440,932
10. Appalachian Electric (West Virginia, Virginia, Tennessee).....	72,621,455	139,039,648	66,418,193
11. Ohio Power Company (Ohio, West Virginia) .	14,253,000	17,029,000	2,776,000
12. Atlantic City El. (N.J.)	3,483,283	5,696,057	2,212,774
13. Scranton Electric (Pa.)	17,350,976	21,777,303	4,426,327
14. Indiana and Michigan Electric (Indiana, Mich.)	13,073,173	19,031,648	5,958,475
Totals:	\$441,246,680	\$795,370,435	\$354,125,755
Excess over book value or actual first cost			80.0 per cent

or sale was completed the sum of \$795,370,435 stood on the books of the new companies ready to draw interest or dividends. It represents write-ups of 80 per cent over the cost carried on the original books. Or, expressed differently, the present claimed capitalization of these com-

panies consists only 55.5 per cent of first money put into them, and 44.5 per cent of write-ups or forced purchases. If the average write-up for the claimed investment in the whole industry should turn out to be no more than half of this, perhaps only 20 per cent of the present claimed capitalization of \$10,000,000,000, it would still represent the not inconsiderable sum of two billion dollars.

A few details on some of these transactions may have local interest. The transaction in Arkansas involved the Arkansas Power and Light Company. The fixed capital on the books after the reorganization was 23 per cent greater than immediately before. In Louisiana the company involved was the Louisiana Power and Light and the fixed capital on the new books was 109.64 per cent higher than before the reorganization. In the case of the Mississippi Power and Light it was 110.15 per cent higher. The average write-up for these three Electric Power and Light groups was 56.4 per cent.²¹

In the case of the New York State companies the counsel for the investigating commission reported: "More examples could be given of the resultant increase of capitalization over actual investments. Mr. Carlisle, for instance, agreed that the capitalized value of the three holding companies which were acquired upon the formation of the Niagara Hudson Power Corporation, namely, the Buffalo, Niagara and Eastern, the Mohawk Hudson and the Northeastern Power Corporation, was increased by approximately \$77,000,000 over their book value on the books of the issuing companies; and further that the capitalization of each of these subsidiary holding companies was substantially in excess of the book values of the operating companies which they control."²² The minority commissioners, not disputed by the majority, reported on this matter: "We have before us evidence that recent upstate mergers have inflated the capitalization of

the properties by approximately \$145,000,000. This represents the excess of the securities issued in exchange over the book values of the equities acquired. It includes \$52,957,448 in connection with the Buffalo, Niagara and Eastern, \$30,598,819 in connection with the Mohawk Hudson, but belonging to the Niagara Hudson combine of which Mr. Floyd Carlisle is Chairman, \$43,000,000 in connection with the Mohawk Valley Power and \$17,590,202 in connection with the Rochester Central Group, both the latter now included in the Associated Gas and Electric. Mr. Carlisle in his testimony dealt at length with this question and indicated clearly, that by a process of reappraisal of the properties on the cost of reproduction theory, they intended to put value behind the excess at which the stocks of the subsidiary companies were carried to the books of the merger. . . . This over-valuation, which in its various forms is defeating efforts at public utility regulation, is still an attempt to determine capitalization, even in a regulated industry, on the basis of profits."²³ The figures given for the Consolidated Gas Company of New York were compiled by the City Club of New York following the purchase of the Brooklyn Edison, a company allied in interest.²⁴ The counsel for the investigating commission pointed out that the Public Service Commission had fixed the book value of the Brooklyn Edison stock without deducting the retirement reserve and other reserves built up by charges to operating expense. The minority of the commission, uncontradicted, stated that, "The New York Public Service Commission never acted more openly as an ally to the utility companies than it did in connection with the absorption of the Brooklyn Edison Company by Consolidated Gas in 1928." Here a non-partisan organization, The Public Committee on Power in New York State, had attempted to secure some guarantees that the merger would be for the benefit of the consumers. Mr. Morris L. Ernst, counsel for the

Committee, and the only consumers' representative, "was almost crudely brushed aside at the demand of Mr. John A. Garvin, counsel for and director of the Consolidated Gas Company," although the Public Committee "was the only party in the entire case to consider seriously any issue save the mutual satisfaction of the stockholders involved." Within thirty days after the Commission allowed the exchange of stock at over \$52,000,000 more than its book value, the dividends were increased over \$7,000,000 annually.³⁵

In Utah the situation was that the Electric Bond and Share was the holding company and the Utah Power and Light the operating company. Mr. Kenneth A. Miller, Federal Trade Commission accountant, testified: "Securities and properties costing Electric Bond and Share \$6,433,118 were capitalized by the Utah Power and Light at approximately \$23,000,000 more than such cost to Bond and Share within a period of three months after the transfer of such securities to the Utah Securities Corporation."³⁶

In Minnesota, according to Trade Commission accountant Mr. Ludvall, the book value of the Great Northern Power Company was \$13,326,328. After its reorganization it was \$33,578,006. This he termed a write-up of \$20,251,682, amounting to 152 per cent. Including this with the various other companies of the American Power and Light, again one of the Electric Bond and Share group, he found a total write-up as given in the table, of over sixty-six million dollars.³⁷

The write-ups of several of the operating companies of the American Gas and Electric group were gone into in some detail. Like the others they were accomplished through mergers in which all, or almost all of the merging companies were controlled by the holding company group, which also held most of the common, and so gets most of the benefit. The Appalachian Electric Power

Company was constituted in its present form on April 1, 1926. On March 31st the plant and investment account carried the seventy-two million figure. The next day it carried the hundred and thirty-nine million figure. The holding company received from the new operating company \$49,438,602 more for the assets it owned than it had paid for them.³⁸ In the course of discovering the inflation in the Ohio Power Company, operating in Ohio and West Virginia, the Federal Trade Commission accountants also found that the company had under-reported its revenue in 1928 to the Ohio Public Service Commission by the net sum of \$2,111,000.³⁹ The write-up of the Indiana and Michigan Electric was allowed by the Public Service Commissions of those two states.⁴⁰ The Scranton Electric received the approval of the Pennsylvania Public Service Commission for its write-up. In this the sum of \$2,239,537, or about 12½ per cent was included for "going value." The Atlantic City Electric also received the permission of the New Jersey Commission to effect its write-up.⁴¹

The attempts to stop the establishment of claims such as these have been sporadic and, on the whole, feeble, outside of California, Massachusetts and Maryland. The New York Commission, which has allowed all the big companies to engage in the process, recently, after it was under fire, refused to do so in the case of a much smaller company, the Ticonderoga Electric Light and Power.⁴² The Illinois Commission apparently does the same. When things got to the point that a holding company in Maine issued \$3,000,000 of securities without Commission approval and after that was accomplished asked to be treated as a public utility in order to consolidate fifteen operating companies, even the Maine Commission called a halt. The Maryland Commission recently was confronted by an attempt of a purchasing company to put \$518,000 on the books where the commission's engineer found a reproduc-

tion cost of only \$242,540. The Commission was taken into court by the company, and was there ordered to allow the sale, on the ground that it could not be disallowed unless it could be shown affirmatively that it was not in the public interest. After this the Maryland Legislature passed a law making it incumbent upon the companies to show that sales were in the public interest rather than leaving the burden of disproof on the Commission. The California Commission has frequently refused such permission, but the situation there, through the example of several large and successful municipal plants, is different. In Massachusetts the Commission has, on the whole, prevented over-capitalization.

Generally the state regulatory bodies have allowed such capitalizations to take place, making a proviso at the same time that the amounts should never influence rate cases. This has not been the practice of the Federal Power Commission, in so far as that body has been allowed to be effective. When the lack of power on the part of the Pennsylvania Commission led the Philadelphia Electric Company to attempt to issue itself a bonus of \$2,355,000 on the Conowingo development in Maryland, putting in an equity of 53 cents a share and proposing to sell those shares for \$25.00 the Federal Power Commission stepped in to reveal what was being done and to prevent the issue of all but \$50,000 of that sum. When in 1929 it discovered that the Cumberland River Power Company, an Insull interest, was trying to include as part of its actual expenses some 30,000 shares of stock which it planned to issue to its two parent Insull companies and to value at \$250,000, the Solicitor of the Commission, Mr. Charles Russell, observed: "We have a situation wherein the whole program is one instituted and fostered by the Middle West Utilities Company, and all the dealings through the other companies involved the same property and were in the interest of the Middle West Utilities Company."

... To say now that it should receive compensation for developing its own property, for financing its own interest, and for the advancement of its own future cannot be conceived or recognized. . . . The result of including this item would require the rate payers to pay rates sufficient to net a return on that sum and require the Government at the end of the term of the license to pay that sum to the licensee." It is claims which differ from this only slightly that the state commissions have allowed very cheerfully.

The result of allowing the free and easy issue of securities can be seen at its worst in the case of the bankruptcy of W. B. Foshay Company. Here was a company in the forefront of the "boosters." It advertised liberally "no loss to any investor." It built the great tower in Minneapolis for its offices. Its plan of operation was to buy utility properties anywhere on the continent and sell them to a subsidiary, Public Utility Consolidated Corporation, incorporated in Delaware and Arizona, two states somewhat inclined to indifference in regard to what is done under their protection. The subsidiary did not turn over the price which the Foshay company had paid, it turned over much more, based on reappraisals and the like. The head company then tried to market these securities. It also collected a management fee from the operating companies. Between 1927 and 1929 some \$29,000,000 of securities were passed on to the public. Approval of the sales by the Arizona Commission automatically permitted the sale of securities in many other states, including Minnesota, without investigation by the agencies of the other states. In California, however, the commission disallowed almost \$800,000, a third of one of these revaluations. The only effective result of that, outside of California, was that the Public Utility Consolidated added a "going concern" value of \$1,430,000,

a write-up of 92.6 per cent. After that there was fudging of the accounts, covering up unprofitable transactions, and finally bankruptcy. As far as their advertisements go, their management fees, their revaluations, there was almost no difference between the Foshay system and that of other companies here described.

While the utilities and the commissions have excused the practice of loading the companies with securities having no relation to the original investment, on the ground that the rates will not be affected, the claim seems as specious as the similar one that whatever holding companies did had no effect on rates. Apparently by way of preparing the ground for the utilities, or giving warning, the Committee on Public Utility Rates of the National Association of Railway and Utility Commissioners recently made a report which seems to throw all such old claims into the waste basket. It was composed of representatives of the state commissions of Indiana, New York, North Carolina, Alabama, Tennessee and Vermont. It told the other commissioners very definitely that the loading of operating companies with securities could not be disregarded in rate cases. The language it used was that one of the elements to be taken into consideration in determining value in rate cases is "the price paid for utility property by its owners within a reasonable period of the time of inquiry."

This report which seems to give the lie to all the previous public assurances by the commissions and utilities was written and signed by the chairman of the Indiana Commission, Mr. F. T. Singleton, after an experience in Indiana which taught him a valuable lesson. There a utility, the People's Motor Coach Company, became involved in a rate suit. The Commission had, in this case, previously objected to a security issue by the utility and had been silenced by the court. So in the rate case it threw up its hands and said it had no option but to accept

the value shown by the securities. The language it used in the rate case is clear on this matter:

"Although considerable evidence was submitted at the hearings as to the value of the property of the People's Motor Coach Company, the fact remains that on November 5, 1927, the Public Service Commission of Indiana, by order of the circuit court of Marion City, Indiana, authorized the Indianapolis Street Railway Company to purchase all of the stock of the People's Motor Coach Company and to issue \$500,000 of its 8 per cent notes for the purpose of purchasing such stock . . . the Commission fails to see how it could, in this proceeding, find a lower value at this time for all the property of the People's Motor Coach Company. It was ordered by the court upon the basis of revenues derived from the ten cent fare which is at issue in this case . . ." ⁴¹

What the Commission said was that the securities were issued. They were issued on a basis of capitalized profit. The capitalized profit was based on a high charge to the consumers. It could not attack the high charge to the consumers because it was the basis of the securities. The security issue kept the rates high. This was the discovery of the Indiana Commission. A situation had been created in which it was helpless. It is the contention here that the loading down of utilities by such security issues, whether it involves an over-capitalization of 80 per cent or 20 per cent leads always to the same result, regardless of the disclaimers of the utilities and the commissions.

After that experience the Indiana Commission seems to have taken a slightly different attitude from what it did in the case of the Indiana and Michigan Electric, mentioned in Table V. In the case of the Associated Telephone Company, in 1928, it said: "If utilities are bought at too high a figure a raise of rates is inevitable. . . ." ⁴²

In the key case the Indiana Commission had the excuse that it was obeying a court. While that does not change the economic significance of its action or lessen by one

cent the burden put on the consumers, it does raise the further question, what happens if a state security commission passes on holding company securities? Will the state regulatory commissions be bound to recognize that these securities now fix the value of the utilities? The answer to that seems to be the same answer to the question of whether the allowance of such security issues by the commissions themselves will not be binding on the commissions in rate cases as well as in security cases. That the answer is "yes" can be seen from the language of the Rate Committee of the National Association of Railway and Utility Commissioners after the Indiana experience. The representatives of six state commissions said:

"Since the world war and the prevalence of high prices brought about by it, there has been a strong tendency to speculate in utility stocks, securities and utility properties. Commissions have been liberal in their scrutiny of evidences of value offered in such cases. *Value found in one case cannot be excluded as evidence of value in any other case affecting the same property. The amount of bonds and preferred stock authorized in a security case must bind, to a greater or less degree, the commissions to grant rates sufficient to pay the dividends on securities so authorized.* Rates must provide the money for such payments." ⁴⁸ (Their italics.)

Thus the excess security issues, representing in the cases cited before some 80 per cent of the actual cost, seem to be on their way into the rate base, and the stacking of the cards against the public begins to be effective. This is nothing new. We have been through it all with the street railways. In the days before the war when a five cent fare meant big profits they stuck to their contracts and franchises like glue. After the era of high prices began they threw their franchise obligations overboard and made their successful plea for higher rates on the basis of the securities they had issued, the well known widows and orphans who had bought those securities and the like. Mr. Justice Brandeis recently pointed out, in the

O'Fallon case, that the railroads in connection with the Act of 1920, proposed that the investment account be made the sole element in determination of the rate base.⁴⁴ Even more recently, in 1930, the vice-president of the New York Edison, on the stand in a rate case stated that valuation must take investments into consideration.⁴⁵ This was, in effect, a warning to the people of New York City that now they might begin paying returns on the excess \$52,173,602 which the Public Service Commission allowed the companies in the merger of 1928.

Here we have sufficient indication of what has already begun to happen and may be expected, under regulation, to continue. By overloading the companies with securities the utilities have accomplished a number of things. They have made it seem more expensive and difficult for municipalities and states to buy them out. They have also secured for themselves an alternative to the revaluation practice which has been so valuable to them in recent years. In case prices tumble, as they have done in 1930 and 1931, and revaluation would mean a lower rather than a higher rate base they can now turn to the securities issued and claim that "value found in one case cannot be excluded as evidence of value in any other case affecting the same property." It promises to offer them even greater protection than the idea of revaluing on the basis of price changes. What it has to do with furnishing service as cheaply as possible is quite another matter.

7. *The Unregulated Half*

Regulation at its most efficient has some resemblance to the cost plus system, with which we became so familiar during the war. No matter how great the costs are, the utilities are allowed to earn them plus a return on their real or fancied capital. It is here that our regulatory system works backward most brilliantly. Where there

is a commission, alert to check excess profits, the utilities are under pressure to increase the size of their operating costs and lower the apparent profits. Where the commission is not alert they are under pressure to reduce their costs only for the benefit of the stockholders. In practically no cases can the commissions step in and regulate operating costs. This leaves close to half of the gross income of the utilities unregulated.

The importance of this sum can be seen from a look at the way the gross income of the industry is divided. The following estimate is based on the figure of \$1,924,000,000 gross income for 1928, given by the National Electric Light Association,⁴⁶ and on the percentages for other items found to be working in the case of 52 companies, representing 76 per cent of the industry, by Mr. C. O. Hardy, of the Institute of Economics.

	<i>Per Cent of Gross Income</i>	<i>Estimated Amount</i>
Payments on capital		
Bond interest	15.1	\$290,524,000
Dividends	9.1	175,084,000
Balance (undistributed dividends) ..	13.1	252,044,000
	37.3	717,652,000
Depreciation	6.5	125,060,000
Taxes	8.5	163,540,000
Operating Expenses	47.7	917,748,000
Gross Income	100.0	\$1,924,000,000

These operating expenses, which apparently passed the one billion mark in 1930, are not touched to any great extent by the commissions. Nothing short of positive proof of collusion and fraud will warrant a commission in deciding that the sums paid for coal or copper or other supplies have been excessive. It is almost impossible for them, handicapped by lack of funds and far behind in keeping up with their job on other points, to obtain such

proof. The result is that incompetence in management is rewarded by high rates. Not only that, but a deliberate and purposeful incompetence may even be encouraged. Professor Philip Cabot expresses it: "... The system puts the management under very severe temptation to extract indirect or concealed profits through the operating accounts which are so casually glanced at, and the suspicion with which many of the holding companies, which seem to be designed to make such manipulation possible, are regarded, indicates that much of this sort of thing may be going on." The discoveries by the Federal Trade Commission of the extent to which it is going on will be cited later. He says further:

"If there are any who think that this point of view is fanciful and that the dangers here suggested are unreal, let them consult any investment banker familiar with public utility securities. He will recommend this form of security and almost the first advantage that he will urge is that they are less dependent than competitive industries upon exceptional managerial ability . . . It is easy to understand the bankers' affection for the present methods of regulation because it works in his favor, but it is hard to see the advantage to the customers for whose benefit the scheme was originally devised."⁴⁷

Here is a heavy blow at the managerial efficiency about which the public utility men speak so often and with so much self-applause. It can be explained simply by the fact that while the engineers and managers may be the best in their world, they are no longer free to pass on their social contribution to the public. They are subordinates and dependents. The holding company and banking interests have the real control and their interest is not a professional engineering one.

Before illustrating what this may amount to in real money loss to the consumers, it should be pointed out that the utilities have continued until 1931 to manipulate their operating expenses through a tricky little point of law.

It is one of many cases where the law laid down in our early agricultural days had not caught up with the changed economic and financial order. As interpreted by the Supreme Court, prior to the Chicago Telephone case in December, 1930, the law held that a regulatory body had no control over unreasonable charges made by a parent holding company which is not under the control of that state body. It could not refuse to allow charges unless fraud is shown. The idea was that two companies, if they only had different names, were really different in interest and might be assumed to be dealing with one another at arm's length. The idea grew up before there were holding companies. What happens today is that an operating company is bought by a holding company. The latter owns the voting control. It puts its directors on the board of the operating utility. It chooses and dismisses the president of the operating company. Its own treasurer is also treasurer of the operating utility. Its directors make a contract with themselves (acting for the operating utility) to charge (and to pay) a certain percentage for management or construction or engineering fees. These fees may drain the operating utility for the benefit of the holding company, but fraud can not possibly be proved. As long as the legal fiction was maintained that when two companies retained different names they were different in interest, no fraud could ever be proved. No man could ever be convicted of cheating himself.

The utilities have taken large advantage of this tricky little point of law. The accountant for the Federal Trade Commission who examined the record of one of the holding companies in the Electric Bond and Share group, the American Gas and Electric, reported that in 1927 that holding company received \$2,499,000 in fees, for which it performed actual services costing \$708,934.⁴⁸ In 1928 the fees collected were \$2,228,019 and the service cost

the holding company only \$586,759. For the thirteen years up to and including 1929, the holding company collected in fees \$381, for every \$100 of actual service given the operating company. Another accountant reported that the Electric Bond and Share itself had collected in 1927 in fees \$9,373,172, which exceeded the actual cost of the services furnished by \$4,809,654, or at the rate of \$211 for every \$100 worth of actual service.⁴⁹ This company refused the Commission the right to examine its books. On the basis of available figures over the 24 year period including 1929 it was reported to the Commission that on supervision fees amounting to \$51,096,767, there was a minimum profit of \$30,591,428. For every \$100 of service, \$249 had been collected.⁵⁰

The two significant facts about such overcharges are that they are, as a matter of routine, unregulated and that a good share of them, those for servicing and construction, are charged to the capital account of the operating companies. On these the consumers of the operating utility pay an annual return. Some of the general supervision fees may also be charged to fixed capital and thus obtain the right to an annual return. In this second fact lies the complete refutation of the contention of the utilities, still accepted by a few editorial writers, that the management and conduct of the holding companies is a matter of indifference to the consumers. From this false contention also is drawn the conclusion that the holding companies should be left unregulated.

There are other ways in which the utilities yield to the temptation to be free and easy about operating expenses. The record is by no mean complete on this point, since it is one which the commissions do not often investigate. The Consolidated Gas properties in New York City paid to a tax expert, a Mr. Witbeck, the sum of \$1,302,782, which was charged against rates, to secure tax reductions. Before being employed by the utilities he had been in the

State Tax Commission fixing the very tax assessments he was employed to reduce. The facts of the matter were admitted by Mr. Matthew Sloan, President of the New York Edison, and recently President of the National Electric Light Association. Governor Roosevelt's appointees on the New York investigating commission in 1930 raised certain questions in this connection: "Why was the Consolidated Gas System interested in conniving at the payment of large sums of money to Mr. Witbeck on such an obviously artificial basis? There is also the important question as to why the Commission never checked up to find whether such payments were legitimate or not. The facts so developed press for further investigation. If the tax reductions shown in Mr. Sloan's report were bona fide they mean in the aggregate millions of dollars lost to the taxpayers of New York City. If the tax reductions prove to have been really fictitious the charging to operating expenses of payments to Mr. Witbeck might prove in the nature of a fraud. It might be well to get to the bottom of this transaction. In any case a system which requires the expenditure of over \$1,300,000 in 12 years along the lines indicated could well be modified. . . . Valuable information is being withheld. We feel that it can only be brought to light by more searching inquiry."⁵¹ The matter was promptly dropped when the investigating commission went out of existence.

Another clear instance of the indifference of commissions to operating expenses, true or false, was chalked up against the expensive and powerful New York Public Service Commission in 1930. The minority of the investigating commission (the majority did not touch on the point nor contradict these findings) found that the electric utilities in New York City had charged against the consumers a certain sur-charge above the regular rates because of the high cost of coal during the war years. Although the consumption of coal per kilowatt hour was

steadily declining the companies figured the sur-charge as if it had not declined. The Commissioners said: "At the 1916 cost of 0.416 cents per kilowatt hour it would have cost \$76,551,792 for the fuel necessary to produce the required amount of electricity. Consequently the actual excess in the cost of fuel for the eight years over the 1916 basis was \$35,730,566. But, according to Mr. Sloan's figures, the companies actually collected from consumers through the sur-charge \$55,701,490, or an excess of \$19,970,924 over and above what the increased fuel cost warranted. In the single year 1928 . . . the excess collection was \$5,579,240. . . . These facts, we believe, contribute another striking example of the way in which the utility corporations have undermined effective regulation."⁵² When a commission as well equipped with accountants as the one in New York State lets an average of almost \$2,500,000 a year be charged unnecessarily for eight years against the consumers of New York City through sheer neglect, some indication is had of what less powerful and well equipped commissions are doing.

In Missouri the City of St. Louis was found protesting to the commission the management fee of \$212,000 which the Laclede Gas Light Company paid to its holding company, the Laclede Gas and Electric Company; it also protested the fact that the company was buying gas at 22½ and 25 cents per 1000 feet from an allied company when it could manufacture the gas itself at considerably less, 20.3 cents per 1000 feet.⁵³ In 1929 the Wisconsin Commission complained of the practice of the Wisconsin Fuel and Light Company in charging to its fixed capital accounts amounts equal to 10 per cent of the direct charges to those accounts representing services of the Interstate Fuel and Light Company or the Utilities Operating Company rendered in connection with construction work. In 1930 the vice-president of the American Gas and Electric admitted that the sums they paid a Mr. Glenn Marston

for going around the country for them doing publicity work against municipal ownership were charged up to the operating companies.⁵⁴ The West Virginia and Kentucky commissions found that one of the Columbia Gas and Electric group, the United Fuel Gas Company, had been siphoning revenues from its operating subsidiary, with an average yearly profit to one of the chain companies of 119 per cent.⁵⁵ In Philadelphia, in 1930, the Controller started suit against the Mitten Management which then controlled the transit system in partnership with the city. He charged the Mitten interests with "draining and diverting" the revenues of the company in such a manner that the city has never collected any of the revenues which rightly belong to it. The suit was based on an audit by Dr. Milo R. Maltbie, later appointed Chairman of the New York Public Service Commission, who analyzed expenditures of more than \$9,500,000 and said that they should be charged directly to the back dividends due stockholders. This amount included \$3,600,000 in fees to Mitten Management, which Dr. Maltbie declared illegal. The report pointed out that traffic, miscellaneous and general expenses totaling \$24,000,000 were \$8,600,000 in excess of "an estimated reasonable amount."⁵⁶

These are only a few cases from the recent years. Others were commented on in *Power Control*.⁵⁷ The commissions have objected to such overcharges when brought to their attention. There have also been protests against the policy of "charging it to the public" and letting the expense go hang, in rate cases. The West Virginia Commission found that a charge of \$100,000 which the Cumberland and Alleghany Gas Company had set up to defray the expenses of its rate case was "excessive and cannot be justified, and never would have been expended had it not been for the fact that it could be passed on to the public—besides, it may be that certain of this expense was incurred for reasons other than presenting

this case to the Commission."⁵⁸ The Indiana Commission in 1928 also disallowed some of the rate case expenses and ordered the company to amortize them over a four year period.⁵⁹ In some of the larger industrial states the expenses incurred by a utility in a rate case extending over several years may easily run in excess of \$1,000,000, or up to four million, as in the case of New York City and the electrical utility there. In the main no serious challenge has as yet been offered to the practice of making the consumers pay the lawyers and accountants hired to keep their rates high. The utilities are in a position where they can afford to spend more than the cities or state involved can hope to.

The really significant fact about this unregulated half of the income, this billion dollars a year, is that there is almost no encouragement to the engineers and managers of the operating companies to cut expenses, to be competent and efficient in the best social sense. If construction costs are high, value is high, as far as regulation is concerned. As Professor Cabot points out, "The more a utility company pays for its property, the better for the company. Its customers may suffer, but not its stockholders . . . the investors are protected at the public expense . . . the interest of the customers which should be the prime concern of regulation, is relegated to second place."⁶⁰ It is the same thing with operating expenses. If the commissions are at all alert they try to turn over the savings from economical management to the consumers. It does not pay the manager to insist on the lowest possible costs. When he is controlled by a holding company it even pays him not to insist upon the lowest possible cost, on pain of losing his job. The men who control the spending of a billion dollars of consumers' money annually are in a tough spot.

8. *The Managers "on the Spot"*

The popular language has recently created two phrases which in themselves tell quite as much about the contemporary scene as Van Loon's well-known summary of American history, "Washington. Jefferson. Lincoln. Go up two flights and ask for Joe." These two phrases are "in a tough spot," and "on the spot." They come to us from the world of the racketeer, where force is used violently to preserve that honor which is supposed to prevail among thieves.

Not all force is violent, however. When men are thrown onto the street, unemployed, no actual violence is being done to them or to their homes and families. It is an undramatic force that is used on them, but it amounts to an almost irresistible pressure to go out and seek work at almost any wages. The same sort of pressure can be brought to bear on men who do their work in white collars and belong to a profession. For all their long years of technical training, for all their high standards, for all their devotion to the larger social ends, they are in much the same position as the workers in overalls. They have security only as long as they have the freedom to quit and find a job elsewhere. If they have that they can keep some of their professional ideals. In the same way the workers in overalls can retain some of their union ideals. But as soon as they have no other place to go they have no security. They are dependent. They become something less than members of a great profession interested in using their skill and achievements for the promotion of the common welfare.

This appears to have happened to the engineers in the electric power field. The great holding company and banking combinations of recent years have created a situation where a man who wants to move forward in his chosen field can exercise very little freedom in the choice

of the groups he will work for. Any opposition he expresses to the policies of the non-professional groups controlling the industry will make work for him impossible in a very large portion of the industry. To this extent the engineer has been "put on the spot." He must behave himself according to the standards of the controllers of the industry or go without his living.

This applies particularly to those engineers who have risen to be managers of companies, and there are many in these positions. As subordinates in a large system, taking orders at a distance, under pressure to make good for the benefit of the holding company owners who bought their companies on a speculative basis, they are no longer free to pass on engineering efficiencies and managerial economies to the public to any great extent. Their initiative and enterprise is exercised on behalf of the real owners of the business, the proprietary interests in it.

There is an unfortunate conflict of interest here. The professional attitude is one evidenced by researchers in medicine who give their discoveries to the world free of charge. But the engineers now face the question of how their skill and efficiency can most help the banking group owning the utility. How can it? Obviously not always by cutting rates to any great extent. The holding company gains when the cost of arranging security issues is high. They gain when the operating expenses are high, for a large share of those expenses goes directly to them. They gain when the rate base is larger, for then the greater is the return allowed. They gain when company assets are written up, following purchases and mergers. They gain when a large capitalization of franchises is secured in the form of going value. They gain when the property is revalued at high prices. They gain when high depreciation charges are made and later appropriated by the utility. In short, they gain by many things which the engineer, in his capacity as a professional man and social

servant, would desire to eliminate from the burden on the public.

It is here that good men are forced to go wrong. It is here that private initiative is perverted from the engineering field and from professional standards into the field of imaginative fiction. The most desirable company official becomes one who can use his professional training to think up new ways of increasing the rate base. It is only with that explanation in mind that we can understand the Curtis Pond incident, for example. In Worcester, Massachusetts, the utility bought a pond and a few acres of land surrounding it for \$69,000. Two years later the question arose of swelling the rate base. How could it be done? Well, if the value of your plant is what it would cost to reproduce it new, obviously the value of your pond is what it would cost to reproduce that new. So we sit down and imagine that the pond isn't there, and estimate how much it would cost for water, buying it from the city. We estimate what machines it would take to dredge a pond, what pipes would have to be laid through city streets, their cost plus interest. We use our initiative and enterprise and arrive at a figure of \$1,200,000, some seventeen times what the pond actually cost two years before.⁶⁰ Or we think up the "inexperience factor," in the same way that the New York Edison discovers it would cost a great deal to train a new staff of employees if an earthquake or pestilence wiped all the present ones from the face of the earth, and, although the consumers have paid already for training the present employees, the power company asks for the right to capitalize \$7,000,000 against the emergency, on which the consumers are to start paying a return of eight per cent at once.

Now all this is very admirable in its way, but it is not what we look to from the engineers. Here the holding companies and the regulatory system together have, it seems clear, placed the engineers in a desperate position.

They cannot pass on the public benefits of their work to any great extent but must use their imaginations to load the dice as heavily as possible against the public.

We have put the engineers in a bad place for good men to be in. The utilities perform functions the state might itself perform. The state authorizes one group or another of private persons to perform those public functions for it for a number of years. It can take over their function. In many cases it has done so. It can yet do so in the rest. Meanwhile the men who run the utilities are supposed to be the economic servants of the public. In the power industry they collect some two billions of public money each year. But, on the other hand, they live and rise through the favor of the proprietary owners of the utilities, now mostly banking groups. The pressure from this side is the strongest. It is the old story of a man not serving two masters, but always serving the paymaster. That being so, we can at present not count on very much more than lip service from our potentially most useful citizens.

This is a bad paradox. It was phrased recently by Mr. Donald Richberg, whose long study of the railroads and his efforts to have the work of the Interstate Commerce Commission sustained by the Supreme Court, lend value to his observations of the electric utilities in action. He said, "The foundation and primary purpose of public utility regulation must be recognized as the necessity for preventing the making of an unfair profit out of public business by a public agent who is privately selected for the very purpose of making as much profit as can safely and regularly be extracted from operating public business."⁶¹

From the point of view of social engineering this seems to be a wasteful smashing against one another of two strong and good forces. It is not efficient. It is not cheap. One would have to be a profound and conquered pessimist to believe that it is the best that America can do.

Here is one of the most notable weaknesses of the system under which we are now living. Industry in general, and the utility industries in the forefront, are trying to accomplish their purposes by conquering professional feeling instead of using it. To the extent that they succeed they achieve a kind of Roman peace, for the Romans too destroyed and conquered and built their empire on submissive and dependent people.

Some sort of resentment against the position in which they are placed may, in an odd psychological way, be expressed in the large sums which some of the heads of great concerns have been voting themselves by way of salaries and bonuses. When there is no longer any satisfaction in functioning in a socially useful way, or when a man is caught up in a process which frustrates him in that line of action, then he wants to get paid for what he does, and get paid to the limit of the market. We have recently seen the large sums taken in one year by officials of the Metropolitan Life Insurance Company. We have seen the \$3,055,786 paid in 1929 by way of bonuses to seven officials of the Bethlehem Steel Corporation. We have seen the stockholders charge that in the merging of the Duke waterpower interests and the Mellon Aluminum interests Mr. Duke arranged a bonus, by a secret agreement and without knowledge of the stockholders, of 147,262 shares at a profit close to \$20,000,000. Here are men who, if not setting themselves up as worth a payment which the business world considers exorbitant, are using their positions of trust and power to recompense themselves for the lack of that satisfaction which others obtain from less exorbitant remuneration.

The frustration of men who, at one time, may have thought they were contributing to the social progress of their country through their economic activity and now, for various reasons, have thrown up their hands, is signified somewhat similarly by the changing ethics of the

business world. There was a time, not long ago, when it was considered not quite Hoyle for a manager or president of a company to procure himself an additional income by holding positions in companies doing business with his own company. That time has passed. It was then also not considered quite proper for a manager or president to profit by his inside knowledge of the affairs of the company through speculation in the company's stocks on the market. That time has passed. A great number of salaried officials have become millionaires in this way. What is now considered unethical is for a manager with inside knowledge to sell short on the market. There is nothing against his buying on margin all the wants to, but he must not use his inside knowledge to depress the market value of the shares of other owners of the company. In this change is symbolized the passing of the trust officer and his replacement by the money-making officer.

9. *A Million Dollars a Day*

The furnishing of public utility service is not a private business and those engaged therein are public agents performing a function of the state. These essential functions of the state can be performed by the state itself with money borrowed from the public. Or the state can authorize private persons to use their own money and money borrowed from the public. The public business is the same whether the government selects the men who are to run it or authorizes certain private companies to do it. The only difference lies, not in the object of exercising state authority, but in the method of exercising it. In the electric power industry, with some notable exceptions, we have chosen the method of authorizing private individuals to operate the public business. They are supposed to be engaged in furnishing a public necessity in the most economical way possible. Their social usefulness depends on their success at this task. If they are not successful

at this task we still have the alternative of having the state perform the function itself if it can do it more economically.

We have seen the way in which the men to whom we delegated this public business put the country to school to learn the lesson-*lie* that they furnished light and power more cheaply than it could possibly be furnished by anyone else, and that criticism of them was practically sacrilegious, or at least unpatriotic and treasonable. We have seen the way in which they claimed in public to be the bulwarks of the old tradition of individualism, and in private sat down at once to take a leading share in combinations and groupings which wiped out the individual initiative of thousands of men and helped move the whole country into an era of industrial feudalism.

Was all this effort spent in order to furnish a public service as economically as possible? What results have they to show?

At present the public is paying at least \$1,000,000 a day more than it needs to pay for light and power. For three hundred days of the year we pay that sum daily because the private controllers of the industry insist upon such high payments for the capital they supply. For the remaining sixty-five days of the year we pay a return on sums that would not for a moment receive a payment if the state were running the public business itself. Those sums include capitalized monopoly privileges, the addition of an imaginary dollar for every four or five real ones through revaluation on the basis of price changes, appropriation of sums contributed by the consumers to keep the plant intact, the addition of imaginary dollars to those real contributions, and sums that come from the appropriation of values added to land by the community's own progress and own expenditures. They include also sums which we pay directly for operating expenses in fees that carry a two hundred per cent profit, in rate case expenses,

in legislative activity, and in the process of having ourselves schooled in the *lie* that the power industry is furnishing service as cheaply as it could be furnished.

As we have seen, the consumers are charged such a high rent for the money invested that they are paying enough to buy out and own free of debt the whole industry in thirty years, saving future consumers an average of \$1,822,000,000 a year on this item alone. There is little pressure on the utilities to lower the cost of money and considerable pressure to resort to means which raise it. They are asking for a return on twice as much as was actually invested in the industry, one hundred million imaginary dollars to be added to each hundred million actually invested. They are successful in getting one hundred million imaginary ones added to every three or four hundred million real ones. On these the consumers are now paying them a return. All this extra money, the reward of imagination, goes unequally to the owners of utility securities. It goes entirely to the common stockholders, now usually holding companies and banking houses. They have not yet reached their limits in swelling the sums on which the consumers are asked to pay. They are ever trying out new tricks. They have been successful in charging a toll on birth rates and municipal progress, appropriating community values which do not represent funds invested by them. The result is that the community gains no benefit from the timely devotion of property to public use, but must always pay as if the property were being acquired anew each year in the most untimely and improvident fashion. They are attempting, and in some cases most successfully, to appropriate the consumers' contributions and to have imaginary dollars added to them, so that the consumers may not only pay double but more than double. They have been successful in capitalizing the monopoly rights given to them by the states to protect them from competition. They have

stacked the cards against the future consumers by over-issue of securities, and thereby piled up a protection in case revaluation ever ceases to protect their conquests.

While this was going on the state commissions, with some few exceptions have, at the best, been duped, at the worst have played partners with them. In the billion dollars collected in operating expenses items which gave holding companies profits of from 149 to 281 per cent have been included. There have been payments to insiders to get city taxes reduced, charges for coal not used, payments of millions to engineers employed to guess at rate bases, payments to fight legislative action, payments to get editorial support through judicious use or refusal of advertising, high payments to construction companies allied in interest. The engineers and managers have been put under pressure to show results of the kind that are profitable to the holding companies, making it impossible for them to remain true social servants.

These are some of the results of turning over a great public business to private companies at the beginning of our period of industrial expansion, but the whole result can by no means be summarized in the conclusion that we are paying at least a million dollars a day more than we need to for the service.

In view of the above, it is little wonder that the spokesmen for the big companies are in favor of continuing exactly as at present. They want regulation to go on, and fight every chance to improve it. The President of the New York Edison, one of the Consolidated Gas group whose activities have been touched on from time to time, said recently:

"State regulation of utilities has not broken down or failed. On the contrary, it has proved, in my judgment, to be one of the best examples in our governmental structure of how capably a public agency as free as is humanly possible from

politics can deal with important, complicated and frequently highly technical matters."⁶²

Their proclaimed approval of the present system, coupled with a determined fight on every important attempt to improve it, simply means, in view of the record discussed in this chapter, that these private individuals who have been authorized to carry on the public business, have entirely forgotten their social obligations. They have been amazingly successful in disarming the policemen who were set to stand between them and the public purse and now they are pointing to those policemen and insisting that the consumers are more than adequately protected.

Here is fraudulent intent. In view of this record it is nonsense to talk about the companies being restricted in their profiteering through regulation. Regulation has been a boon to them. They are making far more money than a great many unregulated industries which have to stand up against competition. If they had been left completely unregulated and subject only to competition there is little doubt that their rates would be much lower than they are today, and their profits would be lower, too. The proof of this is very simply shown in their present earnings. For the operating companies of the American Gas and Electric group the Federal Trade Commission found results that few competitive industries can equal year in and out. The Scranton Electric was earning on its investment in common stock and surplus, in 1923, 34.08 per cent, 1924, 35.66 per cent, 1925, 40.13 per cent, 1926, 49.27 per cent, 1927, 43.10 per cent, and in 1928, eliminating the write-up of that year, 38.28 per cent. The capital was paid back two and a half times in those six years. The Ohio Power Company was earning on its common and surplus, 35.5 per cent in 1926, 39.8 per cent in 1927 and 51.8 per cent in 1928. The capital was being

paid back at the same rate. Based on the cost of the common stock of the Appalachian Electric to its holding company, its earnings on common and surplus were 35.3 per cent in 1926, 33.9 per cent in 1927 and 28.5 per cent in 1928. At this rate the capital was being paid back almost twice every six years. The earnings on the cost of the common and surplus of the Indiana and Michigan were smaller, 17.21 per cent in 1926, 20.23 per cent in 1927 and 29.32 per cent in 1928.^{es}

In the report of the New York State Commission of the Public Service Commissions Law, in 1930, the minority commissioners cite figures showing excess returns. They were calculated by the Public Service Commission without any deductions for depreciation, a most unusual process which had the result of lowering the rates of return. A generous allowance for working capital was made. The figures showed that in 1928 "56 out of 75 electrical properties, or roughly 75 per cent of those subject to the jurisdiction of the Public Service Commission, make a profit of more than 8 per cent on the capital so computed. Electrical properties making more than 9 per cent numbered 46, or more than 60 per cent of all the companies. There were 34 properties out of the 75 with profits of more than 10 per cent and 30 of them showed a return of more than 12 per cent. In the group making more than 15 per cent we find 15 companies, and those exceeding 20 per cent numbered 10.

"Thus the evidence before us shows that under the present system of regulation electrical rates in effect in 1928 were returning to majority of the companies a profit of more than 9 per cent, with profits running up to 31.66 per cent in the case of the Corinth Electric Light & Power Company.

"The evidence before us reveals the extraordinary complicity with which the Public Service Commission viewed a rate situation which produced such profits. Apparently

with the constant threat of dragging rate cases into the courts on the valuation question the corporations had practically paralyzed the Commission's initiative and emasculated regulation."^{es}

The Utility Investigation Committee of the House of Representatives in Pennsylvania in 1931 reported:

"Evidence was also offered from the reports of the utilities to the Commission for the year 1930 that the lack of regulation persisted throughout last year, and that the electric industry had earned an excess over 7 per cent on invested fixed capital in plant and property of \$31,864,414 during 1930. In order to justify such excess earnings the Commission would have had to grant the utilities the use of \$455,205,914 for going value and working capital. This sum is 48.6 per cent of its actual depreciated fixed capital.

"The Committee, therefore, finds it a fact that the utility companies in Pennsylvania have been permitted to enjoy an income which far exceeds a fair return on invested capital; that these facts were all contained in the reports from the companies and filed with the Public Service Commission; that the Commission should have had knowledge of these flagrant violations of their orders; that the Commission has remained indifferent to the enormous stock issues that have been foisted on an innocent and unsuspecting public. We, therefore, find that the Public Service Commission has been negligent in its duties, indifferent to its stewardship, and a menace to proper utility regulation. We recommend that the members of our Public Service Commission be immediately removed from office."^{es}

Some detail was given in the counsel's report. He pointed out that the Public Service Commission had found that all except three of the electrical utilities were earning over 7 per cent in 1928; that it had then included 10 per cent of fixed capital depreciated for going value and

had found in 1929 that 39 companies were earning over a 7 per cent return on that basis, including write-ups, 16 of them over 14 per cent and 7 over 20 per cent. He commented:

"In this connection it should be noted that the Commission knew that the depreciated fixed capital of the electric companies including write-ups was \$937,928,906, and that the operating income alone was \$86,779,697, or a 9.2 per cent return; an excess over 7 per cent of \$21,124,674. At that time known write-ups amounting to \$80,273,136 had been added to the depreciated fixed capital. When these write-ups are deducted the fixed capital depreciated becomes \$857,655,770 and the rate of return becomes 10.11 per cent, an excess over 7 per cent of \$26,743,793. This excess is a 7 per cent return on an investment of \$382,054,186, which is 45 per cent of the depreciated fixed assets less write-ups.

"The essential figures for 1930 (Class A and B electrics, excepting the Pennsylvania Power Company, whose report had not been received by the Commission up to May 13, 1931) are:

Depreciated Fixed Capital Less Write-ups..	\$936,274,926
Adjusted Gross Income.....	97,403,658
Excess over 7% Return.....	31,864,414
Capitalized Excess at 7%.....	455,205,914
Ratio of Capitalized Excess to Depreciated Fixed Capital less Write-ups.....	48.62%

"The significant fact is that in a year of low prices such as 1930 the Commission allowed excess earnings close to thirty-two million dollars. To justify these it would have had to grant the companies allowances for going value, working capital and reappraisals amounting to 48.62 per cent of the total, a sum of \$455,205,914. This sum would presumably be larger if the Pennsylvania Power Company were included.

"A similar situation apparently exists in the natural gas industry. Adopting the Commission's rate of 7 per cent, calculations show excess earnings in 1926 of \$7,626,665. In order to justify such a return the Commission would have had to add the sum of \$108,952,357 to the depreciated fixed capital of the plant for going value and revaluations, an increase of 87 per cent. After 1926 there were write-ups of \$18,216,806. Excluding those write-ups and two companies showing deficits, those which made a profit show an excess over 7 per cent of \$6,843,856. In order to justify such a return the Commission would have had to add the sum of \$97,769,371 to the depreciated fixed capital of these companies, an increase of 79 per cent." ⁶⁶

What the Federal Trade Commission has begun to show for those companies it has investigated can also be seen, more roughly, from the reports furnished to the financial manuals. From them it is not possible to discover how much capital was actually invested in the common stock, but on the basis of the amount carried on the books as representing the value of the common stock, all of the following companies earned over 20 per cent, and up to 50 per cent in 1929, including the year's dividend and the year's surplus: the Los Angeles Gas and Electric, the Rochester Gas and Electric, the Buffalo General Electric, the Knoxville Power and Light, the Nebraska Power, the Duquesne Light of Pittsburgh, the Ohio Edison, the Milwaukee Electric Railway and Light, the Potomac Edison, the Dayton Power and Light. The list is by no means complete.⁶⁷

When a record like this can be rolled up twenty years after state regulation began it is about time to admit that no matter how legal the various moves of the companies have been, they result in an unnecessary expense of huge sums to the consumers. And the unnecessary payments

extracted by the electric power industry are so large that whatever individual initiative remains in our public spirited citizens should be evoked to try and do better for themselves and the country.

NOTES

- ¹ C. O. Hardy, Institute of Economics, *Recent Growth of the Electric Light and Power Industry*, 1930.
- ² Minority Report of the Commission on Revision of the Public Service Commission Law, New York State Legislative Document 75, 1930, p. 270.
- ³ Public Utility Reports, 1928, N. 274.
- ⁴ New York State report, *supra*, p. 134.
- ⁵ Testimony of Commission accountant Thomas Keeney, *New York Times*, December 6, 1929.
- ⁶ Cross-examination of Mr. Nicholas F. Brady, Chairman of the Consolidated Gas Company, transcript of hearings by New York Commission.
- ⁷ New York State report, *supra*, p. 135.
- ⁸ Maurice C. Waltersdorf, *Yale Law Journal*, January, 1928.
- ⁹ *Idem*, p. 341.
- ¹⁰ Interstate Commerce Commission Report 124, St. Louis and O'Fallon R. R.
- ¹¹ New York State report, *supra*, p. 16.
- ¹² *Idem*, p. 62.
- ¹³ *Idem*, pp. 246, 247, 248, 263, 265, 267, 268.
- ¹⁴ Long Island Railway case, P.U.R., 1928, C. 769.
- ¹⁵ New York State report, *supra*, pp. 277-8.
- ¹⁶ Professor Edwin C. Goddard of the University of Michigan Law School, *Harvard Law Review*, Vol. 41, p. 576.
- ¹⁷ Interstate Commerce Commission Finance Docket 1165.
- ¹⁸ C. O. Hardy, *supra*, compare p. 102. The figure for the gross income in 1928 is from the bulletin of the National Electric Light Association, p. 32. The bulletin gives a claimed investment for that year of \$10,100,000,000. The *Electrical World* of January 4, 1930, claims \$10,300,000,000. Both of these figures are believed to represent considerable property not devoted to the public service, and some municipal plant property. The operating expenses reported in the *Electrical World* amount to 2.7 per cent less than the Hardy estimate of 4.7 per cent, i.e., to 45 per cent of the gross income. The *Electrical World* gives taxes of \$165,000,000 for the year, which is .1 per cent more than the Hardy estimate of 8.5 per cent, i.e., 8.6 per cent.
- Adjusting the operating expenses and taxes according to the *Electrical World* figures brings the total payments on capital to

- 7.45 per cent on a claimed investment of \$10,300,000,000 and to 7.6 per cent on a claimed investment of \$10,100,000,000.
- ²⁰ Interstate Commerce Commission Report 15,100, August 15, 1929.
 - ²¹ New York State report, *supra*, p. 358.
 - ²² *Idem*.
 - ²³ Interstate Commerce Commission Report, 15,100, *supra*.
 - ²⁴ Report of Special Master Oelands, 1929, Federal Court, District of Southern New York.
 - ²⁵ Compare Commissioner Bonbright in New York State report, *supra*, pp. 355-6. The holding of the Federal Statutory Court was not that the amount of depreciation reserve is *ipso facto* to be taken as the amount of deductible depreciation in the valuation, but rather that it was persuasive evidence of this later depreciation in the absence of adequate proof that the actual depreciation in the property differed from the reserve. This leaves a wide opening for the utility to produce such proof.
 - ²⁶ *Congressional Record*, March 4, 1930, p. 4879.
 - ²⁷ George Soule, "War in the Power Commission," *New Republic*, March 5, 1930.
 - ²⁸ *27 Columbia Law Review*, May, 1927.
 - ²⁹ Federal Trade Commission Exhibit 4643, Public Utility Corporations.
 - ³⁰ New York State report, *supra*, p. 146.
 - ³¹ *Idem*, pp. 282-3.
 - ³² City Club of New York, 1929, *Report on Consolidated Gas Company of New York*.
 - ³³ New York State report, *supra*, pp. 305-7.
 - ³⁴ Transcript of Federal Trade Commission hearings on Public Utility Corporations, p. 4627.
 - ³⁵ *Idem*, pp. 10677-80, exhibit 4627.
 - ³⁶ Testimony of accountant Asel R. Colbert, Vol. 22, Federal Trade Commission report on Public Utility Corporations, pp. 185-9.
 - ³⁷ Federal Trade Commission report on Public Utility Corporations, Vol. 22, p. 252, p. 238.
 - ³⁸ *Idem*, pp. 265-8.
 - ³⁹ *Idem*, p. 529.
 - ⁴⁰ P.U.R., 1928, A. 776.
 - ⁴¹ Indiana Public Service Commission, *Schnaub vs. People's Motor Coach Company*, July 13, 1928.
 - ⁴² P.U.R., 1928, D. 380.
 - ⁴³ Report of Committee on Public Utility Rates, Proceedings of the 1926 Convention of the National Association and Railway and Utility Commissioners.
 - ⁴⁴ Supreme Court No. 131, October term, 1928, St. Louis and O'Fallon Railway Co. vs. United States and I. C. C. Brandeis, J., dissenting opinion and footnote 14.
 - ⁴⁵ Statement of John C. Parker, Vice-President, New York Edison Company, *New York World*, August 29, 1930.

⁴⁶ Compare Note 19, *supra*.

⁴⁷ Philip Cabot, Professor of Public Utility Management, Harvard Graduate School of Business Administration, *Harvard Business Review*, April, 1929.

⁴⁸ Transcript, Federal Trade Commission hearings on Public Utility Corporations, p. 8966.

⁴⁹ *Idem*, p. 10142.

⁵⁰ *Idem*, p. 10373.

⁵¹ New York State report, *supra*, pp. 320-23.

⁵² *Idem*, pp. 295-6.

⁵³ P.U.R., 1929, A. 575.

⁵⁴ Transcript, Federal Trade Commission hearings on Public Utility Corporations, p. 9530.

⁵⁵ Edward W. Morehouse, *Journal of Land and Public Utility Economics*, February, 1929, p. 99.

⁵⁶ *New York Times*, August 17, 1930. *Philadelphia Public Ledger*, August 17, 1930.

⁵⁷ *Power Control*, H. S. Raushenbush and H. W. Laidler, Republic Publishing Co., 1928.

⁵⁸ P.U.R., 1928, B. 77.

⁵⁹ P.U.R., 1928, E. 725, Logansport Home Telephone Co.

⁶⁰ An illustration cited in testimony by Commissioner Goldberg of Massachusetts before the New York State Commission on Revision of the Public Service Commissions Law, 1929.

⁶¹ Testimony of Donald R. Richberg, counsel of the National Conference on Valuation of Railroads, before the New York State Commission on Revision, etc., January 13, 1930.

⁶² *New York Times*, October 23, 1930.

⁶³ Federal Trade Commission report, *supra*, Vol. 22, pp. 231, 256, 194, 1908.

⁶⁴ New York report, *supra*, pp. 288-9.

⁶⁵ State of Pennsylvania, *Final Report of the House Committee on Investigation of the Public Service Commission and Public Utilities Companies under Resolution No. 10*, 1931, p. 3.

⁶⁶ *Idem*. Counsel's report by Harold Evans.

⁶⁷ Poor's *Manual of Public Utilities*, 1929.

CHAPTER THREE

THE CONQUERED CITIES

1. *The Growing Function of the Cities*

OUR cities are very slow in forgetting that they were once agricultural towns. They received their first delegation of power from the states at a time when the political philosophy of America was pure individualism, and when that was more than a vote-catching battle-cry uttered looking backward. The right of the strong to become stronger and the rich to become richer was accepted, and with it went the condition that the government should have no initiative. Meanwhile the country was becoming industrial. Factories and business houses were set up. The great movement from the farms to the cities got under way. The cities became crowded, were forced to expand, to spend huge sums in educating, transporting, furnishing water, parks, sanitation, police and fire protection and a hundred other services to the new community.

On the whole it is very slowly that the cities have organized to perform efficiently the new social services devolving on them in the industrial age. They are mostly like "Middletown," still organized along the lines of a small town government instead of a great business enterprise, still dividing the functions of officials along arbitrary ward and borough lines and paying, generally, little for the men they employ. Like the Constitution of the United States which still remembers the day when it took weeks to travel from Boston to Washington and consequently allows a year to pass before a newly-elected Congress assembles,

the city charters are not built for the new age. Changes in them are made slowly, against great opposition.

2. *The Arbitrary Limits to Public Service*

In organizing the cities and delegating power to them the states set no arbitrary limit on the social functions they could perform. But they did set a very real limit by fixing the amount to which a city could bond itself for public improvements. The many new needs of the cities for highways, schools, parks, sewage systems, waterworks, hospitals and the like have, in many cases, brought the cities so close to their bonding limits that it is a sheer legal impossibility for them to engage in further public service, such as the operation of the electrical utilities, without exceeding the debt limit imposed on them by constitutions.

These debt limits, coupled with a growing demand for a variety of services which can only be paid off gradually through bonds, are the main reason for the relatively small development of municipal ownership of electrical utilities in the United States. Added to this is a second important fact, that where the bond limits are more reasonable, bonds must be approved, usually, by so large a proportion of the voters that it is not difficult for the private utilities, by electioneering and political maneuvering, to defeat them.

There are, according to one authority, eight states which put the limit to all bonded indebtedness on the part of the cities at 5 per cent or less of the assessed valuation of the real property in the city.¹ There are nine others in which the bonding limit is between 5 and 10 per cent.

In many of the states the relative liberality of the bonding limits is offset by the necessity of going through the political routine of carrying a bond referendum by a very large vote of the citizens or the property-owning tax-paying voters. This is a handicap no efficient private business

is subject to. In nine states a two-thirds vote is necessary to carry a bond issue, California, Georgia, Idaho, Kentucky, Missouri, New Mexico, North Dakota, Ohio, and Texas. In four more a three-fifths majority or over is necessary: Michigan, Nebraska, West Virginia, and South Dakota (petition of five-eighths of the voters is necessary).

Although the National Municipal League, which has been perhaps the most effective force for good city government in the country, has recommended from 1900 onward that cities be given power to furnish all local services and that bonds issued for such purposes should not come under the general debt limit unless the utilities for which they are issued fail to be self-supporting after five years, there are only eleven states which now allow such revenue bonds to be issued.

Where the cities have tried to vote bonds for utilities they have met, in most cases, a determined opposition from the utilities affected. In San Francisco the opponents of the bond issue by which that city hoped to buy out the local light and power systems in 1930 stressed the fact that the city was within \$89,000,000 of its bonding limit and if \$85,000,000 of power bonds were issued there would be no money left for the many other civic enterprises needed. There was also insistence on the need of spending some fifteen to twenty-five millions to acquire the competing privately owned street-car system. With such arguments they were able to persuade the one-third of the voters necessary to defeat the power bonds. But these tactics, often engineered by the utilities, are nothing new. They were busy back in 1913 defeating a bond issue for a light plant in Kansas City, Kansas. In several Nebraska cities they have attacked the financing of additions to municipal power plants by warrants on future earnings, claiming that it should be done through municipal bonds. In Pasadena the Southern California Edison

not only fought the bond issue in the elections but took the city into court. In *Public Ownership on Trial*, Bird and Ryan lay the blame for three years' delay in starting the municipal plant in Los Angeles to the power companies and their litigation and political influence.² Speaking of that city they say, "Obstructive litigation has proved a most adroit and effective method of sabotage against the Los Angeles municipal system, and a total of more than thirty law suits, brought directly by the private power companies, or by dummies using company attorneys, or by friends, have been directed against the Power Bureau."³ In concluding their study of the California cities they comment: "The right of a municipality to acquire or improve a plant without undue expense or delay should exist in fact as well as in theory. So long as the issuance of bonds for such purposes can be vetoed by a one-third minority influenced by customer-ownership campaigns and company propaganda, municipal ownership will continue under a severe handicap. The financing of self-sustaining municipal utilities should be distinguished from the incurring of general indebtedness which must be met by taxation."⁴

This, then, is the situation: more than half of the states of the country do not leave their cities free to engage in public service if that involves bonding themselves for more than 10 per cent of the value of all their real property. Only eleven states allow what is common business sense, the issuance of bonds based on revenues from self-sustaining utilities. In many cases the usage of having a large proportion of the voters pass on each issue makes their defeat by opponents easy.

3. *Gentlemen and Professionals*

During the past thirty years a very considerable number of public-spirited citizens have engaged in the attempt to secure good government at cost in the cities. What

has been accomplished is not inconsiderable, but the adaptation of city machinery to the crowded industrial age still has wide gaps. Another Lincoln Steffens could still, in the 1930's, write another *Shame of the Cities*. Much of the fighting against the forces which stood to gain by the weakness of city governments was done by amateurs and gentlemen. They fought when an issue presented itself out in the open. Opposed to them were the professionals of the contracting firms and utilities who did their very best to keep issues from seeing the light of day. In the unequal contest the professional soldiery won more often than they lost.

The restriction on the bonding limits of the cities was only one of their victories, and in it they had many innocent allies. The cities soon found that they were tied up in many other ways and unable to move.

The story is not new. Back in 1914 Mayor Carter Harrison of Chicago was telling the American Academy, "Take away private ownership of public utilities and you will have removed one of the principal causes of and incentives to corruption, to the seeking of public office for the purposes of corrupt gain, to commercialism in politics."⁵ At the same time Newton D. Baker, then Mayor of Cleveland, was saying, "The adversaries of municipal ownership are claiming that municipal utilities, public utilities, ought not to be in politics. I have had thirteen years of perfectly joyous experience on that subject. I have been for thirteen years combating public utilities in Cleveland. Every campaign in these thirteen years, no matter how remote its issues might be from public utilities questions, I found the forces of the public utilities engaged in politics." Going even a little further back we find the *Toledo News Bee*, which has no history of flaunting the red flag, commenting on Tom L. Johnson's experiences as Mayor of Cleveland, "The modern public service corporation is the most desperate and

dangerous criminal in the modern city . . . When more mayors show the same intelligent contempt of corporation controlled courts there will be more chance of getting justice on the spot, instead of after you are dead." St. Louis had its experience with corruption about city lighting contracts, Philadelphia had hers with the gas ring, New York with the gas and subway groups as well.

The story is not obsolete, either. The chapter dealing with the political influence of the utilities at present mentioned several instances of clear continuation along these lines. Insull's influence in Chicago and Maine, the Montana Power Company's power in Montana, the influence of the upstate companies with the New York State Legislature and of the Consolidated Gas in the affairs of New York City has never been seriously questioned. The sums spent in the West coast states have been scandalous. But apparently not even the smaller towns have been entirely neglected. A letter from one of the Foshay men to the main offices in Minneapolis, written in 1928, concerning the acquisition of the municipal plant at Burlington, Colorado, shows that the tradition has not died out. The letter reads:

"I know that you do not look with favor on the plan of 'oiling your way' through these municipal sales, and I agree with you that such practice is detestable and it has been hard for me to finally be compelled to admit, regardless of my feelings contrary to such practice, that at least eight out of ten councils I have contacted during my brief acquisition experience can only be handled through the 'oiling system.'"⁵

But there is no claim made here that this is typical. At present the utilities can get almost everything they want through the state commissions and do not need to bother much with the cities.

4. *The Purpose of the Commissions*

The good government literature of the day, before the establishment of the first state commissions in 1907, indicates with fair clearness why they were established. On all sides there was a strong and growing demand for municipal ownership. Mayor McClellan of New York City was recommending it, and the city was asking the Legislature for powers to go ahead. Mayor Carter Harrison of Chicago was fighting for it. Detroit had a municipal plant and cut street light costs from \$102 to \$61.65. Columbus, Ohio, was planning the acquisition of a plant. Under threat of municipal competition street light rates were lowered in Kansas City from \$116 to \$65.⁷ Chicago had a plant to furnish street lighting. The indignation against the utilities, aided by some exposures of franchise corruption, was becoming similar to the Populist reaction against the railroads, with its demand that they be taken over by the government. That demand was met by federal regulation. The demand in the cities that the utilities be owned by the cities was met by state regulation.

The people of the time were not unaware that these state commissions might be used against the cities, and many of the states do not, as yet, have state regulation of the electric utilities. In 1913 Iowa was defeating for the third time a utility commission bill as legislation in favor of the corporations. The utility corporations lobbied for it heavily.⁸ The Minnesota Home Rule League made a study of Wisconsin, one of the first states to enact regulation. It reported in 1914: "One of the reasons for the cordial support of the state regulation law in 1907 by the public utilities was to stop the wave of municipal ownership of water plants by Wisconsin cities then sweeping over the state. Many of the franchises were to expire in that and the following year. It was believed that

the Public Utility Act would stop this tendency, and it has."⁹

This is a bit of twentieth century history which has been somewhat neglected. More often than not it is assumed that state regulation was always a great public victory over the utilities. We have seen in the previous chapter how far that regulation has gone astray from its function. It is even more significant to notice how it cramped the powers of the cities to protect themselves.

5. *Cancelling the Franchise Power*

With the establishment of the state commissions the powers which the cities had previously exercised, largely through franchises, of regulating the utilities, were transferred to them. At first the cities did not realize what was happening. Later they were to see the concessions and payments they had wrung from the utilities wiped out by the state commissions.

When that occurred there was loud but largely futile indignation. The statement of Professor Charles E. Merriam of Chicago University, who was at the time active in Chicago municipal affairs, is typical. He said in 1914: "The City of Chicago was the victim in 1913 of as daring a raid as a private crew ever made upon a rich and defenseless city. . . . The home-rule article was taken out of the bill creating a Public Service Commission in Illinois . . . [which] swept away most of the powers Chicago had slowly wrung from the state legislature through a long series of efforts, and snatched away the hope of adding others . . . passed in the interests of the public utility corporations, and was the crowning climax of the corporation legislation of our state."¹⁰ In 1919 the Illinois Supreme Court was saying that the municipal authorities of Illinois had never been clothed with power to fix, by binding contract, rates for any definite term of years.¹¹ A year later Chicago insisted on its right to en-

force its franchise terms on the street railway lines, was taken to court and told by the Supreme Court of Illinois that "the General Assembly has never conferred upon any municipality power to make inviolable contracts for rates for a public utility."¹² In the same year Judge Wade of the United States District Court was refusing to dissolve a temporary injunction restraining the city of Des Moines, Iowa, from enforcing its ordinance rate for gas service against the company, many other courts—although not all—were also declaring that when the state took over the regulatory powers the city powers were thereby, in effect, cancelled, and the utilities freed from the major responsibilities that had been laid upon them.¹³ This was a hard blow at the cities.

In several states the cancelling of city victories by turning regulation over to the state commission was accompanied by an arrangement called "the indeterminate permit." On its face this was a franchise granted by the state commission in order to avoid the disadvantages to the cities of perpetual franchises and the disadvantages to the utilities of short-term grants. In Indiana, Minnesota and Wisconsin it provides that the grant shall end when the city authorities desire, but on condition that the city thereupon buy the plant at a cost fixed by the state commission. It has effectively prevented any competition by other utilities or by public plants, although such competition is permissible. The guaranteed right of a municipality to purchase does not, however, necessarily mean a simple and expeditious transaction. The city counsel of Racine, Wisconsin, Judge R. R. Burgess, described the process of taking over the private waterworks there. No sooner had the necessary application for a valuation been made to the Commission than a taxpayer instituted suit, claiming that the legal procedure was wrong, and asking that the city be enjoined. The Circuit Court dissolved the injunction. The matter was then appealed to the State

Supreme Court and the city was again upheld. No sooner had the valuation proceedings started afresh than the Farmers Loan and Trust Company of New York, which held a mortgage on the plant for about a million dollars, secured a temporary federal injunction. The city then had to go to the Federal Court and fight that. After the second injunction was dissolved, an appeal from the valuation of the commission was taken to the Circuit Court for review. Here it appeared that the private water-works had an agreement with the bank to keep a separate fund to fight the proceedings. All this litigation took five years. Only at the end of it did the company begin to negotiate about the sale.¹⁴

The type of indeterminate permit existing in Oklahoma under the revokable permit law of 1925 was declared unconstitutional in 1929. The Supreme Court of Oklahoma held that the act authorized the conversion of a limited franchise into a perpetual one, in violation of a constitutional provision against perpetuities and monopolies, that it deprived the electors of the right reserved to them of granting and renewing franchises and that it prevented the electors from petitioning for such grants.

Now while the switch of power from the cities to the state commission, where such exists, has taken away most of the long-fought gains of the municipalities, and to a certain extent has seemed to abrogate that part of the Constitution of the United States which declares that no state shall pass any law impairing the obligation of contracts, the old franchises still work against the cities. Not only do the companies capitalize their going value, their monopoly rights, as we have seen in the preceding chapter, but they insist that the cities cannot purchase them or compete until the end of the franchise period.

In taking away the obligations of the utilities without also relieving the cities of their obligations, state regulation has worked in a very one-sided way. But, although

franchise obligations are considerable, the main burden is the bonding limit. Today we see the city of Chicago, with all the main franchises of its utilities run out, unable to proceed to take them over.

6. *Making It Hard to Buy*

On top of these other limitations on their powers the cities meet still others. Not only does a city like Cleveland encounter a hundred injunctions in its nine-year war on the traction corporations, but there remain even greater uncertainties. In most states the cities are obligated to buy out existing properties, which may often be run down and quite undesirable. Thus, until two years ago the Massachusetts cities had to vote twice, through their councils, to acquire a plant and thereafter wait for the Commission to set a price on the old property before they knew what they were voting to buy. In some cases it was not only an obligation to purchase junk, it had a great similarity with buying a pig in a poke. The pig was known but the price was not. In other cases the great difficulty was that of fixing a price, the companies insisting on capitalizing their privileges, the cities denying that right. In Dallas the city expert valued the street car and light systems at six and a half million, the utilities at \$9,700,000. The differences in valuations in San Francisco have already been listed. In Detroit, Mayor Couzens had to threaten to build municipal lines in competition with the private street railways before they would come down to a reasonable price. In states where the commissions can give or withhold permission to the cities such means of lowering the purchase price are ineffective.

A more simple and common way of making it difficult for the cities to buy utility property is illustrated in New York City. Here the city signed a contract with the utilities allowing them to construct the elaborate conduit system under the city streets, subject to recapture by the city

at cost plus the amount by which net earnings were below ten per cent. That was a very liberal contract which the city made for the invaluable privilege of using the city streets. The utilities immediately arranged a series of construction and subsidiary companies which ran the construction costs way up. The Roosevelt appointees to the 1930 investigating commission reported that "every device has been used to inflate the investment and keep the rate of return down so that the City, if it wanted to recapture, would have to pay a large accumulated back deficit."¹⁶ In 1916 the City brought suit for an accounting, and seven years later, in 1923, was informed that the actual costs of the conduit (including all the charges of the subsidiary construction companies), were over \$53,000,000, and that there were arrears in the 10 per cent earnings of over \$17,000,000, making the total cost of acquisition to the City \$71,000,000. The Commissioners mentioned commented: "This figure was probably excessive, but it would seem that even at that price it would pay the City to acquire these conduits under the old contract. Their ownership constitutes a monopoly control of the means of transmission for both high and low tension service. If the City owned and completely controlled the conduit systems it would not only derive income from the rentals, but, of greater importance, by using its contract power it could lay down certain rates as conditions to using the conduits and so could control the cost of electricity and telephone service to its citizens." They also pointed out that the City would need these conduits if it were to try municipal competition as a means of keeping down the rates.

7. *No Expansion Allowed*

One of the conditions of success has been expansion. Here is where the cities have been held back most effectively. They have not been allowed, in most cases, to expand their service outside of the city limits. The result

of this limitation has been almost as severe as the bonding limitation. Private plants were allowed to serve the villages surrounding a city, and when these were taken into the city, or even when they were not, the city found its own field of growth limited.

In half the states the cities cannot expand beyond the city limits. In some of the twenty-four states where they can expand beyond there are limitations which make the permission of little value. In some of them it amounts only to owning a plant outside the city limits. In several others they are allowed only to sell "excess power" outside the limits. In still others they may sell outside but not construct lines. In still others they may sell outside only in case the villages there own their own plants. In short the city plants have simply not been allowed to expand as private plants have been allowed to do.

8. *Attempts at Competition*

A considerable number of municipalities are served by both municipal and private plants. The extent to which municipal plants have succeeded in reducing rates will be considered later, but it is important to note here the inequality of the competition. Private plants have been allowed to expand freely. Municipal plants have been kept inside or very close to their own city limits. The result is that private companies not infrequently can cut rates in cities where they are in competition with municipal plants, meanwhile making their remaining territory foot the bill.

This has happened in several cases. The latest is in Georgia. In 1930 a county in that state with a population of 20,000 developed a waterpower plant of 15,000 horsepower and opened for business on August 1st. Their bond issue met the usual opposition and delay. When the plant opened it offered rates ten per cent below those of the Georgia Power Company, which operates through-

out the state and in Crisp County. The private company then countered with a 35 per cent cut in its rates in the county. This looked like the beginning of a rate war of the kind that the West Coast has frequently seen. But in this case the Georgia Public Service Commission simply called on the private company to show cause why it should not extend its rate cut throughout the whole state, if it could afford to put it into effect in Crisp County. The company immediately rushed into court and enjoined the Commission from asking it to show cause why it should not extend the rate cut. Fifty other cities throughout the state immediately demanded that the rate cuts be made applicable to them. But the Commission was enjoined successfully, and then proceeded to allow the discriminatory competition.¹⁶

In Nebraska, where the state commission has no regulatory power over all the electric utilities the situation was described by the director of the Nebraska Information Bureau, "Think as you will, it is competition that brings the price down and not regulation."¹⁷ The cities have had some experience with it. United States Senator Robert Howell, who was formerly city engineer of Omaha, described the local experience:

"In Omaha we secured authority to build ice plants. The rate for delivered ice had been raised from 50 cents to 70 and 80 cents. This was in the midst of the war. We installed ice plants. The result was that immediately, as soon as we began operating, the rate for delivered ice dropped back to 50 cents. The rate for cash and carry ice dropped to 30 cents. Although we could produce but one-third of the ice used in the city of Omaha, at 30 cents per 100 pounds, the rate at which we sold to the public, the proceeds of the sale of the ice produced enabled us in seven years to pay off the \$700,000 invested in the plants, so that they are today 'velvet,' as it were, as far as the people of Omaha are concerned. It was our position from the beginning that we did not want to do all the ice business in the city of Omaha, merely sufficient to regulate rates. In my opinion public competition is de-

cidedly more advantageous and safer than public monopoly. Public competition could keep the privately owned ice plants good, and they would necessarily keep the publicly owned plants on their toes or they would go out of business."¹⁸

Such an attitude on the part of the Nebraska cities has resulted in an attempt on the part of the power companies to put competing plants out of business by rate cutting, relying on the rest of their territory to pay the bill. A key case was fought up to the Supreme Court of the State in 1929. The Court held that electricity was a commodity and subject to the law forbidding discrimination between various sections of the state. "From the record the Court found that it was the settled and controlling policy of the company to preserve the monopoly it enjoyed at Hartington at all costs; that its efforts were carried even to the extent of adopting a policy of intimidation—diplomatic, but no less effective, forcible and efficient in accomplishing the desired object; that by a multiplicity of forms it sought to circumvent the commands of the statute, one entity maintaining a 6 cent rate at Hartington and others maintaining elsewhere in Nebraska under like situations rates exceeding that at Hartington by 100 per cent; that the 6 cent rate is inadequate and non-compensatory to a degree that renders permanent competition on this basis wholly impossible and the ultimate destruction of its competitor at that point unavoidable."¹⁹ Here was a case where the Interstate Power Company had reduced rates from 18 to 14 cents, which was unsatisfactory to the Council. The Council gave a franchise, as several other city councils did, to the Western States Utilities Company, which built a plant under a contract to turn it over to the city when the profits repaid the cost. It started with a 9 cent rate, and can now continue.

In 1929 also the Missouri Commission refused to allow the Missouri General Utilities to cut rates below those of

the municipal plant at Salem, on the ground that the burden fell on consumers in other parts of the company's territory.²⁰ In Oregon the commission seems to be changing its policy a little and allowing competition where the rates are very high.

A picture of the difficulties of municipal plants competing with private companies which can make outside consumers pay the bill is given by Bird and Ryan in *Public Ownership on Trial*.²¹ At San Diego the Southern California Edison was charging 15 cents per kwh. and the municipal plant began with an 8 cent rate.

"These years of competition made municipal ownership history. A rate war with political complications provides the thread of the narrative. When the city placed the first unit of its street lighting plant in operation the company dropped its rate from 15 to 11½ cents . . . The company then offered a flat rate of \$1.25 a month for domestic lighting. The city council put a stop to these tactics by requiring the sale of energy by meter measurement. The company immediately filed a new schedule of rates lower than that of the city. The city, following a policy of making its plant pay its way, continued its 8-cent rate until earnings justified a reduction to 7 cents. Whereupon the company reduced its charges to 5 cents. Citizens who remembered the 15-cent rate . . . continued to patronize their own plant. . . . This support made possible a further reduction to 5 cents. . . . The company immediately reduced its base rate to 4 cents with the announcement of willingness to go further if necessary. . . .

This last reduction by the company, while it was charging much higher rates in neighboring communities, led to consideration of the situation by the state Legislature. The Legislature adopted the Unjust Competition Act prohibiting the furnishing of electrical energy in one community at discriminatory rates which would affect other communities. . . .

With resulting equalization of rates between the city and the company, the last six years of competition degenerated into guerilla warfare for customers. In some years the city would connect approximately 2,000 customers and lose 1,000 to 1,500 through the efforts of the company's solicitors. The gain always favored the city and by 1920 it was serving 12,000 consumers to the company's 4,000; but such compe-

tion made the development of business unnecessarily expensive."

Most of the state commissions do not allow competition, however, and the result is that the cities have no way of protecting themselves except by appealing to that process of regulation which has been seen to afford so little protection.

9. *Capitalizing the Triumph*

Through these various restrictions municipal ownership has often failed to expand. Many towns and cities found that they needed the limits of the bonding rights for other public improvements. Others found that, unable to expand, they were unable to install new machinery and charge rates in competition with the private super-power systems. In some cases they sold or abandoned their generating system, keeping their distribution systems. In still other cases they sold both systems to private companies. What the cities experienced in part through restrictions laid on them and in part through advance in the arts of the industry which the restrictions made it impossible for them to use, the small private plants also experienced.

Between the census years 1922 and 1927 for every municipal plant going out of existence there were three private plants doing the same.²²

In spite of this fact and of all the barriers put in the way of municipal growth and expansion, the electric power industry has done its best to spread around the claim that municipal ownership is a failure, and that it is a failure because of what they describe as "political interference." This is rather shameless suppression of truth. It is much as if the advocates of municipal ownership attempted to circulate the story that private ownership was a failure because three private plants went out of existence to every one municipal plant that did so. Yet

this is exactly what the National Electric Light Association has been doing assiduously for a long time. Every year a new edition comes out of a book entitled *Political Ownership* which lists, with many mistakes, the number of municipal plants that have sold out and draws one and only one conclusion, that the main cause is the fact that they are administered indirectly by people elected by popular vote instead of appointed by a business organization. No attention is given at all to any of the restrictions on the cities.

The utilities have not only defeated many of the efforts of the cities to secure a public service at cost but they capitalize their triumph by laying the blame where it does not belong and where it can do them the most good.

Meanwhile they go on defeating bills both to improve the regulatory system and to extend the powers of the cities. Most of the state legislatures met in 1929. Investigations of the regulatory system or waterpower situation were defeated in Kansas, Missouri, North Carolina, Minnesota, Pennsylvania and Georgia. They were begun in New York State and Massachusetts. In Texas, Florida, Kentucky and Delaware bills for state commissions were introduced. In Kentucky the utility men appeared for the bill. They were defeated. In Maine the utilities carried a bill to export power out of the state through the legislature, subject to a referendum. The voters defeated it. In Wisconsin, however, a bill to forbid the export of power in case its sale outside the state was cheaper than rates charged inside the state was defeated. Bills in Texas, Missouri and New York to reduce the rate of return to the utilities were defeated. Practically no improvements in the regulatory system were carried.

In several states an expansion of the power of the cities was demanded. The Illinois Municipal League asked for a law authorizing the establishment of municipal utility districts, but was unsuccessful. In Minnesota a proposed

bond issue of \$50,000,000 for state development of water-power was defeated in the legislature. In Wisconsin the constitutional amendment to allow the state to recapture its waterpowers and develop them itself was defeated in the Senate. In Texas a bill to revoke all permits for dams on public streams when the dams had not been started, was defeated. In Nebraska a bill to establish a bureau of water conservation and utilization was indefinitely postponed. (In Nebraska the political interest of the power companies was emphasized in 1930 by the discovery that the chairman of the Nebraska Power Company had spent \$4,000 in trying to discover a man who could defeat Senator Norris in the 1930 election.) In New York the Conference of Mayors recommended legislation giving the cities the right to build or acquire power plants, but the Legislature paid no attention. In the 1930 session it ignored bills providing for municipal operation and competition.

There were a few small victories for the cities. In Nebraska first class cities were allowed to expand 15 miles into the surrounding territory under certain restrictions. In North Dakota a law giving municipalities the right to operate power properties was passed. In Nebraska the power district bill was amended to meet constitutional objections and repassed.

However, these victories were offset by defeats. In Minnesota a bill to allow city councils to contract for the payment of plants out of their future earnings was defeated. In Wisconsin the amendment to remove from the existing debt limit any debt created for purposes of acquiring municipal power plants was defeated. In Pennsylvania the action of the utilities in opposing Governor Pinchot drew fire from one of the stockholders of the United Gas Improvement (one of the Morgan group). He wrote to its President, John E. Zimmermann: "You have flooded Pennsylvania with letters to the stockholders

of the United Gas Improvement Company in which you appeal to them to vote against Gifford Pinchot for Governor of this State because of his attitude toward public utilities. The sole purpose of this letter is to intimidate the voters of this State by creating in their minds the fear that the dividend on the stock which they hold in your company would be endangered should he be elected Governor of the State of Pennsylvania. As a holder of both your preferred and common stock I resent this as a vicious and sordid use of the power lodged in your hands by reason of the position which you hold as president of the United Gas Improvement Company."

Certainly the utilities and those who worked with them either purposefully or blindly have won in the struggle with the cities in most states. The cities are and remain hampered in their endeavors to secure the fulfillment of their needs without profit to outsiders. Where their political machines are strong the utilities have treated the cities as feudal acquisitions. In the language of the Supreme Court of Nebraska, they may be said to have adopted a policy of intimidation—diplomatic, but no less effective, forcible and efficient in accomplishing their desired objects.

NOTES

- ¹ Compiled from Poor's *Manual of Municipals*, 1931.
- ² *Public Ownership on Trial*, Bird and Ryan, Republic Publishing Co., 1930, p. 109.
- ³ *Idem*, footnote, p. 110.
- ⁴ *Idem*, pp. 179-80.
- ⁵ *Annals of the American Academy of Political and Social Science*, 1914, Vol. 57, p. 61.
- ⁶ Federal Trade Commission Transcript on Public Utility Corporations, Exhibit 4668.
- ⁷ Bulletin, League of American Municipalities, 1905, p. 10.
- ⁸ *American Municipalities*, May, 1913.
- ⁹ *Idem*, September, 1914.
- ¹⁰ *Annals*, *supra*, p. 170.
- ¹¹ 290 Ill. 366, 1919, cited by Charles M. Kneier in "State Regulation of Public Utilities in Illinois," 1927.

- ¹² *Idem*, p. 71, Chicago Railways *vs.* City of Chicago, 292 Ill. 190, 195 (1920).
- ¹³ *Idem*, p. 76.
- ¹⁴ *National Municipal Review*, April, 1920.
- ¹⁵ Report of the Commission on Revision of the Public Service Commissions Law, New York State, 1930, p. 333.
- ¹⁶ Compare Judson King, "Crisp County Bucks the Utilities" in *New Republic*, October 29, 1930.
- ¹⁷ Federal Trade Commission Report on Public Utility Corporations, Vol. 2, p. 116.
- ¹⁸ *Congressional Record*, February 15, 1928.
- ¹⁹ *Electrical World*, July 27, 1929, p. 203.
- ²⁰ *Electrical World*, November 16, 1929.
- ²¹ *Public Ownership on Trial*, *supra*, pp. 97-9.
- ²² Compiled from base figures given in Census release August 17, 1929.

CHAPTER FOUR

NATIONAL DEFENSE LINES

1. *The Federal Waterpower Defense*

IT has been our habit to erect our defenses against the utilities a little belatedly. The power companies had grown beyond the boundaries of the individual cities before the state-wide defenses, the regulatory commissions, were set up. They have long since grown beyond the state boundaries, but, as yet, the national defense lines built to protect the consumers are in almost skeletal shape.

The first comprehensive move to aid waterpower development on a national basis and at the same time to protect the consumers of the power and light developed from the national waterpowers, was made in 1920, when the Federal Waterpower Act, creating the Federal Power Commission, was passed. Prior to that there had been outright gifts of certain waterpower resources as well as limited gifts. Today the Forestry Service in the Department of Agriculture supervises some 272 projects with a development of 540,000 horsepower, and the War Department a further 43 projects with a development of 830,000 horsepower.¹ Since 1920 the licenses to use waterpowers on navigable streams, over which the national government has control, have been issued by the Federal Power Commission. It has licensed 2,489,978 horsepower installed capacity between 1920 and 1929, and has applications for a further 5,744,239 horsepower ultimate capacity pending.

In this act one principle was definitely established, and several protections were laid down. The principle was that the national government retained ownership of the

waterpowers on navigable rivers and could take them over for the benefit of municipalities or states desiring to develop them at the end of a fifty year license period. The protections laid down were three: 1. There could be no inflation of costs. The price to be paid by the government at the end of the fifty years of private development was actual cost plus severance damages. This was intended to eliminate revaluations, so popular with the utilities under state regulation, and the issuance of securities not based on sums actually invested. It meant that the companies had to report all additions to plant under license from the Federal Power Commission, and also all expenditures made for the sake of the development before the license was granted. 2. The second was that of regulating the issuance of securities on these developments where the state commissions involved had not been granted sufficient power to regulate such securities. 3. The third was regulation of rates charged for power developed from these plants where the state commissions had not been granted adequate power to regulate them. It involved the taking of excess profits in the form of higher license fees, a form of excess profits tax.

What use has been made of these three powers to protect the present consumers? The answer, given by the Federal Power Commission itself, is "almost nothing." In its 1928 report it states, on the first point (prevention of the inflation of pre-license costs), that it has settled \$21,851,000 of such claims, but that \$275,000,000 stand unsettled. If all of the projects now licensed are completed it will be necessary to pass on claimed expenditures of about one billion dollars. On the second point (preventing the issuance of unsupported securities where the states involved do not have sufficient authority to do so), it has acted in only one case, that of the development at Conowingo, in Maryland. On the third point it has done nothing at all. In 1928 the Commission re-

ported that while it has acted rapidly in authorizing the development of new waterpowers, it had not been able to perform the other duties "which related primarily to the protection of the public interest in the waterpowers so licensed."²

The admitted failure of the Commission to use its powers to protect the consumers led to criticism. The point was made that its three heads, the Secretaries of War, Agriculture and the Interior were active party politicians and responsive to the considerable political power of the electric power companies. The Commission itself pleaded that it had been kept practically helpless through insufficient appropriations. It said in 1928:

"Neither sufficient time nor qualified employees were available for inquiring into the financial arrangements of applicants, the cost of construction of their projects, or the items which they were entering into the fixed capital accounts of their projects, all matters upon which costs to consumers are so largely dependent."

It is true that the Commission has been hampered in not being allowed sufficient workers to handle the great task which it was supposed to do. Whether this hampering was done intentionally or as a sincere part of the penny-wise pound-foolish economy which characterized a large part of the period of its activity, is a matter of opinion. Since 1920 it has persistently asked for more employees, and for the freedom to hire them directly. Both of these requests have been refused by Congress. The result is that the Commission was dependent on employees assigned to it from the three departments of Agriculture, War and Interior, who were always subject to recall to their own departments. Not until 1929 were funds directly appropriated for 29 employees.

Some evidence is available as to the causes for such hampering of the Commission. In 1928 its request for more employees was defeated in the House of Representa-

tives by 11 votes. Later it was brought out that this defeat was really caused by one of the power companies, the Niagara Falls Power Company, with the aid of the Secretary of War. The Commission had prepared a statement showing the extent of the problems before it, the sums involved in the claims of the various power companies which the Commission was challenging. The Niagara Falls Power Company was one of them. One of the reporters for the organ of the electric power industry, the *Electrical World*, managed to see the report. News of the matter was thereupon received in Niagara Falls. The Secretary of War was approached. The statement showing the claimed inflations was then, at his request, not presented to Congress, and the Commission was thereupon refused the additional employees necessary to challenge those claims. This held the work back very definitely. The first result was that the Commission suspended its orders to the licensees to report on the securities they were issuing. This was a complete surrender on one of the three protections. The excuse, insufficient staff, may have been valid. The cause for its being valid was the Niagara Falls Power Company and its associates.

The report suppressed at the instigation of the power companies was later made public by the Senate Committee on Interstate Commerce in its hearings under Senator James Couzens. It is valuable in indicating the work the Commission might do if it were left free. It is also corroborative evidence of some of the methods of the utilities described in Chapter Two. The Niagara Falls Power Company was given a license in 1921 covering 312,450 horsepower, and for an addition of 210,000 horsepower. The license provided for finding the cost of the plants. The Federal Power Commission tried to establish these costs. Its report, in the language of the suppressed memorandum, "could not be completed because access to certain records of the constituent companies was refused. The

examination disclosed that considerable property which had been abandoned and demolished was still carried in whole or in part in the plant investment; that many large amounts in connection with new construction appeared to have been erroneously charged to property investment; and that many millions of dollars carried in the plant investment account did not represent actual investment either by the company or by its predecessors."* The first charge, then, is one of inflation.

The second charge is that of organizing to escape state regulation. The inflations involved in the process are also given, and provide a commentary on the New York State Public Service Commission.

"The Niagara Falls Power Company was formed by the consolidation in 1918 of a former corporation by the same name, of Hydraulic Power Co., and of Cliff Electrical Distributing Co. The last-named company had been organized on March 16, 1909, and there had been transferred to it that part of the property of Niagara Falls Hydraulic and Manufacturing Co. which was used in generating and distributing energy for use in public service. The Public Service Commission of the State of New York had been created in 1907 with authority over accounts, rates, services and securities of public utility corporations. It was presumably for the purpose of avoiding supervision by that commission over the major parts of its operations that such transfer was made by Niagara Falls Power and Manufacturing Co. The transferred properties appear to have been carried on the books of the transferor for approximately \$422,000. The transferee paid for the properties \$500,000 in bonds and \$250,000 in stocks, or \$328,000 in excess of book costs to the transferor, an increase of 78 per cent."

In 1910 the stockholders of this Hydraulic and Manufacturing Company organized still another company, the Hydraulic Power Co. The assets of the former stood in that year at \$3,973,716. "The new corporation set up on its books under the caption 'Purchased Property' as an asset item, \$15,771,208, or nearly \$12,000,000 in excess

of the amount carried in the fixed capital account of its predecessor. This transaction and that connected with the organization of Cliff Electrical Distributing Co. added \$12,123,964 to investment accounts which prior to transfer had aggregated \$4,395,245, an increase of 282 per cent."* The Federal Power Commission found still further inflation in some construction costs, bringing the total to \$14,000,000 out of an aggregate property investment in 1918 of \$34,500,000.

Since the Commission has never prosecuted the case the cost of the company has never been determined, "and the company has never filed a formal statement of its claims." The company did transmit an appraisal showing:

Tangible fixed capital.....	\$31,190,974
Intangible property.....	5,762,143
Overhead costs.....	8,718,334
Water and rights.....	32,000,000

\$77,671,451

The report of the Commission which was suppressed by this company with the aid of the Secretary of War said: "This aggregate represents what appears to be a claim for 'fair value' of the property which was transferred on the books at the time of the consolidation at \$34,500,000, and which appears to have represented not more than \$20,500,000 of actual investment." There have been additions to the properties since then in which the Commission found many questionable items. It puts the difference between actual cost and "value" claimed by the company on the theory that it is allowed to revalue its property, at \$46,000,000, the sum of the items of "intangible property," "overhead costs" and "water and rights," not including the \$14,000,000 of earlier inflations. The total is \$60,000,000. In its suppressed plea for more employees the Commission said that the costs to be estab-

lished would have to be fought through the courts and that the Commission was without adequate staff to do this. "To do so without technical preparation and without experienced legal assistance would be foolishly to risk scores of millions of dollars, for the amounts finally determined in these proceedings will be the amounts which the United States would be required to pay if it ever exercised its option to purchase at the termination of a license. They are likewise the amounts which would serve as a rate base if the Commission ever exercised its authority of rate regulation."

In 1926 the development of Conowingo was authorized, and the Commission, together with the Pennsylvania and Maryland Commissions, prevented an over-issue of securities. The pre-license costs have never been agreed to, however. Out of a total pre-license costs of \$7,246,832 claimed by the various companies involved in the project "\$3,443,708 appeared not to be a proper charge to the project, and the balance of \$712,870 was doubtful." Another example was the Chelan Electric Company in the State of Washington. Acting in its behalf the Washington Water Power Co. claimed \$516,600 in pre-license costs, alleging that this was the compound interest on certain preliminary expenditures running over nineteen years. No evidence was presented to show that it had actually been paid to anybody. "There have been many other cases where accrued but unpaid interest charges comprise a very substantial part of alleged pre-license costs." Still another case happened in Minnesota. The Minnesota Utilities Company acquired certain rights in the Winton development for \$48,000, and entered them on its books at \$300,000. In 1923 American Power and Light (an Electric Bond and Share company) acquired these rights. The licensee, the Minnesota Power and Light, a subsidiary, bought them from its holding com-

pany for \$534,500. Thus by re-sales among allied companies the "cost" had been driven up from \$47,000 to \$534,500.⁸

The attempts of the power companies to write into their accounts various fictitious expenditures have not taken place only in New York, Maryland, Washington and Minnesota. The Commission's accountants report involves the Alabama Power Company, formerly one of the chief bidders for Muscle Shoals. A joint examination of the records was made by the Federal Power Commission and the Alabama Public Service Commission. "The total cost of the Mitchell dam project is shown on the books of the power company as \$10,968,000. It is doubtful if more than \$7,000,000 of this amount can be considered as actual legitimate cost." The development on the Saluda River in South Carolina was accompanied by very large payments to the holding companies for engineering services as well as excess capitalization of water rights. On the former score the holding companies proposed to take \$1,250,000 and on the latter score \$1,035,000 "representing alleged values which probably cost less than \$100,000."

Activities in South Carolina have also interested the Commission. In September, 1930, it sent to the Carolina Power and Light (an Electric Bond and Share subsidiary) a preliminary accounting report, cutting the sum of \$779,329 from its claimed pre-license costs of \$924,850. In other words it stated that the actual legitimate expenses were about \$145,521, instead of being over five times as much. Most of the eliminated sum represented claims for land and water rights. The development involved was the Pigeon River. The group of that name is a company which has played a considerable part in the financial manipulations of the Electric Bond and Share in the South. According to the Federal Trade Commission reports the National Power and Light secured control of the old

Carolina Power and Light in 1925 and issued its own shares in the ratio of 15 to one of the old Carolina company. This old stock had been carried at \$126 a share, including surplus. It was entered on the books of the National Power and Light at \$500 a share, \$23,818,000. It was turned over in the same year to the Pigeon River Power Company plus other properties carried at \$4,284,160, for \$28,094,860. In 1926 there was a new merger, forming the new Carolina Power and Light Company, in which the old stock was eliminated, but the sum of \$19,048,000 was left on the books. The Federal Trade Commission accountant reporting said: "In addition to this write-up of \$19,048,400 there was an additional write-up in the fixed capital account of the new Carolina Power and Light Company, due to the reserve account of \$3,000,000 created at the organization of the Pigeon River Power Company, through a charge of like amount to its plant and investment account. Thus the total 'write-up' in fixed capital accounts of the new Carolina Power and Light was approximately \$22,048,400."*

Inasmuch as the companies involved here have a license from the Federal Power Commission to develop the water power and the Pigeon River Power Company was an operating company as well as a holding company, use of the Commission powers to regulate securities might have helped avoid some of this \$22,048,400 inflation.

When the companies are engaged in this kind of financial transactions it is inconvenient to have a Commission empowered to act. The Commission, however, may be kept silent and be hampered in its work to the point where it refuses to retain responsibility. But nevertheless it might sometime act. So now the companies are threatening to take the Commission into court to test its powers. There have been indications of this in two cases. One of them is the Columbia Electric and Power Company

which has a development on the Chattahoochee River between Georgia and Alabama. The Commission's accountants eliminated some \$650,070 from its claimed pre-license costs. Some of this was for claimed interest which had not been actually paid. The larger part consisted of \$459,249 in fees paid to Stone and Webster. This was disallowed on the ground that "such fee represents an arbitrary overhead charge for services of officers of one or both of the corporations performed only incidentally to other multitudinous duties. . . ." The Solicitor of the Commission, Charles A. Russell, held that the contract between the several parties was not a valid contract between parties dealing at arm's length. The firm of Stone and Webster is fighting this contention, and says that the contracting parties were separate and distinct corporations and that on the board of directors of the Columbia Gas and Electric were three officers and stockholders of Stone and Webster, three who were stockholders in other companies managed by Stone and Webster, but five others who had no interest in Stone and Webster or in any of their companies. This promises a law suit on the old question of whether the corporate fiction validates acts between closely allied parties. And it is very important to the many companies which have paid allied parties very large sums for more or less nominal services in connection with water powers.

The constitutionality of the act has also been attacked. The Clarion River Power Company of Pennsylvania attempted to enjoin the Commission in the Supreme Court of the District of Columbia from holding any hearings or making any report regarding the amount of net investment in the company. It is owned by the Associated Gas and Electric. In its suppressed report the Commission cited the company "as an example of inflation of fixed capital accounts through charges for construction as well

as pre-license costs." The company claims \$11,032,816 under this head. The Chief Accountant of the Commission, Mr. William V. King, states that \$6,387,731 of that amount is irregular and unlawful. The report says: "The book costs of this project are probably inflated by not less than \$4,000,000 and possibly by much more. Vouchers and other original records in support of less than \$5,000,000 of total book costs have been furnished for inspection. More than \$6,000,000 of alleged costs is represented merely by entries on the books and is unsupported by evidence of expenditure or cost. Original records necessary for determining costs are supposed to be in possession of H. D. Walbridge and Co., but access to them has been refused." The Court, however, upheld the Commission.

Further attack on the Federal Water Power Act has been made by the Appalachian Electric Power Company, some of whose financing has been described in Chapter Two. This company desires to develop a waterpower on the New River, a tributary of the Kanawha, in West Virginia. The question raised is whether the tributary of a navigable river can be considered as part of that river system and as such under Federal control. The law states that navigable waters are

"those parts of streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states, and which either in their natural or improved condition, notwithstanding interruptions between the navigable parts of such streams or waters by falls, shallows or rapids compelling land carriage, are used or suitable for use in the transportation of persons or property . . . including therein all such interrupting falls, shallows or rapids, together with such other parts of streams as shall have been authorized by Congress for improvement by the United States or shall have been recommended to Congress for such improvement after investigation under its authority."

While this language seems to be inclusive, Attorney General Mitchell has delivered an opinion in which he holds that the rights of the Federal Power Commission to retain jurisdiction over tributaries to navigable rivers are limited. If this opinion holds, a considerable number of power companies are expected to seek cancellation of the licenses they have received from the Commission.

These various attacks on the powers and acts of the Federal Power Commission headed up in 1930. During that year Senator Couzens held hearings on his bill to form a new power commission, which was finally passed by Congress. In the course of the hearings it developed that the Chief Accountant of the Commission, William V. King and the Solicitor, Charles A. Russell, had been at some pains to prepare the work so that the Commission's protests against inflations could be made effective. To circumvent their efforts to eliminate fictitious entries, it was proposed that "the work could be done better by the Departments of War, Interior and Agriculture than by the Commission's staff directly. If this committee (of the United States Chamber of Commerce) is successful in presenting this argument to the Secretaries who form the commission . . . it is believed that these departments will not have men especially trained for this work. At least they will be removed from the direct supervision of Mr. King."

The Couzens hearings drew attention to the fact that there was a considerable difference of opinion within the Commission staff. The Chief Accountant and the Solicitor seemed to be more eager to press the issues presented than did the new Secretary, Mr. F. E. Bonner. The Federal Trade Commission made public a letter written by Richard B. Scandrett, one of the officials of the Electric Bond and Share group and formerly Mr. Coolidge's Western campaign manager, in which he communicated to S. Z. Mitchell that he had reliable information that

Mr. O. C. Merrill was going to resign as Secretary, that the National Electric Light Association had been busy in putting spokes into the wheels of candidates for his position who were unacceptable to it, and that "apparently the most likely selection is Mr. F. E. Bonner of San Francisco." When Secretary Merrill resigned to become director of the World Power Conference, Mr. Bonner was appointed in his place. He was recommended by Mr. Merrill and endorsed by the Pacific Gas and Electric Company. He reversed Mr. Merrill's policy of asking Congress for the necessary additional facilities with which to carry on the work. He announced that no increase was needed in the accounting or legal staff but that the work could be done in other departments. He tried, by bringing the Solicitor of the Commission, Russell, into conference with the Washington representative of the Electric Bond and Share interests, M. O. Leighton, to convince Russell that the Chief Accountant, King, was obstructing the granting of power sites to these companies. Mr. Russell held that the Chief Accountant was obeying the law. A deadlock resulted. Secretary Bonner and Secretary of the Interior Wilbur, prevented the securing of further funds to prosecute the disputed claims and the Chief Accountant and the Solicitor refused to approve claims which had not been properly audited. This situation prevailed at the time that the Couzens bill was enacted, providing for the appointment of five commissioners who would devote their full time to the work. It was brought out that the Secretaries of War, Agriculture and the Interior had, during the previous nine years, devoted only an average of five or six hours a year to the work of the Commission.

Further evidence of utility control of the Commission appeared to be shown in the action of the old Commission in June, 1930, in the matter of giving a license for development on the Flathead River in Montana to the Montana

Power Company. In Chapter Two, in the discussion of the capitalization of monopoly privileges, it was pointed out that the Montana Power Company (an Electric Bond and Share interest) had appraised its tangible property at \$45,746,598 but had added to this for "water rights, contracts, franchises, etc." the sum of \$51,491,269, thereby increasing the total valuation to \$97,237,867. If the Montana Power Company had sought a direct license for itself some of these items might sooner or later have been questioned by the Commission. It sought the license through a dummy corporation, the Rocky Mountain Power Company.

The situation was complicated by two unusual factors. One was that the site in question was on Indian tribal land. The other was that an active competitor appeared and asked for the lease. This competitor wanted to use the very cheap power for chemical purposes. He guaranteed to undertake an initial development of 214,000 horsepower and to sell the power at \$15 a horsepower and to pay the Indians a rental of \$240,000 a year. These were better terms than those offered by the Montana Power Company interests.

Hereupon the Army Engineers prepared a plan which charged a very low rental for the first 68,000 h.p. which was all the Montana Power Co. proposed to develop, with a rising rental for all above that amount. This hit at the Wheeler proposal for a much larger development. On exposure, this scheme was hurriedly withdrawn, but the Secretary of the Interior, Mr. Wilbur, promptly issued another proposal, and transmitted it to the Montana Power Co., ignoring Walter H. Wheeler altogether. This proposal, which was finally made the basis of the license, cut the rental to the Indians to \$104,000 a year for the amount of power which the Montana Power Co. proposed to generate.

According to F. L. Bird, formerly Secretary of the

Committee on Coal and Power, the fact that a dummy corporation was used invalidates all the essential controls of the Commission. In the license the dummy company agrees to sell all of the developed waterpower to its owner, the Montana Power Company. It can sell this power at such a low rate to its owner that there will be no excess profit to itself, giving cause for a rate reduction. He commented:

"If the dummy licensee could be thus adequately controlled under the Federal Water Power Act, why was not this control imposed upon the actual licensee, where it would have been of direct benefit to the people of Montana? The rate control applied to the dummy licensee is of little or no value except to the Montana Power Company. . . . If the Montana Power Co. were the licensee, it would have been required to submit its financial structure and operations in all particulars to the direct scrutiny of the Commission. Under the convenient arrangement of the dummy organization the Montana Power Co. is saved all such embarrassment. It can capitalize its contract with the Rocky Mountain Power Co., include this fictitious value in its rate base, and retain its excess profits from the sale of Flathead Power with absolute impunity in so far as Federal control is concerned. . . .

True, the Public Service Commission of Montana will now have available important information as to production costs which it may use in determining rates. But the work of the Montana commission has been singularly ineffective. It has not prevented the excessive rates to industrial and domestic consumers which offset the cut-rate sales to the Montana Copper Co. It has no jurisdiction, under Montana law, over the issuance of securities by the utility companies. It was unable to prevent the purchase by Mr. Ryan of the Thompson Falls power plant for \$925,000 and its immediate sale to the Montana Power Co. for \$5,000,000 worth of stock in that company. It has not been able to prevent the Montana Power Co. from carrying over 50 per cent of its total capitalization on its books as "water rights, franchises and contracts," and from charging the people of Montana interest and profits on that amount of water in its capitalization. It will be impotent to prevent the capitalization at more millions of dollars of the contract for the purchase of power from the Rocky Mountain Power Co.

The Flathead license is, in brief, but another of the magnificent fictions of regulation. . . ."

The members of the Federal Power Commission have stated that the cause for their decision to grant the license to the Montana Power Company interests was that the competitor had not given essential proof of his ability to finance the undertaking on the large scale proposed. Actually the rental scheme proposed by the Commission under the stress of this competition was such as to discourage complete development of the power at the sites involved.

The work of the old Federal Power Commission for the eleven years of its life may be summed up. It had been established to aid in the development of the country's waterpower resources and to protect the interest of present consumers and future governmental owners of such developments. It was given several powers with which to make such protection effective. First, it was to hold down the investments in the projects to actual cost. During the years of its life hundreds of millions of dollars of claims have piled up which have not been settled. On only a very small share of the claimed costs did the Commission and the companies agree. The others have been held in abeyance. They are important because they go to constitute the price the government will later have to pay when recapturing such projects at the end of the license periods. They are also important because they affect rates to present consumers. The Commission stated that it has not prosecuted these claims, in which it has found millions of dollars of padding and inflation, because it had no adequate staff, and did not care to risk the sums unless the cases were thoroughly prepared. It laid the blame for this delay not only on the inadequate appropriations given to it but on the companies for withholding essential information which would have made

final agreement on the claims possible. The companies have protested the findings of the Commission in regard to inflation of pre-license costs, and are now taking the Commission into court, in the eleventh year of its life, to test its authority. One case is being brought on the same point that defeated the state commissions, the contention that holding companies, because they are separate entities, can charge their subsidiary companies all sorts of prices for more or less real services, and that these prices must be allowed as part of the development costs of the project. If the companies win and the bulk of the inflation is allowed by the courts, all the accounting work the Commission has done will be cancelled, and the protection its existence promised to consumers destroyed. By waiting for eleven years to bring their suits the companies have gained exactly that much time in which to carry on these transactions. The amendment to the act which will probably follow the defeat on this point will be eleven or twelve years belated.

The authority of the Commission is further challenged by a suit to limit its powers to fewer sites than the Commission had taken under its jurisdiction. Success of this suit, indicated in an opinion by the Attorney General of the United States, would cause the cancellation of a number of licenses now granted, or amendment of the act to include the tributary streams, on which control is challenged.

The second power of the Commission was to control security issues of its licensees. The Commission has only once during its life exercised that power. This was at Conowingo in 1926 when it prevented the Philadelphia Electric Company from issuing itself a bonus of \$2,355,000. Otherwise it has done nothing about the many hundreds of millions of dollars issued by its licensees. One of the reasons given for this failure to function is inadequate appropriations and staff. Here the penny-wise

pound-foolish economy of the period was very effective, and its advocates have a great deal to answer for. The other reason given was complaint by several of the state commissions that regulation of securities might conflict with their functions.

It is difficult to understand the objection of the state commissions on this ground. Those which have security regulation among their own powers would not be interfered with. Only those states, over half of the total, which do not have such powers would be affected. But there are other considerations. Limitation of security issues would immediately throw into contrast the workings of regulation in the various states. The public would see very clearly the difference between regulation on the basis of actual cost and regulation on the basis of revaluations. The contrast would be entirely in favor of the former. It would doubtless increase rather than diminish dissatisfaction with the regulatory commissions, and perhaps even increase the demand for public ownership. This affects the regulatory commissions rather directly. So instead of inviting regulation by the Federal Power Commission in order that it might bring effective pressure on the non-licensed power companies, they fought against it.

The third power given to the Commission was regulation of rates charged by licensees in the states which had no regulatory commissions of their own. This has not been exercised at all. Somewhat similar explanations for the failure to function here have been given. Now the companies have, apparently, found a way in which to circumvent even the threat of any such regulation. They are procuring licenses in the name of dummy corporations, which they own, and which are obligated to sell the power generated to them at cost. They are willing to let the dummy corporation be regulated, while they take their own chances with the state commissions, reselling the low-

cost power as high as is warranted by their own revaluations, capitalization of contracts, going value and the like.

In 1930 Congress passed the Couzens bill which created a new power commission, and President Hoover appointed to it five men, who were confirmed by the Senate. They were George Otis Smith, chairman, Marcel Garsaud of Louisiana, Ralph D. Williamson of Washington, Claude L. Draper, chairman of the Public Service Commission of Wyoming, and Frank McNinch of North Carolina. Their terms range from one to five years, after which the terms are to be for five years. The salary is \$10,000. No more than three commissioners are to be from one political party and no commissioner is to hold stocks or bonds in any corporation affected by the act.

No sooner had these men been confirmed than they dismissed Charles A. Russell, the solicitor of the old Commission and William V. King, its chief accountant. These two men had been carrying the burden of the real attempt to enforce the waterpower law. The Senate immediately adopted a resolution requesting the President to withdraw their names, which Mr. Hoover refused to do. The Senate took advantage of a clause in its rules giving it the power to withdraw confirmation within two legislative days and withdrew confirmation from Mr. Smith. Its right to do so was successfully contested in the courts.

At this point it began to appear to some observers that the new administration was quite as actively intent on sabotaging the waterpower act as its predecessor had been. One of them, Mr. Amos Pinchot, pointed out a series of connections between the Hoover administration and the power companies. Mr. Hoover's first secretary of war, the chairman of the old Federal Power Commission, was the late James W. Good, who was counsel for the Alabama Power Company, one of those most interested in securing Muscle Shoals. The new chairman, Mr. George Otis

Smith, had "as director of the Geological Survey, supported Secretary of the Interior Ballinger during the Taft administration when he cancelled the power-site withdrawals made by his predecessor, Secretary Garfield, and turned the immense power resources of the federal domain over to private exploitation." The fact that the dismissals of Mr. Russell and Mr. King took place within twenty-four hours after Mr. Smith became the new chairman was taken as indication that he was acting under instructions from the President. Colonel Marcel Garsaud is described as being "locally identified with the Public Service Corporation of New Orleans, a subsidiary of the Electric Bond and Share Company." Mr. Pinchot points out further that the Secretary of State, Mr. Henry L. Stimson, has as partners in his law firm Mr. Winthrop, who signed a brief presented to Congress in an attempt to block the Walsh resolution; also Mr. Roberts who was a director in the Niagara-Hudson and other power companies and a vice-president of Bonbright and Company. The firm is counsel for the Georgia Power Company and had been employed politically by the head of the utility lobby, Josiah T. Newcomb. Mr. Hoover's Attorney General came from the firm of Butler and Mitchell, "one of the most prominent utility firms of the Northwest." The Solicitor-General, Mr. Thomas D. Thatcher, came from a firm which acted for the Electric Bond and Share in most of its mergers. The Chairman of the Republican National Committee was Claudius H. Huston, head of the Tennessee River Improvement Association, a lobbying agency devoted to fighting the Norris Muscle Shoals bill.⁸

This fairly close line-up of the administration with the power group may explain in part the extraordinary step taken by the President on July 31, 1930, when he requested from his Attorney General an opinion on the attempts of the Appalachian Electric Power Company to invalidate the law in two ways. The Attorney General replied up-

holding the contentions of the power company to the effect that New River was not a navigable stream and that the Commission could issue a minor-part license, i.e., one not subjecting the company to control. He also questioned the constitutionality of the whole law. The Commission, however, refused to give the minor-part license and referred the question of the navigability of the river to the courts.

In view of the importance of the decisions of this Commission on the future of regulation the appointments of new members to the Commission, and their confirmation, should be matters very closely watched by all those who are interested in saving something from the wreckage.

2. *The Couzens Defense*

A proposal for more adequate control of the whole situation has been made by Senator Couzens of Michigan. It intends to meet, after a fashion, two of the most serious weaknesses of regulation at present. One of these is the partly unregulated movement of power in interstate commerce. The other is the growth of unregulated holding company activities prejudicial to the general welfare. In this attempt to supplement the weakened state powers with some measure of Federal control he is supported by Governor Pinchot of Pennsylvania.

The interstate movement of power in 1929 totaled 30,411,322,000 kwh., which is over 32 per cent of the electrical energy available for public use in that year.⁹ This is split 52-48 between imports into states and exports from states. There is some duplication involved in these figures and not all of the power crossing state lines is unregulated. In some states the export of power is a very large proportion of the total.

The holding company situation, however, affects almost every state in the union, and only a very few states, including Massachusetts and New York, have tried to meet

the problem by claiming some measure of control over their activities.

What Senator Couzens has proposed is to include under the jurisdiction of the Federal Power Commission all parent companies, and by a parent company he means any person or group of persons controlling one or more utility corporations and/or their operations or management, whether by ownership or control of stock, or by interlocking directorates, or otherwise. These parent companies, where they control licensees of Federal waterpowers, or control operating companies transmitting power interstate, are to be subject to the same requirements of the proposed act as their subsidiary licensees or their subsidiary companies shipping power in interstate commerce. This applies also to management companies.

These utilities, licensees of the Commission, or shippers in interstate commerce, or their holding and management companies, are to furnish complete annual reports to the Commission as to their assets and liabilities, capitalization, net investment, gross receipts, interest, depreciation, cost of generation, of distribution and the like. These must be in the form prescribed by the Commission, which may also require special reports. The Commission is especially charged with classifying property for depreciation purposes and fixing the proper percentages to be charged in each classification. The importance of this charge was discussed in Chapter Two.

The Commission is ordered, within six months after the act is passed, to start to make a valuation of all the property used in the generation, transmission, distribution and sale of power by all persons subject to the act. This includes holding and management companies. This valuation is to ascertain the original cost of the property, the cost of reproduction new and the reason for the differences between the two. The properties of licensees of the Commission is not to include any valuations in excess

of the net investment, following the old waterpower act. After hearings on the preliminary valuations and any necessary changes, the valuations are to become final, following the procedure of the Interstate Commerce Commission. Appeals from the Commission's valuations can be taken to the courts.

General regulatory principles are laid down to the effect that the rates to any distributor, consumer or other purchaser of power transmitted in interstate commerce for ultimate public consumption or to any interstate transmission company shall be "just and reasonable." Discrimination in rates giving any undue or unreasonable preference to any particular person or locality is declared to be unlawful. Distribution or transmission service in interstate commerce cannot be abandoned without permission, except for nonpayment of bills. The value of franchises or other public donations shall not be considered in rate cases.

Under this proposed Couzens bill rate cases can be started by the Commission itself, or by any State Commission or by a distributor or by a substantial number of consumers of the utility involved. Such a petition about rates is then to be referred to a joint board, which is to act as an agency of the United States. It is to be composed of one representative from each State in which the utility involved in the rate case, is produced or consumed. These state representatives may be chosen as the states see fit. Anybody having an interest in the case is allowed to intervene in the proceedings before the joint board, and to be heard. These joint boards can decide the matter presented to them by a majority vote. They can function even if some states refuse or fail to appoint representatives to them. But if a majority of the states which have a right to representation on any joint board fail to appoint representatives, then the Federal Power Commission takes control of the rate case. Otherwise it has nothing

to do with the joint boards, except to delegate some of its authority to them, and to furnish them with assistance. The arrangement, up to this point, simply calls in the various states affected by a case about rates in interstate commerce to decide it. Their majority vote becomes the order of the Federal Power Commission unless appeal is taken from the decision of the joint board. In case of appeal, however, the Federal Commission takes jurisdiction, but has to determine the case on the record of evidence before the joint board in question. It is made very clear that neither the Commission nor any joint boards composed of several state representatives have anything to do with rates charged for power which does not enter into interstate commerce. Appeal from the decisions of the Commission can be taken to the Court of Appeals of the District of Columbia, and the decisions of that court are subject to review only by the Supreme Court of the United States.

In addition to the rate regulation the Commission is given power over the issuance of securities, extending beyond the powers of the present Commission which apply only to licensees of Federal waterpowers. The new Commission, according to Senator Couzens, should be given power to pass on all security issues, not only of licensees but of their holding and management companies and of companies transmitting power in interstate commerce, and shall not approve such issues "even though permitted by the laws of any State" unless it finds them to be for some lawful object, and compatible with the public interest. When one of the utilities affected by this act wants to issue securities there is to be a hearing at which "the public service or utilities commissions or other appropriate State authorities of the State shall have the right to make before the commission such representations as they may deem just and proper for preserving and conserving the rights

and interests of their people and the States, respectively, involved in such proceeding." ¹⁰

This proposal by Senator Couzens is planned to block two of the largest breaches in the wall of regulation, the unregulated shipment of interstate power and the holding company control.

There is a danger in regulating holding companies. You cannot regulate them without starting from somewhere. If you start from the present you run into the same situation that the state commissions ran into when they undertook regulation of operating power utilities in 1907 and since. They had to accept the financial manipulations up to that date, and they were on a much smaller scale than those confronting us in the present holding companies. You may try to go back of the present into the past, but the courts, in their reverence for the past, have been quick to say that milk once split is split for all eternity.

When the regulation of public utilities in the states is an expensive farce and when the national defense lines are merely in skeletal shape, it is interesting to note the means employed by interested parties to defeat all attempts at more effective regulation. The state commissions blame their own ineffectiveness on the courts, which allow revaluations of an almost fantastic kind, and which forbid control of holding companies and of power shipped under certain circumstances in interstate commerce. When Senator Couzens proposes to stop the last two of these three gaps in the wall the state commissions turn on his proposals, not with the objection that they would not work, but with the objection that they would work, and in the course of working would take away some of the authority of the state commissions. The officials of the Federal Power Commission were charged with doing

some of the things now proposed by Senator Couzens, such as taking control of security issues. They failed to do that, as they failed to fight out the inflations charged by their licensees. Are they interested in fighting out the inflations, in controlling security issues? No, they propose to scatter the work involved over other departments, give it to men who know little about it, who have other, more pressing duties. They hold up the activity of their Chief Accountant and Solicitor. They do not even ask for enough money to prosecute the claims against the companies, which, if unprosecuted, mean a gift to the power companies out of public funds and out of consumers' pockets, both, of hundreds of millions of dollars. When faced by the Couzens proposals for really effective regulation of interstate transmission, do they welcome it? Or do they point out that it may mean giving the holding companies a present that has not been equaled since we gave away land to the railroads? No, they suggest the one thing which will leave the whole situation exactly where it is. They announce their decision to pursue a policy of Federal inactivity, applying "a minimum of interference with the existing machinery of the State agencies." ¹¹ To justify this they even close their eyes to what is happening in the industry, the fact that 32 per cent of the power generated is shipped across state lines, and in Secretary Bonner's words claim that, "It has been recognized that electric power must of necessity be consumed in the immediate vicinity of its place of production." Quite the contrary has been recognized. Probably if the power companies had been paying a secretary of the Power Commission out of their own pockets he could have thought of no better ways of delaying and hampering regulation than those which have been employed.

The difficulties are mentioned here not only to illustrate

how fragmentary and ineffective Federal regulation has been up to the present, but to raise the question whether it is worth the time and energy and money to continue the effort of policing companies which do not want to be policed. It is a long and unprofitable struggle between the government and the lawyers of the power companies. Whenever a government, either state or national, decides to regulate, the country's brightest minds are hired by the power companies to find ways of doing the things they want to do in spite of the law. They succeed. Then the struggle begins all over again. And each step in the struggle creates vested interests in the present order of things, which drag their feet when other people want to move the defense lines ahead and make them effective. Then prices have to be paid by the government to reconcile the opponents of improved regulation. If the price to be paid for federal regulation is the acceptance of all the speculative values piled up by holding and banking companies, running into hundreds of millions of dollars, then it is about time to call for a new deal all around, to admit that the private initiative for which we are paying such a high price is really private initiative exercised for the purpose of laying heavy burdens upon the consumers, and that instead of paying for it we ought to eliminate it from public business.

NOTES

¹ Paul Webbink, *Federal Waterpower Policy*, Editorial Research Reports, January 22, 1929, p. 72.

² *Federal Power Commission Report*, 1928.

³ *Congressional Record*, March 4, 1930, p. 4879, section 27.

⁴ *Idem*, section 29.

⁵ Drew Pearson, *Baltimore Sun*, December 3, 1929.

⁶ Federal Trade Commission report on Public Utility Corporations, Exhibit 4676 B 1, p. 59 *seq.*

⁷ F. L. Bird. Report by the National Committee on Coal and Power, New York.

⁸ "President Hoover's Record," by Amos Pinchot, *The Nation*, August 12, 1931.

Department of Commerce figures, reported *United States Daily*, September 20, 1930.

¹⁰ Senate 3869, 71st Congress, 2nd Session, Section 34, c.

¹¹ Frank E. Bonner, then Secretary of the Federal Power Commission, before the American Society of Mechanical Engineers, *New York Times*, December 3, 1930.

CHAPTER FIVE

THE OUTPOSTS OF CONTROL

SEVERAL outposts of control are projected outside the battered trenches of regulation in the invaded and hostile field of private operation of the public power business. Boulder Dam is the first of them to be undertaken. Muscle Shoals, the St. Lawrence, and the Columbia River are expected to follow. They constitute the bulk of what is left in public hands of the great remaining natural waterpowers of the country. The erection of these outposts of control will, judging by past experience, be accompanied by years of hidden sniping and open battle on the part of those private interests which have so much at stake in the present system of privately regulated regulation. Their establishment by the consumer interests of the country will probably spell the end of power utility extortion in the large sections which will be touched by them.

1. *Boulder Dam*

On the Colorado River between Arizona and Nevada has begun what promises to be the greatest engineering achievement in the continental United States. The river drains a huge area, including in its watershed large parts of the states of Colorado, Arizona, Wyoming, Utah, New Mexico, Nevada and California. Along its banks and those of its tributaries some 2,500,000 acres of land are irrigated, and it is expected that another 5,500,000 acres will be added when Boulder Dam begins functioning as a water control and power project. Construction of a preliminary character was begun in 1930, and it is ex-

pected that the 408 yard dam, rising 242 yards from the bedrock, will be finished in 1937. It will be engineered by Mr. Walker R. Young and Mr. Raymond F. Walter of the Bureau of Reclamation, which has done so much to add greater value to many of the arid lands of the West.

This dam, which will be the highest in the world, will back up the river into a lake 115 miles long, and the 26,000,000 acre feet of water in the lake would be enough to cover the State of Kentucky to the depth of one foot.¹ There will be an installation of 1,000,000 horsepower, and of that 550,000 will be primary horsepower available all year around, day in and day out, like the power at Niagara Falls. A large part of this power will be needed to pump drinking and commercial water across the mountains to the coast cities of California. The Federal Government is not generating the power. It is selling the falling water to various private companies and municipalities for their use. They must install their own generators and transmission lines.

None of the expenses of this dam and development are to be paid out of taxes. There is no subsidy of Government plant and property such as the one asked for at Muscle Shoals first by the power companies and then by the chemical companies. The cost of the dam, which is to a large extent an irrigation and flood control project, is to be repaid, with interest, within fifty years, out of the revenues to be received from the sale of the falling water. The Secretary of the Interior has fixed this price at 1.63 mills for every kilowatt hour developed. This is expected to be sufficient to repay the costs of the dam, and power house, the interest on the bonds issued, and also to furnish sums in lieu of taxes to Arizona and Nevada ranging from \$350,000 to \$700,000 a year. The falling water was all contracted for at this price before building of the dam was begun.

The development also involves the building of an All-American canal which will divert water from the lower Colorado to the Imperial and Coachella Valleys in California. This will be about 75 miles long, the longest irrigation canal in the country. Its costs will be borne by the irrigators affected. Some power can be developed along its route and may help pay the cost.

The costs are expected to be:

Dam and Reservoir.....	\$70,600,000
Power Plant.....	38,200,000
All-American Canal.....	38,500,000
Interest during construction.....	17,700,000
Total	<u>\$165,000,000</u>

This flood control, water supply and irrigation project is the largest single one of its kind supported by the Federal Government. It was not adopted without vehement opposition on the part of the power companies, not only of the West Coast, but of the whole country, to the principle which seemed to them to be involved. Because the development affected so many states some distribution of both power and water was necessary, and the project was opposed by several of the states on the ground that they were treated inequitably. At times it seemed to some observers that the power companies and the objecting states were united for the same purpose, that of keeping the government from repaying the costs of the dam by the sale of power. This, however, is not entirely accurate. Some of the opponents, such as Senator Carl Hayden of Arizona, were not opposed to government development of waterpower projects, but believed that they could best be administered by the groups most affected, in this case the Southern California municipalities. He proposed therefore, that they do the financing of the whole project, under license from the Federal Power Commission. To others, however, it seemed a national project, not only be-

cause of the expense of building the dam and related irrigation works, but also because of the very involved questions of interstate and international water rights, which neither a private company nor a municipality leasing the site could deal with adequately.

One of the great points of division is the distribution of the water for irrigation purposes among the several states on the river. The population of California has grown very rapidly. The population growth of some of the other states has been slower, but they naturally have hopes for the future. They are interested in protecting themselves. The original Colorado River compact of 1922, never ratified by Arizona, provided that 8,500,000 acre feet of water should be allocated to the lower basin states, California, Arizona and Nevada. The State of Nevada proposes to use about 300,000 acre feet, leaving 8,200,000 for distribution between California and Arizona. Each of these two states claims to have acquired rights to about 3,000,000 acre feet apiece, leaving 2,200,000 subject to dispute. This is, however, not going to be sufficient to supply both of these states with their more or less immediate future needs. Each state thinks that it will need a further 3,000,000 acre feet. There is a shortage, then between demand and supply as it is arranged, of 3,800,000 acre feet. The Boulder Dam act allocated 4,400,000 acre feet to California and 2,800,000 acre feet to Arizona, which is less than that state claims as a vested right. Some additional water may come from the non-use by the upper basin states of some of the 6,500,000 acre feet allocated to them.

The second point at issue was the division of water-power between the various states and private companies. The private power companies had fought the act for many years because it contained the provision that municipalities should have preference in the allotment of the water-power. The municipalities had fought for the act and

by freeing the municipalities in California, Nevada and Arizona from its domination, but it will be an example leading gradually to nation-wide freedom. The future of the whole country is at stake."²

In view of the protest by the cities and the California representatives in Congress, notably Senator Hiram Johnson and Representative Phil Swing at this apparent attempt to invalidate the act by executive action, the tentative allotment was changed and contracts were finally signed on the following basis: Arizona and Nevada are each to have 18 per cent of the firm power. The Metropolitan Water District is to have 36 per cent for pumping purposes. The small municipalities of Southern California are to have 6 per cent. The City of Los Angeles is to have 13 per cent, and the Southern California Edison is to have 9 per cent. This division in effect gives 45 per cent to private companies and 55 per cent to municipalities.

Boulder Dam will furnish a much needed aid in water and power to the Southwest. It is, however, not particularly aimed at the power companies of that section of the country. The final allotment of power does give the Southern California cities a certain amount of freedom from the companies; they will not have to buy all their power from the Southern California Edison and its allies. But the power generators are not to be installed with the use of cheap Government money. This was an alternative open to the Secretary of the Interior. He chose not to use it. Instead he worked out a complicated scheme by which the Federal Government builds the power plant but the generating machinery which must be fastened to the foundations of the power plant is to be furnished by the City of Los Angeles, and the costs of its installation and operation must be borne jointly by that city and the Southern California Edison Company. It has been estimated that this will cost three million dollars more than

if the Federal Government installed the equipment.³ The control of the machinery is to be under a board on which Los Angeles and the other municipalities are to have two representatives, the power companies two, and the Federal Government one. This gives the private power companies an excellent chance of capturing control. Nor is there any guarantee that the power taken by the private companies in Nevada, Arizona or California will get to the consumers without those revaluations which the Federal Waterpower Act, for example, forbade to the licensees of waterpower. The proposal made by Representative Davenport of New York that as a condition to every contract for the sale of power a clause be included that the companies "shall agree that the property . . . used and useful in connection therewith shall be valued . . . whether for regulation of rates or for taxation, or for State or municipal acquisition and use, at its fair value, not to exceed the net investment," was defeated. This is a step backward from the standards of the Federal Waterpower Act, and withdraws protection from the consumers of the power furnished by private companies, which is 45 per cent of all the firm power generated at the dam.

The objection of the adjoining states of Arizona and Nevada that private development of the river would result in taxes for them and that public development would not have this advantage, was met by a provision that certain portions of the revenue should be allotted to them.

The final arrangement seemed to Arizona to be inequitable in several respects, and the State instituted suit to contest the validity of the act. One of the claims made was that the contracts between the United States and the Metropolitan Water District and the City of Los Angeles were invalid because both units would have to spend very considerable sums to secure the water and the power and, at the time of signing the contracts, neither unit had

voted the necessary bonds. In the water district a majority vote is necessary and in Los Angeles a two-thirds vote is required. Here again the legal restrictions laid on the cities by our laws threatened to have a hampering effect on their development. The Supreme Court of the United States failed to sustain Arizona's objections.

2. *Muscle Shoals*

The Federal Government owns a large waterpower on the Tennessee River, at Muscle Shoals in Alabama. It acquired the waterpower and built a dam, steam power plant and a chemical plant for the purpose of manufacturing nitrates for munitions during the war. After the war a movement was started by interested parties to turn this government property over to private interests. Several times Congress came close to disposing of it. But each time it became clear that the group desiring to lease it was unwilling to pay a price anywhere near what the property was worth. Each group offered a sum so low that it meant, in effect, a large subsidy from the Federal Government. Each time Congress took the matter up, something like a stampede was staged in the name of disposing of the property quickly. And each time certain of the progressive Senators, notably Senator Norris, were able to point out the self-interested motives behind such action and the essential fact that disposal of the property on any of the terms proposed meant a great gift on the part of the Government.

At first the power companies tried to discourage the idea that this waterpower was worth anything at all. They said that the power generated at Muscle Shoals or the power generated from an interconnected Tennessee River waterpower system could not be sold cheaply enough to compete with privately developed power plants already in existence.⁵ Whether they thought this to be true or not is uncertain, but it remains a fact that three

years later, in 1924, they returned and offered a considerable sum for the development. A factor in their change of attitude may have been an offer made by Mr. Henry Ford for the property.

The farmers desired to have the government chemical plant operated in peace time as a producer of fertilizer materials. In Mr. Ford's offer there were some general statements which made an appeal to these interests. The House of Representatives passed a bill giving him the properties for a period of one hundred years. In the Senate, Senator Norris subjected the Ford offer to an analysis which showed that there were no guarantees at all that the farmers would be given cheap fertilizer or that the property would be used otherwise to the best interests of the country. The Senate refused to give away this valuable property under the proposed terms. In 1926 Congress appointed a Joint Committee to secure bids that were better than Mr. Ford's.

At this point the power companies reentered the picture. Certain companies, then largely Electric Bond and Share interests but now under the control of the United Corporation, grouped together to submit bids, and they received the support of the Joint Committee of Congress. Their bids illustrated a certain truth which had been neglected or under-emphasized during the first discussions of Government policy in regard to Muscle Shoals. This truth was that while the Government dam and powerhouse and steam plant had a very considerable value by themselves, they increased in value enormously if they could be operated as part of a larger waterpower system, developing the other waterpowers on the Tennessee River. This was, in effect, the truth the power industry had been putting into operation elsewhere during these years. The hooking up of power plants throughout the country had increased the amount of primary power, available all the time, and valuable because of that quality, and had

also diminished the amount of capital needed to supply standby power plants. Muscle Shoals was in the same situation. The Wilson Dam and the steam plant represented 156,000 primary horsepower and 104,000 secondary horsepower. But with a relatively small investment at other places on the river, including Cove Creek, the flow of water could be so regulated that the amount of primary power would be made at least five times as large. The increase in value through a combined system was very considerable. In 1927 Mr. Ford said: "The real goal and objective of the power combine at this time is the Cove Creek Reservoir Dam. The power combine knows that that reservoir dam is worth \$50,000,000, and perhaps \$100,000,000, and the combine knows that this dam belongs to the people of Tennessee, yet the combine asks the Federal Power Commission to make a gift to them of Cove Creek."⁴

The danger that the power companies, which had earlier in the fight claimed that even the power from an interconnected system could not be developed economically, would gain control of such an interconnected system by grant of the Federal Power Commission, was obviated when Congress withdrew the other Tennessee River sites from the jurisdiction of the Commission until Muscle Shoals had been disposed of.

With this record of what seemed to be double-dealing before it, Congress analyzed the various proposals of the power companies. It had on record a statement of one of the Army Engineers, Colonel Spalding, to the effect that the Wilson Dam and steam plant could, without further improvements on the river, produce power worth \$3,500,000 annually.⁵ For these properties on which the Government had spent \$55,714,000, the power companies proposed to pay a rental of only \$1,766,000 annually. Any increase in value from further development and interconnection of the other courses on the river was to go

to them. Their second proposition was that in case the Government spent a further \$40,000,000 on a second dam and on additional generators at Wilson Dam, the annual rental would go higher, amounting to \$2,976,160 a year, which would be about 3.1 per cent on the total Government investment. Their third proposition was that if the Government, or the companies, developed the reservoir dam at Cove Creek there would be further payments up to a carefully guarded limit, after which the increased value was to go entirely to the companies. Apparently some 280,000 horsepower could be developed under such an interconnected system on which the government would receive no return. This was a considerable gift and subsidy to one group of power companies.

At this point it became clear that the Government was in the position of a man who has an automobile out in the country which is in good shape except for the fact that two wheels are missing. The motor is there, the chassis is in excellent condition. If the man is unable to spend the money for the new wheels, he must sell the car at a low price to someone who is willing to buy missing parts. The buyer has the advantage over the man who is convinced he should spend no more money. In spite of the objections of the power companies and their supporters to the effect that it would be unthinkable for the Government to spend any further money on the two missing wheels, that it would be "throwing good money after bad," the discussion of Muscle Shoals from this point on began to take into consideration the value of the Government properties as the keystone of a Tennessee River power system.

Despite the fact that the power companies were offering a return to the Government so low that it would not even pay the interest on Government bonds, their bids did not provide for cheap fertilizer. The Joint Congressional Committee reported that there was no definite

guarantee on the part of the power company for the performance of the fertilizer company which was to be put in charge of the chemical works.⁸

At this point the power companies dropped out of the picture to give place to the chemical companies. First the Air Nitrates Corporation and then the American Cyanamid Company bid for the Muscle Shoals power and the power of the Tennessee River. Their bids illustrate what the bids of the power companies had already made reasonably clear, that the value of the interconnected system on the Tennessee was many times the value of any single water power there. The Cyanamid Company bid was at first seriously considered. It proposed an installation of 1,220,000 horsepower, largely at Government expense, and an annual rental amounting to 2.6 per cent on the Government's investment in power properties alone. This amounted to about half of the total power installation in the six Southern States of Alabama, Georgia, North and South Carolina, Tennessee and Kentucky. It was pointed out that with this huge volume of cheap power, a considerable part of the cost of which would be paid by the United States, the company "could establish a dictatorship in the electrochemical business and put every competitor out of business."

The bid of the Cyanamid Company involved, on the face of it, some production of fertilizer for the farmers. A large part of the cheap power available from an interconnected system seemed destined for the use of fertilizer production. Because of this fact it received the endorsement of certain farmers' organizations. However, it was brought out by Senator Norris that the cyanamid process of manufacturing the chemical ingredients for fertilizer had been supplanted by more recent discoveries. Throughout the world the more recent synthetic process has been replacing the cyanamid process. The synthetic process fixes nitrogen from the air and uses only about

a third as much electric power as the cyanamid process. The conclusion was that the Cyanamid Company proposed to produce fertilizer by a relatively inefficient process, resulting in prices which would probably not stand the competition of prices charged for fertilizer produced by the synthetic process.

It then appeared that the Cyanamid Company had adequately protected itself for an occasion such as this. It proposed to produce not less than 10,000 tons of fixed nitrogen or 40,000 tons of plant food. If it could sell this at manufacturing cost plus a ten per cent write-off of the value of the plant plus an eight per cent profit, it would continue manufacturing, and double the capacity of the plant at the end of ten years. But if ever a quarter of the production stayed unsold at these prices the company could stop fertilizer production entirely. In view of the relative inefficiency of the cyanamid process of manufacturing and the growth of manufacturing by the synthetic process it seems unlikely that any great amounts of fertilizer would be sold at the prices to be asked by the company.

The surplus power, above the need for fertilizer production (625,000,000 kwh.) would go to the company, and according to Mr. O. C. Merrill, then Secretary of the Federal Power Commission, this surplus power meant a profit which would be in excess of \$7,000,000 annually with the power plants in full operation. This involved the investment by the Government of further sums sufficient to develop the whole Tennessee River system. Mr. Merrill pointed out that the Government was really being called upon to give a very considerable subsidy.

The present Government investment in power plants is.....	\$55,714,000
The proposed additional Government investment was.....	77,300,000

The total Government investment in power properties alone would be \$133,014,000. Only a small part of this would be devoted to extension of the facilities at the present Wilson Dam. Here the private company would invest \$5,400,000 of their own. Yet this dam alone would produce four times the amount of power needed for their fertilizer requirements. According to Mr. Merrill this surplus energy (1,750,000,000 kwh.) would be worth at least \$2,800,000 a year in clear profits after operating expenses and rentals, and should in itself "be an adequate subsidy for the United States to pay in order to induce private capital to produce fertilizer at Muscle Shoals under restrictions limiting profits thereon to eight per cent."*

But this was not all that was asked by the company. It wanted the Government to put in a further \$69,000,000 in other waterpowers along the river. This drew from Mr. Merrill the comment: "If to secure such private operation it is necessary to grant an additional subsidy of 2,000,000,000 kwh., having an additional sale value of \$4,400,000 per annum, with an additional investment of \$69,000,000, but with no additional investment or obligation upon the part of the lessee, it would seem time for the United States to abandon efforts in this direction and to proceed itself to operate Muscle Shoals. A few years of operation and experimentation on a commercial scale would demonstrate the possibilities of utilization of the nitrate properties, and would put the Government into a position, if it then wished to dispose of the properties, where it could negotiate a business deal instead of sitting in on a poker game."¹⁰

In spite of these facts a bill was drawn to give the company the power resources, and met with considerable support in Congress at first, especially in the House of Representatives. It proposed to develop at Government expense and turn over to a private corporation for its

use a greater power capacity than is in the hands of any one power company in the country. The proposal involved the following installations:

	<i>Horsepower</i>
Dam 2 (Wilson Dam to be expanded)	610,000
Dam 3 (to be built)	250,000
Cove Creek (to be built)	200,000
Steam Plant (at Dam 2)	
existing installation	80,000
new installation	80,000
	160,000
Total	1,220,000

This installation was to be composed of the \$55,714,000 of present Government investment in power plant, \$77,300,000 of new Government investment and \$5,400,000 of company investment in power plant, a total of \$138,414,000.

Just what the value of all this power is, used as a combined system, can be seen from Mr. Merrill's calculation:¹¹

Dam 2 (Wilson Dam), with the steam plant used as an auxiliary, with a capacity of 610,000 horsepower, and a 75 per cent load factor, will produce in the average year, he states, 2,480,000,000 kwh. Of this 78 per cent is primary power and 22 per cent secondary power.

With the addition of Dam 3 the total becomes 3,550,000,000 kwh. Of this 67 per cent is primary and 33 per cent secondary.

When Cove Creek is added in, the total becomes 4,449,000,000 kwh., of which 94 per cent is primary and 6 per cent secondary power. At the very low rate of 3.5 mills per kwh. for primary power and at 2.2 mills per kwh. for secondary power, this means a gross income approaching \$15,280,300 a year. The company proposed to pay an average of 2.6 per cent on the Government investment, amounting to \$3,390,285 a year. The costs

of operation to the private company are calculated at \$3,280,000 a year for the full development. The net income to the company, before payments to the government, would be \$12,000,000 a year. After the payments to the Government it would amount to \$8,600,000 a year. This is net profit. This sum, capitalized at 6 per cent, represents an investment of \$143,442,000, and is a little above the figure given by Mr. Henry Ford as the value of the Cove Creek Dam as part of an interconnected power system. The estimated value of the development is based on waterpower sold after all payments to the Government and all operating expenses are deducted. It is based on prices lower than those available almost anywhere else east of the Mississippi, with the possible exception of Niagara Falls. If the private interests are able to sell the primary power at a rate equal to 4 mills per kwh. instead of 3.5 mills the additional profit is \$2,112,500 a year. If they are able to sell it at 5 mills, one-half cent, the additional profit is \$6,337,500. Again capitalized at 6 per cent these sums represent respectively \$35,194,250 and \$105,582,750. Under the circumstances of such higher charges for power, up to one-half for primary power, the Muscle Shoals gift that is sought by private interests approaches \$249,000,000 in value.

The Muscle Shoals fight may be said to be around the question of whether an outright gift, ranging from \$143,000,000 to \$249,000,000 in value, should be given to the power companies or chemical companies or retained by the Government.

With prospects such as this at stake there has, of course, been a great deal of talk about the value of private initiative, and a very considerable lobby at Washington. At first the power groups, with their well organized system of popular education, carried on the struggle. Then the chemical companies carried it on. It was discovered that they had financed the Tennessee River Improvement As-

sociation in large part. This organization was active in politics. Its treasurer, Mr. Claudius H. Huston, left it to become Chairman of the National Republican Committee. He admitted that he had received \$36,100 from the Union Carbide Company, one of the chemical companies involved in the Cyanamid bid. This was apparently not part of the \$168,706 spent by the Cyanamid Company in its efforts to acquire Muscle Shoals.

It is indicated that there was some kind of a gentlemen's agreement between the chemical and power companies which resulted in the silence of the power industry while the chemical companies were attempting to secure the lease from the Government. The Chairman of the Tennessee River Improvement Association, Col. J. W. Worthington, might write letters saying, "These power ambushes have ceased to have any respect for decency, or facts or merits of the case,"¹² but meanwhile the Vice-President of the American Cyanamid Company was apparently writing to officials of the American Farm Bureau Federation to the effect that under a proposed change in their bid (which would have eliminated Government money from the construction of Dam 3 and Cove Creek) "the power companies would have no reason to be concerned about competitive distribution of power from Muscle Shoals affecting their rate structure," and that the chemical companies, in the event that this modified proposal was accepted, "would agree to keep out of public utility distribution for a period of ten years all the surplus power that the power companies did not desire to distribute over their own lines. Such a definite agreement obviously would not receive the approval of Congress, where it would be attacked as a measure to protect a power monopoly. But if there were any way that the matter could be adjusted by such assurance, with the effect of eliminating the opposition which has prevented the adoption of a fertilizer solution of the Muscle Shoals

problem, the American Cyanamid Company could have no objection to such an adjustment. Any threat of competitive power distribution under this plan would, in practical effect, be completely removed."¹⁵

During the period that the power companies had been active in their attempts to secure the development a great many organizations, including Chambers of Commerce, had been mobilized to influence Congress. The Cyanamid Company secured a valuable ally in Mr. Chester H. Gray, representative of the American Farm Bureau Federation. He was very active on behalf of their bid, and later admitted to a Senate Committee that he played a rôle very similar to that played by the officials of the Niagara Falls Power Company when they secured the aid of the Secretary of War in suppressing the memorandum of the Federal Power Commission on their claimed values. Mr. Gray secured the aid of President Coolidge in suppressing a bill that was being drafted in the Department of Agriculture for Government operation of its Muscle Shoals plant. He also admitted to having persuaded President Coolidge to assign his Secretary of Commerce, Mr. Herbert Hoover, to attempt to iron out the differences that then existed between the power and chemical interests, an undertaking which failed. He also admitted to having dictated the paragraphs concerning Muscle Shoals in one of President Coolidge's speeches. He also persuaded other officials of the Farm Bureau Federation to allow a field worker to lobby against the Norris bill for government ownership in the name of the American Farm Bureau Federation when he was actually being paid \$725.00 a month by the Union Carbide Company. He let the American Cyanamid Company send out circulars advocating the Madden-Wright bill to farm journals and other newspapers as though they came from the offices of the American Farm Bureau Federation. This cost them \$7,000. On the stand he stated that this expense

had been borne by his own organization. Later he changed the record, without permission, to read that it had been borne by his own organization "coöperatively." This seemed to Senator Norris to make his original testimony resemble perjury, and Gray might have been put behind the bars for it except for the fact that the chairman of the committee had neglected to put him under oath.

While these private groups were mustering forces in order to secure the gift from the Government of values ranging from \$143,000,000 to \$249,000,000, and while they were making their mistakes of thinking that Congress was more subservient to their interests and principles than it actually turned out to be, Senator Norris was introducing his proposals, first for a Federal Power Corporation in 1926 and then for a Muscle Shoals Corporation of the United States.

In 1928 a joint resolution for the establishment of a Government owned corporation to develop the power at Wilson Dam and Cove Creek was carried in both houses of Congress. President Coolidge did not veto it, but did not sign it. It had been carried in the last days of Congress, and, the Supreme Court decided later, bills not signed by the President in such circumstances could not become laws. In the campaign of 1928 the Republican candidate for President was asked by the editor of one of the Scripps-Howard papers, Mr. Edward J. Meeman of the *Neus Sentinel* of Knoxville, about his attitude toward Muscle Shoals. The candidate of the Democratic Party favored government operation, and there was a considerable belief around the country that the Government could use the waterpowers there to greater advantage than private companies. This belief was shared by the Scripps-Howard papers, which had endorsed Mr. Hoover. In the course of his Elizabethon speech, Mr. Hoover said: "There are local instances where the Government must enter the business field as a by-product to some great

major purpose such as improvement in navigation, flood control, irrigation, scientific research or national defense. But they do not vitiate the general policy (of private ownership) to which we would adhere."

That afternoon the editor of the *News Sentinel* asked the candidate if the statement just quoted did not particularly refer to Muscle Shoals. "You may say that that means Muscle Shoals," Mr. Hoover replied. Three days later he issued a further statement confirming and clarifying his remarks. In this statement the candidate declared definitely that the Scripps-Howard editor had quoted him correctly in using the words, "You may say that that means Muscle Shoals," and added, "There is no question of Government ownership about Muscle Shoals, as the Government already owns both the power and the nitrate plants. The major purposes which were advanced for its construction were navigation, scientific research and national defense. After these purposes are satisfied there is a by-product of surplus power. That by-product should be disposed of on such terms and conditions as will safeguard and protect all public interest. I entirely agree with these proposals."¹⁴

In spite of this declaration the new administration did not give any support to the Norris bill. It passed the Senate by a large vote. In the House of Representatives it met with opposition from the House Military Affairs Committee, which had, under the chairmanship of Representative James of Michigan, previously been favorable to it. That Committee was entirely reorganized and new members hostile to Government operation were added. In the closing days of the 1930 session they threw away the Norris bill and proposed in its stead a bill giving the President the right to lease the properties to the best bidder. In conference Senator Norris suggested a compromise by which the chemical plants should be leased to the best bidder and the waterpower be developed by the

Muscle Shoals Corporation of the United States. This was not accepted. Action on the development was thereby postponed again. One of the men who had been to the forefront in opposing the measure, Representative Reece of Tennessee, received the unusual distinction of a letter from the President urging his reelection in the campaign of 1930. He was defeated by an independent Republican who entered the campaign during the last three weeks on the platform of Government operation of the development. After this election, in which many of the opponents of the Norris bill had been defeated, Congress carried the Norris bill for Government operation of the Shoals and development of the river.

The Norris proposal for a Government owned corporation is described in Chapter Eight. He did not propose building Dam 3, which the Cyanamid Company had included in its proposals. He planned for the enlargement and development of the Wilson Dam and the Auxiliary steam plant there and for the building of the Cove Creek Reservoir Dam. This latter will act as a means of flood control and navigation control. He stated that sooner or later the Government would probably build it for these purposes even if it developed no power. But as an addition which almost doubles the value of the Government's other property he favored it. In addition he favored the whole development by the Government because it could be expected to act as a yardstick to private development of the other waterpowers of the South. His speeches made constant reference to a similar Government waterpower development, the one in Ontario, and its value as a yardstick to private ownership and operation in the United States. He saw it as the cheapest and most efficient manner of operation of a public business, and desirable on that score.

Outside of the always amazing attempt of the power companies to insist that power is not a public business but a private one, there were other objections to be met. One

was that private development would give the states of Alabama and Tennessee a certain revenue, to the extent that the private companies would act as tax-collecting agencies. This was met by the inclusion in the bill of a provision that 5 per cent of the gross proceeds for the sale of power at the Wilson Dam would go to Alabama in lieu of taxes, and that 5 per cent of the gross proceeds from the sale of power at Cove Creek, in Tennessee, would go to the State of Tennessee. The construction of the Cove Creek Dam would cause a greater power to be generated at the Wilson Dam, and $2\frac{1}{2}$ per cent of the proceeds from this additional power are to go to Alabama and $2\frac{1}{2}$ per cent to Tennessee. This is an arrangement somewhat similar to the one made at Boulder Dam, where the equivalent of taxes is paid to Arizona and Nevada.

A further objection to be met was that the power companies in the vicinity of the development presented a united front, and could refuse to take any of the power, or to carry it over their lines to near-by cities which might desire to use it. This is the same situation confronting the St. Lawrence development in New York State, where about 80 per cent of the power developed in the State is under the control of allied banking groups. New York State is meeting that danger by proposing state owned transmission lines to carry the power down to the metropolitan area of New York City. The Norris Muscle Shoals bill meets it by providing that the Government corporation may do the same thing, build transmission lines to carry the power to the cities needing it.

On March 3, 1931, President Hoover vetoed the Norris bill. He objected to it on the ground that it involved competition with private business, and that it necessarily involved control by Congress. He also cited the War Department as authority for a statement that the plan was not economically feasible.

As far as the estimates drawn from the War Department go the veto is doubtless one of the most careless government documents issued in many years. The best criticism of it was made by Dr. John Bauer, formerly consultant to the St. Lawrence Power Development Commission.¹⁶ The War Department estimated a total cost in power development of \$127,000,000, with an annual interest of \$5,080,000. Dr. Bauer points out that the expense of the Wilson Dam and steam plant, totaling \$42,000,000, has already been incurred and cannot be avoided even if the Government does not go on with the power plan. To test the soundness of going on with the power operation this already unavoidable obligation should be excluded from the calculation. Further, the War Department assigned only \$5,000,000 of the \$41,000,000 development on the rest of the river to navigation, and charged up \$36,000,000 to power. Dr. Bauer properly increased that low assignment to navigation to \$16,000,000. The War Department estimated \$40,000,000 for transmission lines, an arbitrary figure which would mean 3,500 miles of lines, and which is not contemplated in the bill. The transmission feature is optional, and no lines would be constructed if the local companies bought the power at a reasonable price. Dr. Bauer reduces this to \$6,000,000 for major connections with the large systems. These deductions bring the total for power development down to \$40,000,000 instead of \$127,000,000. The interest on that would be \$1,600,000 annually instead of \$5,080,000 annually.

The War Department generously estimated amortization at $1\frac{1}{2}$ per cent on this \$127,000,000. Dr. Bauer follows the St. Lawrence Power Development Commission engineers in estimating 1 per cent, and applies it to the \$40,000,000 properly allocated to new power development. He also reduces operating expenses on the transmission lines from \$550,000 annually to \$100,000 in view

of the cut in estimate of the lines themselves from \$40,000,000 to \$6,000,000.

The total annual cost due to additional power development is thus brought down to \$3,725,000 instead of the \$9,145,000 estimate of the War Department. The three main errors so far in the War Department calculations, that of assigning only five million to navigation, that of assigning forty million to transmission lines and that of assuming that the interest on the forty-two million already invested in power plant would stop if the government did not go on with the development, are not engineering matters.

There was another gross error on the part of the War Department. It calculated that there would only be 466,000 kilowatts available at the maximum, that a load factor of only 33 per cent could be obtained, bringing the average power down to 155,000 kilowatts, and that this would produce for sale an average annual output of only 1,300,000,000 kilowatt hours. Further, a rough allowance for transmission losses brought the net total down to 1,000,000,000 kwh. actually to be sold.

In view of the earlier calculations by Mr. Merrill, given above, of a load factor of 75 per cent, this rough reduction to 33 per cent was the big surprise of the year. On top of that apparently no calculation for secondary power was made. Dr. Bauer uses the same base figures to find 2,000,000,000 kwh. of firm power available and another 1,000,000,000 kwh. of secondary power. He points out that while 33 per cent may represent the average load factor of all the steam plants in that part of the country, it does not represent the load factor of the hydro-electric plants. On an 80 per cent load factor about 2,400,000,000 kwh. could be sold. If the combined primary and secondary gross revenue brought in as little as 3 mills per kwh., totaling \$7,200,000 annually, the total annual cost due to new power development would be covered with

\$3,475,000 to spare. That extra \$3,475,000 would also cover 4 per cent interest on the \$42,000,000 represented by existing power development, and previously excluded from the calculations.

In view of this analysis, it looks very much as if the engineers in the War Department did whatever they were told to do, and did it badly.

There was one further error of fact in the veto which can not be attributed to the War Department. The President stated that it would deprive the states surrounding the river of the taxes they might collect from a private plant. In fact the bill provides that the states shall receive 5 per cent of the gross revenues, which is more than they would collect in taxes from a private plant.

After Congress adjourned in 1931 the President chose a commission to secure leases for the plant. It was a hand-picked commission of the variety later made celebrated by the group chosen to decide that the Navy League was in error in its charges. One of its members, Mr. William A. Caldwell of Jackson, Tennessee, resigned on the ground that he was unwilling to subscribe to a "pre-conceived plan to devote the property primarily to the production of fertilizer . . . I am inclined to believe that the plan referred to omits from consideration . . . the possibility of devoting the property, in connection with any other which may be necessary, to the quantity production of cheap electric power for distribution to the small as well as the large consumer, both rural and urban, having in mind always the necessity of flood control and navigation in the Tennessee Valley."

The President made public the report of his commission on November 19, 1931. The group went back several years and decided that Muscle Shoals should be devoted primarily to fertilizer production. It did see that the construction of Cove Creek Dam would greatly enhance the value of the Wilson Dam at Muscle Shoals

itself. It recommended turning all the power over to a private chemical company, and leaving the President free to negotiate a lease for the whole Tennessee River system. This conclusion about fertilizer production was made in the face of a memorandum to the commission from Dr. Henry G. Knight, chief of the Chemistry and Soils Bureau of the Department of Agriculture, to the effect that other methods for producing nitrogen had been developed which would take care of the demand more economically. The long debate has thus been turned back on itself.

3. *The St. Lawrence*

The St. Lawrence River winds along the Northern border of the United States for some distance before it goes into Canadian territory. On part of the stretch which is international there is a very considerable water-power. It is sometimes estimated at 2,000,000 horsepower, of which 1,000,000 is on the American side, in the State of New York. On the purely Canadian stretch of the river there is an additional 3,000,000 horsepower. The plans for developing all or part of this power have been taking form as the value of waterpower has been growing. In New York State there has for years been a political struggle over the question of private and public development.

The question has been complicated by the fact that large sections of the Western grain growing states have desired to have the whole river developed as a waterway. Their hope is that their grain would get to the seaboard at a lower price than the farmers must now pay for the rail-water haul or the rail-water-rail haul that takes it to the Great Lakes and from the Great Lakes at Buffalo down to New York or Philadelphia. They want the international waterway as a supplement, if not a competitor, to the railways. They hope that some part of the cost of the project can be borne by the power to be gen-

erated on the river. On the other hand New York and some of the other Eastern states are fearful of losing the grain trade that now goes through their ports.

The Government of the United States has been interested in the furtherance of the project. Immediately after the war, when additional transportation facilities seemed of supreme importance, an International Joint Commission was set up by Canada and the United States. In 1921 this body reported favorably on the idea, recommending further investigation by engineers. In 1924 President Coolidge established the St. Lawrence Commission, with Mr. Hoover as chairman, and at the same time Canada set up The National Advisory Committee. These two appointed a Joint Board of Engineers, with three Canadian and three United States members. This board of engineers found the project feasible from an engineering viewpoint. It said that a 25 foot canal could be constructed through the Great Lakes to the sea and all the power could be developed, at a combined cost of around 625 or 650 million dollars. The United States body, the St. Lawrence Commission, reported in 1926, favoring improvement of the river for navigation and power purposes, if an agreement with Canada could be arranged. The Department of State, in 1927, began negotiations with Canada. The Canadian body, The National Advisory Committee, reported somewhat later to its government, and its report was transmitted to the United States in 1928.

Canada was not impetuously eager to advance the project. She said that her railroad facilities were overdeveloped, rather than underdeveloped; her rates for wheat and other commodities coming from the West to the Atlantic seaboard were already lower than those in the United States; since most of the Canadian railroad mileage was owned and operated by the Government, the St. Lawrence project would affect state revenues adversely;

since public opinion in Canada was adverse to the export of power it was essential that the power development on the Canadian side of the river should not be faster than the Dominion required; its expenditures on the channel from the sea to Montreal and on the Welland Canal around Niagara Falls had been so considerable that it did not look with favor upon further heavy investments in waterways; certain problems of power control remained unsettled as between the Dominion and the two provinces of Ontario and Quebec. Finally, an arrangement might be worked out under which the United States might deepen the channel through the international section and in the upper lakes and construct the power development, while Canada would do the work in the purely Canadian section of the river.

The United States made some objections to the proposed division of costs between the two countries, stating that Canada really ought not to have full credit for her expenses on the St. Lawrence channel and Welland Canal, and that she should bear her full share of the power expense. Canada in return insisted on a development of power sufficiently graduated so as not to outrun her capacity to absorb it. Pending negotiations between the Dominion and the provinces affected, further agreement between the two nations has hung fire.

The power companies in New York State have attempted to secure the rights to develop the waterpower on the international section. They own the bank along which the dam and powerhouse must be built. In 1926 they persuaded the State Waterpower Commission to give them a license for the development. Governor Smith threatened them with the legal opposition of the State on all sides, and under this pressure they declined the licenses. In 1930 the Legislature, in which the majority had been consistently hostile to public development of the St. Lawrence, consented to the appointment by Governor Roose-

velt of a St. Lawrence Power Development Commission to examine plans for public development.

The Report of the St. Lawrence Power Development Commission ¹⁶ is a most interesting public document. The Commission found that from an engineering viewpoint the construction of a dam was feasible, and that the costs would be much lower than those usually mentioned. A plant able to produce two million horsepower, 72 per cent of which would be primary power, was recommended. Estimating the sales price at \$10 per horsepower the commission found that the capital cost could be amortized in forty years. It recommended public construction of the generating plant and sale to private companies of the power on a contract basis which would protect the consumers. One commissioner favored empowering the state agency to build transmission lines in case the private companies would not consent to favorable contracts.

The commission found that if the power plant should be built in advance of the international canal, the costs would run as follows:

Works required for power if built in advance	\$151,920,000
Interest during construction.....	18,500,000
Works required to coördinate power and navigation	\$170,420,000
Future works required for navigation.....	\$ 1,127,000
Grand total	\$222,046,000

The Report of the Marketing Board to the Commission found that five billion kwh. of firm power and one and a half billion kwh. of secondary power could be sold from the development on the New York side of the line. New York would pay half of the estimated \$170,420,000 for the power development, about \$85,210,000. The average capital cost was calculated as follows:

	<i>Private</i>	<i>Public</i>
Interest		5.0 %
Cost of money	7.0%	
Amortization		1.0
Taxes	1.5	
Renewal		0.89
Depreciation, renewal and general	2.5	
	<u>11.0%</u>	<u>6.89%</u>

On the basis of this report the Legislature set up the Power Authority of New York in 1931, and Governor Roosevelt appointed to it Frank Walsh of New York City, Professor Bonbright of Columbia University, Morris L. Cooke, who directed the Giant Power Survey in Pennsylvania, Delos M. Cosgrove and Fred J. Freestone. This Power Authority immediately began to enter into negotiations with the Federal Government. The whole question of ownership and control of this power was slowly opened. The debate was spiced somewhat by a general feeling that the Federal administration was opposed to public development and in favor of private development. The State Power Authority of New York was interested in early public development.

Several steps must be taken before this development can get underway. There must be a treaty in regard to the use of the waterpower and any international waterway to be constructed at the same time or later. This whole question is complicated by the expenses already incurred by each government in constructing part of the waterway. Before the treaty can be ready for ratification the Province of Ontario, the Dominion of Canada, the State of New York and the Government of the United States must agree on what is to be done, and how, and who is to have the benefits.

The Power Authority of New York, in its turn, must have a contract for the sale of the electric power and on the basis of such a contract must arrange for the issuance

of bonds for construction purposes. Such contract must be submitted for approval to the Governor, who may spend two months examining it. It must be in accordance with the principle that the power "shall be considered primarily for the benefit of the people of the State as a whole and particularly the domestic and rural consumers to whom the power can economically be made available."

On the acceptance of this contract by the Power Authority and its approval by the Governor the Authority will be authorized to issue bonds to pay the cost of constructing the generating station. They will not be considered as obligations of the State itself.

The contract with the private company taking the power will contain clauses intended to protect the interests of the ultimate consumers as well as the Power Authority itself. Professor Bonbright, a member of the Authority, has stated that the contract form of rate control "bid fair to change the entire basis of rate control by which rates of electrical consumers are determined. . . . The plan of the commission contemplates either a partial or a complete abandonment of rate regulation by a public service commission in favor of rate control by reference to contractual obligations. . . . If the experiment works it will eliminate most of the tedious delays, uncertainties and expensive and time-consuming litigations which brand the American system inefficient."¹⁷

In case the power company groups, the Niagara-Hudson and the Consolidated Gas, affiliated interests, do not choose to take the power at a rate satisfactory to the Power Authority the latter will be faced with the decision of building its own transmission lines down to the large cities of the Hudson Valley. Or the Legislature might declare the existing transmission lines to be common carriers and authorize that they be supplemented by only such new lines as are necessary to furnish an effective link between the remote section of Northern New York State

and the industrial section in the Hudson and Mohawk Valleys.

During the time taken to discuss the Power Authority and to bring it into being, the private companies grouped together more and more closely. By 1930 several companies under one allied banking control had over 80 per cent of the power production of the State in their hands. This put the private companies in the position where they could refuse to purchase any power generated at the St. Lawrence, and have no fear that any important competitor would take it. It put the State in the position where it was forced to consider the possibility of constructing transmission lines itself to take the power down to the cities wanting it.

The New York situation is further complicated by the fact that the State has rights and claims to waterpower not yet used by private companies at Niagara Falls and on some of the interior rivers of the State, amounting to about another 1,000,000 horsepower. The development of some of this power might increase greatly the value, either of private steam power plants or of the State's other power resources, by furnishing standby power at a low expense. Its development would thus convert that other power into firm power, good twenty-four hours a day, and increase its value correspondingly, much as the value of the Wilson Dam at Muscle Shoals is increased by the development of Cove Creek. A Legislature favorable to the power companies put through a scheme of development which would give the advantages of such development almost entirely to the private companies.

In *Water Power in New York State* Mr. A. Blair Knapp has pointed out the significance of the River Regulating Districts which are allowed in New York State. To some they have seemed to be the equivalent of power districts. This is not the case. These districts may build dams, and assess the cost of them to both the private and

public property affected. But the State receives in return for the use of its property only 6 per cent of its value. Much of this power is on state forest reserves. The land is valued at \$10 an acre. One project was proposed on the Salmon River in the Adirondack reserve. Its development would have increased the primary horsepower of the private plants along the river and in the vicinity to the extent of 120,000 primary horsepower, which meant a net gain to the private companies ranging from \$158,000 to \$287,000 a year. It involved the use of 1,290 acres of state land, valued at \$10 an acre. The 6 per cent return on the value of this land, which was all the State would receive, would be \$774 a year. Attempts to increase the income to the state have so far been defeated by the power companies.¹⁸

New York State, with the richest waterpower resources of any state in the East, is handicapped in their development by the fact that it has hampered and restricted the municipalities so much that very few of them have developed municipal power systems. Even if it develops its waterpowers it will have to sell to the private companies which control the production of the State. For lack of cities able to purchase the power generated by the State, or free to develop it themselves, it will have to turn over some of the waterpowers to the private companies, or, failing that, to make terms advantageous to them. The difference can clearly be seen by a contrast with the Boulder Dam development. In California the cities had their own power systems developed to the extent where they were willing and eager to take all the Boulder Dam power, and to distribute it without profit to the citizens in that section of the country. In New York State, with only a few exceptions, most of the power will be taken by private companies. The State thinks it can force these companies to sell the power at a limited profit. The com-

panies are sufficiently in control of the distribution systems to refuse to make any such terms. They have the power to convert the State's waterpower plants into white elephants. Partly to meet this situation the Governor's appointees to the 1930 Commission on Revision of the Public Service Commission Laws recommended that municipalities be authorized to serve the surrounding territory, to form power districts, to undertake public competition and to replace private plants with municipal plants at the end of the franchise period of the private plants without obligation to purchase the often antiquated private plants. The cities are not allowed to exercise any of these rights now. The fact that they have been restricted in their exercise for so many years now creates a situation where the private companies have the advantage in any development of the State's waterpowers.

4. *The Development of the West*

Power projects of some importance have been developed under the Reclamation Service. The largest of these, now under control of the Salt River Water Users' Association, developed 188,000,000 kwh. in 1929. The outstanding structures are the Elephant Butte Dam in New Mexico, the Roosevelt Dam in Arizona, the Coolidge Dam in Arizona, the Pathfinder and Shoshone Dams in Wyoming, the Arrowrock Dam in Idaho and the Tieton Dam in Washington.

The Reclamation Service was established in order to develop an independent farmer population in the West, and to increase the value of the Government lands in that part of the country. It functioned at first during a period when there seemed to be no likelihood of overdevelopment of agriculture. It was based on the financial principle of loaning Government money without interest for the development of these irrigation projects, with the expectation that the farmers settling on them would repay

the entire cost of the development to the Government within ten or twenty years. With the over production of the agricultural products in the years following the war the irrigation projects have failed, in many cases, to pay their obligations.

The Reclamation Service was essentially supposed to improve the value of public lands. Actually some 513,163 acres have been improved and 2,951,987 acres of private land have been improved.¹⁹ The special committee of advisers on the workings of the service reported that "in many cases the owners of the land capitalized the Government expenditures and the liberality of its terms of repayment by selling the land to the settlers at much higher prices than could otherwise have been obtained. The benefits of the reclamation act, therefore, went in such cases almost entirely to these speculative owners, and an obligation of paying interest on inflated land prices was imposed upon the settler, in addition to his other burdens."²⁰

The Reclamation Service under the direction of Dr. Elwood Mead, undertook the investigation which finally resulted in the proposal to build Boulder Dam, and its construction is being carried on by engineers of the Bureau of Reclamation. It is now being asked by the State of Washington to undertake supervision of an irrigation project in the Columbia River basin, where 1,883,000 acres are believed to be irrigable, an area equal to that of the States of Connecticut and Rhode Island. President Hoover and Secretary of the Interior Wilbur have been quoted as favoring the project. An investigation is being made, and its report is expected to be presented to Congress in 1932. Doubtless the unfavorable financial circumstances of the present agricultural areas of the country will raise the question of social policy as to developing further agricultural lands.

To meet this objection it is proposed to develop the

land slowly, a quarter of the area at one time. The development is estimated at present to cost \$150,000,000, a little less than Boulder Dam and the All-American Canal. The land lies between Yakima and Spokane, between the Columbia and Snake Rivers.

The power possibilities of the development are considerable. They are on top of the 1,125,000 horsepower which Seattle expects to develop on the Skagit River. Two plans for development of power have been proposed. One is the Pend Oreille-Spokane plan, which would bring the water down by gravity through a long canal and develop only 145,000 horsepower. The other proposal, called the Grand Coulee Lake plan, involves the construction of a huge reservoir at Coulee, with an estimated power development of 1,250,000 horsepower, of which 450,000 horsepower would be used for pumping the water to the lands. This plan is strongly opposed by the power companies. In both cases the water resources of several states are involved, and the aid of the Federal Government appears to be necessary.

Citizens in the states of Washington, Oregon and Idaho have organized to form the Umatilla Rapids Association to urge power and reclamation development on the Columbia River. Preliminary reports indicate that a dam can be constructed for \$45,000,000 to generate 420,000 primary horsepower at a cost of 1.2 mills at the powerhouse. This is less than Boulder Dam power will cost. The irrigable lands are estimated at between 94,000 acres and 121,000 acres. The estimated cost of the irrigation development is \$16,579,000.²¹ While this project does not conflict with the plans for development of the Columbia River basin, it does encounter the same difficulties as that project and the St. Lawrence project in New York State encounter. There is no assurance that the private companies will take the power generated, even if it is cheaper than their own power at present or their own

future supply. This is one of the unsatisfactory results of un-unified and competitive planning of power development. It is a strong argument for unified planning under some agency which will be interested in the progressive development of the whole country.

In these various developments at Boulder Dam, Muscle Shoals, the St. Lawrence and the Columbia River the country may secure a series of yardsticks by which it can measure the efficiency of the private developments and the value of their loud claims to public service. Where municipal plants have been large enough to be successful the influence of their low rates has extended far beyond the territory they served. Where municipalities have established an interconnected system, as they have done in Ontario, their influence has stretched across the national border into the United States, and has confronted the private power systems of this country with a contrast in costs and rates which is a challenge to all their claims. The utilities have hired many people to discredit the Ontario system. But they have not succeeded in destroying its challenge. They are influenced by it perhaps more than by the whole system of regulation, which is something they have managed to handle to their own advantage. There is no reason why Government operation of our remaining waterpower resources should not add to this challenge to their efficiency and claims of service.

NOTES

¹ Dr. Elwood Mead, Commissioner, Bureau of Reclamation, *New York Times*, July 13, 1930.

² Paul Y. Anderson, *Nation*, February 12, 1930.

³ *New York World*, February 18, 1930.

⁴ Los Angeles estimate quoted by Ruth Finney, *Nation*, December 11, 1929.

⁵ Quoted in *Power Control*, Raushenbush and Laidler, Republic Publishing Co., 1928, p. 240. Statement by the Tennessee Electric

Power Company to the Chief of the Army Engineers, Hearings, Joint Committee on Muscle Shoals, 69th Congress, p. 689.

⁶ Quoted by Representative Lister Hill, *Congressional Record*, July 7, 1930, p. 12991.

⁷ Hearings, Joint Committee on Muscle Shoals, 69th Congress, p. 327.

⁸ Senate Report 672, 69th Congress, pp. 10-11.

⁹ *Congressional Record*, April 2, 1930, p. 6624.

¹⁰ *Idem*.

¹¹ *Idem*, pp. 6626-27.

¹² Reported *United States Daily*, March 15, 1930.

¹³ *New York Times*, February 28, 1930.

¹⁴ Quoted in *Congressional Record*, April 10, 1930, p. 7114, from an editorial in the *Chattanooga News*.

¹⁵ "Muscle Shoals and the President's Veto," Dr. John Bauer, *National Municipal Review*, April, 1931.

¹⁶ Submitted January 15, 1931.

¹⁷ Interview in the *New York Evening Telegram*, January 19, 1931.

¹⁸ A. Blair Knapp, *Water Power in New York State*, School of Citizenship, Syracuse University, 1930.

¹⁹ Senate Document 92, 68th Congress, 1st Session, p. 133. Report of the Committee of Special Advisors on Reclamation to the Secretary of the Interior.

²⁰ *Idem*, p. 38.

²¹ Report of E. R. Crocker, assistant engineer, U. S. Reclamation Bureau, quoted in the minutes of the Umatilla Rapids Association, December 20, 1924.

CHAPTER SIX

THE HOME GUARDS

WHILE the state defenses against the utilities were being broken down, and the first skeletal lines of a national defense blocked out, the home guards have kept a great number of municipally owned plants busy furnishing service at cost.

The legal limitations imposed on the cities which have made municipal ownership a relatively unimportant factor in the situation were discussed in Chapter Three. These legal limitations have made it impossible for the cities to swing along with the new technical developments in the industry. The question arises as to what extent single municipal plants can be successful today. The propaganda of the power companies has been to the effect that they can never be successful. It has been contradicted only in the cities having large municipal plants.

An answer to the question can be found in a report by the Special Committee on Generation and Distribution of Electric Power of the National Association of Railway and Utility Commissioners. The Committee under the chairmanship of Commissioner Adolph Kanenberg of the Wisconsin Railroad Commission, made its report in 1928. It challenges somewhat sharply the current impression that the savings possible through large systems are much greater than those in relatively small municipal systems.

"The general trend of all costs over the fifteen year period has been downward. . . . The decreases have been, usually, greater for the small systems than for the larger ones, so that the margin of advantage of the large over the small systems has contracted noticeably. . . ."

In the field of costs connected with distribution systems

we find a condition contrasting with the variations which are the rule in generating costs. . . . Looking at each of these expenses separately we discover a remarkable standardization of unit cost for all systems from the largest to the smallest. . . . It appears, therefore, that a small distributing system can be operated at a cost comparing favorably with that of a large one.

Comparison of systems and plants in any given period points strongly to the conclusion that the decisive factor controlling the cost of generation is volume of output. . . . This relation of output to cost enters into the determination of the size of steam plants necessary to generate cheaply enough to compete at the present time with the huge central stations of super-power systems. . . . The data show that, in the range of smaller outputs, costs drop rapidly as output increases, but that there soon comes a change in this rate, and that beyond the point of this change the reduction with increase in output is very gradual. The transitional point falls at or near the volume of 8,000,000 to 10,000,000 kwh. per year."¹

In other words, municipal ownership of distribution systems is apt to be as efficient and cheap as large-scale private distribution. Also municipal ownership of generating plants in cities of over 20,000 population is not greatly handicapped in competition with large private super-power systems. The report continues:

"The conclusions regarding generating and distributing costs have an interesting bearing on the question of municipal ownership of electric utilities. The really small independent generating and distributing system handling under 5,000,000 kwh. only, if operated by waterpower, can run at a cost comparable with service from large systems. A small system using steam power, however, has too high a generating cost to be economical under present conditions. For the large number of small cities, then, which lack the gift of an adequate waterpower, there remain several possibilities for securing electric service at low cost.

One course is to be served entirely by a super-power system, privately owned, or possibly state-owned in the future. Another is to own and operate only their distributing systems for themselves, since the operation of a small distributing

system costs approximately the same as a large one, and purchase their energy from a super-power transmission line, either privately or state owned. Still another plan, if the laws and the constitution permit it, is for several communities to form a power unit and own and operate a generating plant and transmission system to supply energy to the community distributing systems, which might be owned either by the power unit or by the community alone.

This device would secure complete public ownership of the electric utility, combined with a cost that is in line with the cost of service available by other methods. . . . Since steam plants need an output of only about 10,000,000 kwh. annually to produce energy at reasonable cost, the power units could be modest in size, combining only three or four communities with a population of 5,000 each. These should be easily formed and easily arranged to cover territories geographically most suited for such units."

The conclusions of this report to the National Association of Railway and Utility Commissioners, a group never notable in its advocacy of anything but private ownership and regulation, are to the effect that small distribution systems are as efficient as large ones, that small water-power plants are likely to be as economical as super-power, that municipal generating systems in towns over 20,000 population are economical and that interconnection between smaller communities under joint ownership is likely to be at least as efficient as private ownership. These conclusions are at complete variance with the customary utility propaganda.

The larger cities have been in no doubt about the success of their municipal plants. In commenting on this fact Senator Norris took the illustration of Tacoma, Washington, and said: "Tacoma is showing the country what a city can do for its people." Current, generated by waterpower, is supplied to the consumers so cheaply that the people of Tacoma can heat their homes with it. He cited the case of a man using 2,249 kwh. in December, 1928, at a cost of \$16.55. The Insull rate for steam

power in Chicago for such service is \$98.97. Allowing 3 mills per kilowatt hour as the difference between water-power and the most efficient modern steam plants (\$6.75), the Tacoma cost would become only \$23.30, and the difference against Chicago would become \$75.67 on the monthly bill. Tacoma now pays 7.5 per cent of the income of its plant to the city in lieu of taxes, so that no correction need be made for this item in the comparison. Senator Norris pointed out further that farmers outside the city had formed non-profit, non-stock companies and bought power from Tacoma at the rate of 5 cents per kwh. for the first 20 kwh. used and at 1 cent after that. "This is cheaper than the Alabama Power Company would give electricity to a city of 100,000 people."²

An interesting commentary on some often disputed points is made by Mr. Homer T. Bone, who is connected with the Tacoma plant:

"The operating costs of the Tacoma light system are lower than those of its private competitors in this State. It does not carry in this account the inevitable political contributions so necessary to the program of the private combines. And it pays union scale of wages to its men, which, incidentally, are considerably higher than those paid by its private opponent.

Underlying the principle of public ownership is the sane and healthy practice of retiring any debt against the plant, in large yearly installments. . . . This practice should be contrasted with that of private companies which never retire their stock and bond issues. If a bond issue is retired, it is generally a refunding process which leaves the debt intact. . . . Stocks and bonds of private power companies constitute a perpetual debt upon which the public must forever pay interest and dividends. Systems of private financing do not permit of any relief from this burden. The defects are inherent in the system of private financing. . . ."³

The success of the Tacoma and Seattle plants in Washington has had its effect on the neighboring State of Oregon, which in 1930 elected an independent for Gov-

ernor who ran on a municipal ownership program. It also passed a constitutional amendment for power districts at the same time. The Seattle plant, which has had the services of J. D. Ross as Superintendent of Lighting, has a remarkable rate and financial record. Its rates are half of those charged by the private power company competitor just across the street at the city limits.⁴ Mr. Ross reports: "The rates throughout the State of Washington increase as the distance from Seattle increases, showing the great influence of Seattle rates in all other parts of the State. . . . The demand on the city plant has doubled every five years in the last 20 years and is now expanding at a still faster pace. In order to meet the demand the City is rushing the building of the second unit of the Skagit project of 1,120,000 horsepower potential capacity. . . . At the present rates for light and power the 1,120,000 h.p. of the Skagit will bring \$50,000,000 every year to the citizens of Seattle either in cash or in further rate reductions as they elect. . . ."

Here, as in Los Angeles, there was competition with a private company. The threat of a city plant brought the rates down from 20 to 12 cents. The city started in, with an 8.5 cent rate and the company came close to it, meeting it in 1911. After that the city made five rate changes, the company meeting all of them. The rates are now 5.5 cents per kwh. for the first 40 kwh. monthly, 2 cents for the next 200 kwh. and 1 cent for all over 240 kwh. The company charges higher rates outside of Seattle and thus makes up its losses in the city. This plant has been a leader in the field, using a transmission line of 45,000 volts when that was the highest transmission pressure in the world, and was the first to use gas-filled lamps and to discard arc lights. The city is handicapped by the expense of competing with the private company for customers, and states that without such competition it

could eliminate future underground construction duplication that will cost each one \$3,000,000.

The Los Angeles plant is another of the large and successful municipal plants which have led neighboring cities to consider the advantages of public ownership. It has had the engineering services of Mr. E. F. Scattergood. The financial results of eleven years of operation are summarized by Bird and Ryan: "The City of Los Angeles has during that period acquired a \$71,000,000 light and power system in which it has an equity of \$24,133,000—\$3,736,000 of this being the unpaid remainder of funds raised from taxation for the purpose of financing original development and losses during the early operation period, and \$20,397,000 from surplus earnings. On this investment the city is now earning net profits of over \$3,000,000 a year."^a

In contrast with the private companies the municipally owned systems in California are required by law to pay off each year a part of the principal in outstanding bonds. This accounts for the large equity in the Los Angeles plant now free from interest charges. In 18 smaller municipalities the same authors found a book value of the plants of \$4,692,043, covered by a bonded debt of only \$719,135, thus giving the cities involved \$3,966,577 worth of plant free from interest charges. During the year 1928 one of the 18 plants received \$6,330 from city taxes, and six of the plants on which figures were available made contributions to their cities of \$3,405,636. The Pasadena municipal plant, which has had the engineering services of Mr. C. W. Koerner, shows a similar situation. The surplus and reserves are \$3,382,093. The bonded debt is only \$734,000. Assemblyman Alvin Reis reported that in Wisconsin the debt against municipal utilities was only 12.7 per cent of the investment, and the debt against private companies was 88 per cent.^a

Many smaller plants elsewhere in the country have been

very successful. The success of Jamestown, N. Y., has been mentioned before. Its steam plant is underselling the Niagara power of one of the super-power companies. The Borough of Wallingford, Conn., under the direction of Mr. Alfred L. Pierce, has not only kept rates lower than most of the privately owned plants in the State, but has built up assets of \$462,074, with a bonded debt of only \$10,000 outstanding against it.⁷ The plant in Springfield, Ill., under the direction of Mr. Willis J. Spaulding, has rates lower than most of the private companies in Illinois and earns a considerable yearly profit. The Cleveland municipal plant forced a very considerable reduction in rates in that city. It is in competition with a private company. It appears to have fallen into the hands of people who are not interested in expanding its services, and instead of soliciting customers in competition with the private company as Seattle and Los Angeles have done with great success, it has dismissed many of its solicitors. The city manager was ousted by the machine in 1929. In spite of this policy of non-competitiveness the plant has an equity of \$6,765,000 in an investment worth \$13,870,000, added in spite of its low rates. In recent years the City of Lansing, Mich., has taken its place among the big municipal producing plants of the country.

In Pennsylvania the growth of municipal ownership has been definitely stopped by a law providing that municipalities have no power to condemn electric light plants. The counsel to the House Committee on Investigation of the Public Service Commission, Mr. Harold Evans, reported to the effect that the larger municipal plants in the State had been successful. He said:

"Officials of some of the larger municipal light plants in Pennsylvania testified before the committee. Mr. Mowrey, Manager of Utilities of Chambersburg, stated that the borough had a total budget of \$306,813 and produced by revenue from taxation only \$44,082. The difference is covered by the

profits made from the light and water plants. The profit from the electric light plant in 1930 was \$34,101, after operating expenses and depreciation had been deducted and after free light and power to the extent of \$36,637 had been furnished to other departments of the city. The rates run from 7.2 cents to 3.6 cents for lighting and the average domestic light charges, according to Mr. Mowrey, are 5 cents per kwh. The Borough Manager of Aspinwall, Mr. Lea, stated that the budget of \$100,000 was practically all covered by the profits of water and light departments, amounting to about \$88,000. The rates are 6 cents after discount for the first 800 kwh.

The Borough Manager of Ellwood City, Mr. Monroe, testified that the borough sold domestic light at a rate of 5 cents per kwh., and announced new rates as of June 1st of 5 cents for the first 30 kwh. and 4½ cents for the next 170 kwh. On top of the low rates a profit of \$71,563 was made in 1930. The Burgess of Middletown, Mr. McNair, testified that the borough bought its power from the Metropolitan Edison for one cent per kwh. and sold it to domestic consumers for 6.4 cents and less, and on top of these low rates made an annual profit between \$20,000 and \$30,000, after deductions for sinking fund appropriations." 8

This Committee also heard evidence about the effect of municipal operation in other states. The Counsel's Report continues:

"Testimony was offered by Chairman, Atwill of the Massachusetts Department of Public Utilities to the effect that there were 30 to 40 municipal gas and electric plants in Massachusetts and that their existence was helpful to regulation. After citing certain low municipal rates he said:

"It is very helpful because a private company says, we cannot sell around five cents, and you naturally are able to turn to them and say, you ought to be ashamed of yourself."

Q. When you speak of 4½ cents you mean the top step? A. The maximum,—you ought to be ashamed of yourself, you have been telling me that a municipal plant was inefficient, filled up with politics, and you with all your experience and with an absence of politics, cleanliness, elaboration, cannot make 5 cents, we cannot understand it. Of course, it is helpful; it makes the private owner ashamed that he cannot approach the public owner." 9

Testimony from Ohio was given by Mr. Roy Husselman, engineering consultant to the Committee and formerly engineer of General Construction, Division of Light and Heat of Cleveland, pointed out the effect of municipal freedom in Ohio. He said:

"We do not have many rate cases in Ohio, except for some few telephone and natural gas cases. We hardly ever have an electric rate case, because the cities of Ohio have home rule. The Constitution of the State provides that every municipality may own and operate a municipal plant. The municipal councils of the cities are the fundamental rate-making bodies. They can pass an ordinance fixing and establishing the rates that any utility company may charge for service. If the company accepts that rate it becomes a contract and a binding contract for the period of the ordinance. If they choose not to accept it they can appeal to the public utilities commission. Then they have a rate case. Very seldom is there a case going to the federal court out of the utilities commission."

We haven't had a large electric rate case to my knowledge for a good many years, because,—I am saying this with knowledge, the municipalities have found that competition was a better regulation than the commission, and the threat of competition is as good a regulation as they need, and if the municipal authorities find that they are paying too high a rate, in place of making a rate case before the commission, they propose to build a municipal plant, and, by the way, the Constitution of Ohio also provides that this plant may be financed by the sale of mortgage bonds, which are not a liability upon the taxpayers, which are over and above the limit of indebtedness prescribed by law." 10

Each one of the big municipal enterprises has fought against the heavy odds of private company competition or obstruction. For example in the Los Angeles bond campaign of 1923 the private power companies were very active and the Bureau of Power and Light spent \$12,000 in advertisements to counteract some of their statements. Suit was immediately brought by a friend of one of the power companies against such use of funds and the Bu-

reau was ordered to restore the funds to the treasury. The effect of the ruling was that while the power companies were free to spend unlimited amounts in propaganda the Bureau had no right to spend a cent. A very different decision was rendered in Winnipeg at about the same time on the same point. The court there held that the municipal power plant had every power to expand its business, and advertising was a proper use of such powers.

The old question of corruption by public utilities still remains. In 1930 the City Manager of Woodward, Oklahoma, Mr. H. M. Renner, said:

"Two corporations wanted to buy the light plant. One offered something better than a half million dollars. There was a legal question involved as to whether the old commission had the right to sell the plant without a vote. In the general confusion which resulted, we know bribes were taken and given, and votes were sold at so much per head over the counter the same as so much merchandise. I wish again to emphasize the unscrupulous tactics which corporations are using, the frenzy with which they are fighting the spread of municipal ownership."¹¹

The activities of some of the Foshay men in similar transactions have been mentioned before.

The legal obstacles shoved up against the cities are, however, equally effective. The situation in Texas is not untypical of several other states. It is described by Mr. C. A. Winder, Supervisor of Public Utilities at Fort Worth:

"Some cities are fortunate in having a franchise whereby the utility, if there is a question about rates, can be taken over by the municipality at a fixed price. . . . We do not have that arrangement either in Fort Worth or any other cities in Texas. If we want to take over a utility for municipal operation, it must be done by agreement or condemnation. If we do it by condemnation, we are handicapped if the city does not agree with the board of condemnation on the price. Then we have to file with the board double the amount set, take over the utility and settle the question later

as to valuation for sale purposes. The only recourse left is for the city to compete with the private company and that is uneconomical."¹²

The Texas situation was further described by Mr. Joseph F. Nichols of Greenville, Tex., before the 1929 convention of the League of Texas Municipalities. He said, after sketching the social influence of the power combinations:

"Government and municipal ownerships are the Verdun to the battle fronts of the armies of the Power Trust, and as long as the Government and municipal ownership lines are not weakened or destroyed, the onward march of the power trust forces 'shall not pass' and will not pass. . . ."

During the 1929 Legislature of the State of Texas, the Power Trust sought to obtain legislation to destroy, hamper or prevent municipal ownership. These interests had purchased, largely at extravagant prices, the great majority of the plants in Texas, leaving only a comparatively small number of municipally owned plants that had not been taken over by them. Hence, if the power interests could destroy, curtail or seriously hamper any right of any municipality to install and operate a municipal plant in competition with the power group plant, the conquest of Texas would be most complete. . . ."¹³

In 1929 some of the Illinois towns sent out a cry for help to their fellow municipalities in that State. The cities of Mt. Olive and Staunton, which have had municipal plants for over twenty years and never granted any private franchises were faced with the alternative of buying power or selling their plants. They were offered several times the value of the plants, but realized that any price paid would be capitalized by the private companies, and they would have to pay a 7 per cent return on it. They refused to sell. Then the Illinois Power and Light refused to sell current to them. They had to look elsewhere, and finally bought off-peak current from some neighboring coal mines. The private company brought suit

to enjoin this purchase from the coal mines, alleging competition. It brought this suit without having any franchises in the two cities. In Nebraska the Nebraska Power Company has been active buying up the small town distributing systems fed by current from larger municipalities. The *Electrical World* reports that in one case it paid \$110,000 for a plant, in North Bend, which the City of Fremont, which had been selling it current, claims is worth only \$30,000. Fremont charges that the Nebraska Power Co. simply desired to cancel the Fremont contracts, thus causing heavy damages. According to the trade organ: "In power circles it is said that this method is necessary to fight the municipal plant monopoly planned through a state wide hook-up."¹⁴

To judge success of municipal plants in comparison with the larger and connected super-power systems is a difficult process. The latest available figures on a national scale are from the Bureau of Census. In its report for the year 1927, published late in 1930, it gave the average private company charges for domestic service at 6.9 cents per kwh. and the municipal charges at 5.5 cents. The small light and power service of the private companies averaged 4.2 cents, and the large power service 1.4 cents per kwh. The two classes brought the municipalities a revenue of 2.5 cents per kwh. The private companies averaged 5.1 cents for street lighting, and the municipal plants averaged 2.4 cents. On the item reported as "undistributed by class of service," the private companies received a revenue of 4.8 cents per kwh., and the municipal plants 5.6 cents.

In such a rough comparison of private and municipal rates several considerations should be remembered. One is that most municipal plants are forced to set aside a certain share of the earnings for retirement purposes,

which the private companies are under no obligation to do. Their rates include this contribution from the consumers to freeing the plant from debt. Another consideration is that most municipal plants make a contribution to the cities in the form of rates for street lighting lower than the private plants charge. In many cases the municipal plants contribute to the city funds. On the other hand it should be remembered that the private companies act as tax collecting agencies for the states and cities. They turn over an average of 8.5 per cent of their gross revenue in taxes.¹⁵ On a 7 cent rate this is about 6 mills, a little over half a cent per kwh. Comparison of modern steam plants with waterpower plants should take into account a further differential of about 3 mills per kilowatt hour. Cities of about the same size should be compared. A rough balance may be drawn:

<i>Municipal Plant</i>	<i>Private Plant</i>
Rates include retirement of debt	Rates include taxes
Low charges on street lighting	
Financial contributions to city in lieu of taxes	.....
Water power often cheaper	Steam power often more costly
Steampower often costly	Waterpower often cheaper

While exact comparison of rate advantages at present involves taking these and other items into consideration, some preliminary evidence can be offered for the states of New Jersey, New York, Kansas and Massachusetts. The following figures are compiled from the rate sheets filed with the state commissions in 1929 for domestic

lighting. They show a difference in favor of the municipal plants as far as the small consumer is concerned.

TABLE VI¹⁰

	Private 40 kwh. over Public 80 kwh. over Public	
New York (Cities under 25,000)		
Private	\$3,621	18.3%
Municipal	3,059	
Kansas		
Private	3,188	12.0%
Municipal	2,845	
		\$5,059 .4%
		5,039
Massachusetts		
Private	2,995	15.6%
Municipal	2,590	
		5,189 2.3%
		5,071
New Jersey		
Private	3,485	5.856

It will be seen at once that the rates of the municipal plants are somewhat below those of the private companies, in spite of the fact that they are, for the most part, in the smaller cities, and are compared with state-wide private superpower systems, not only operating in the large cities in each of these states, but gaining all the efficiencies of interconnected load. In New York State, where figures were available only for the users of 40 kwh. a month, the comparison is more accurate because it is for cities of about the same size. The difference shown is larger than in the other states where small municipal plants are compared with large private ones, as well as small private ones.

It also stands out that the rates in Kansas and Massachusetts where there are a considerable number of efficient municipal plants, are lower, even for the private plants,

than in New Jersey where there are almost no important municipal plants. It appears to be *prima facie* evidence that municipal plants have a very definite effect on the rates of near-by private plants, a contention which is also supported by the experience in the West Coast states.

While the municipal plants, and especially the larger ones, seem to be performing their social function of doing a public business at a lower cost, their real service may be expected when they are free to follow the engineering developments in the industry and combine into interconnected public power systems. Some evidence as to their success at this is available.

NOTES

- ¹ Report of the Special Committee on Generation and Distribution of Electric Power, Proceedings of the 1928 Convention of the National Association of Railway and Utility Commissioners, Hon. Adolph Kanneberg, Chairman.
- ² Senator George W. Norris, *Congressional Record*, June 5, 1930.
- ³ Quoted in *Congressional Record*, May 26, 1930.
- ⁴ Annual Report, Seattle Department of Lighting, 1928.
- ⁵ Bird and Ryan, *Public Ownership on Trial*, p. 114, 1928 audits.
- ⁶ Transcript, hearings of the New York State Commission on Revision of the Public Service Commission Laws, p. 4161.
- ⁷ Detroit Convention of the International Association of Municipal Electricians, 1925.
- ⁸ Final Report of the Committee of the House of Representatives on Investigation of the Public Service Commission, Pennsylvania, May, 1931. Report of Counsel.
- ⁹ *Idem*, Record, p. 4155.
- ¹⁰ *Idem*, Record, pp. 3131-2.
- ¹¹ H. M. Renner, *Public Management*, March, 1930.
- ¹² C. A. Winder, *idem*.
- ¹³ Quoted in *Congressional Record*, June 8, 1929, pp. 2675-6.
- ¹⁴ *Electrical World*, February 22, 1930, p. 380.
- ¹⁵ Compare p. 102.
- ¹⁶ From "Government Ownership and Control," H. S. Raushenbush, Vol. CXLIX, *Annals of the American Academy of Political and Social Science*, May, 1930.

CHAPTER SEVEN

THE CITIES LEAGUE TOGETHER

TWENTY years after the private power companies began interconnecting cities, some of the cities are freeing themselves sufficiently to do the same thing. In California, Nebraska, Washington and Oregon they have secured permission to establish power districts. In Wisconsin a constitutional amendment is before the electorate. In New York it was recommended by the Governor's appointees to the investigating commission of 1930 and by Governor Roosevelt. In Pennsylvania Governor Pinchot in 1926 supported a plan for regulation which involves such power districts. The belief of its advocates is that the people can gain the chief advantages of the engineering in the industry only by the creation of public super-power systems. They have the remarkable success of an operating league of municipalities in Ontario to support their contentions.

The Pennsylvania proposal for "Giant Power" in that state resulted from a survey under the direction of Mr. Morris L. Cooke, and attracted a certain amount of attention in the East. The first proposals of the plan were directed toward an improvement of the regulatory system. The private power companies were asked to accept changes in their charters which would allow the fixing of rates on "net investment plus additional fair value, if any, at a rate reasonably sufficient from time to time to attract into the enterprise new money in sufficient volume to meet the needs of its public service duty."¹ It will be noted that this had some similarity to the proposals made by the Massachusetts Department of Public Utilities a little later.

The sanctions invoked were also very much the same. In case the private power companies did not accept the changes in their charters which would allow such regulation, then they were to lose certain privileges, that of exercising the right of eminent domain, that of acquiring ownership in other electrical utilities, that of beginning the exercise of any franchise, that of renewing their charters and that of selling or leasing their property to any other electrical utility. In other words they were restrained from using further state consent to expand.

The plan was interesting also in that it resembled the British General Electricity plan of 1926. It proposed a certain amount of social control over the development of the industry. It included the incorporation of generation and transmission companies for a 50 year period. Each such "Giant Power Company" would become a common purchaser and seller for the transmission district in which it was located. In this way it arranged for a pooling of power with the transmission lines as common carriers. These companies, too, would be held to a fair return on their actual investment.

The plan was supplemented by a proposal which is of more interest at this point. Electric districts might be incorporated and have the power of borrowing up to 2 per cent of the valuation of the property covered by the districts, and more than that upon majority vote of the electors in the district. These electric districts could interconnect with any company's transmission lines, and have the right to buy power at a fair price. Provision was also made for mutual electricity companies which would be limited to 8 per cent dividends and would have power to construct and operate electric facilities and to condemn property and to distribute power to people who were not stockholders. It was expected that these two plans would be used largely by farmers in the rural areas, for at the time they were proposed, in 1926, only six per

cent of the farms in Pennsylvania had electric service. All these Giant Power proposals were beaten by a hostile Legislature.

In Nebraska a power district bill was carried, but was later declared unconstitutional on the ground that the Legislature had delegated some of its legislative powers. It was repassed on popular initiative in 1930 to avoid this difficulty. In 1930 the States of Washington and Oregon carried initiative petitions for the formation of power districts.

According to the Nebraska law there must, first, be a petition signed by at least 25 per cent of the electors in the proposed district. In the Washington law 10 per cent of the electors must sign such a petition. In Nebraska the petition then goes to the District Court, which holds open hearings and declares that the proposed power district is, or is not, to be incorporated. After that it goes to the voters in the proposed district. In Washington it goes to the Board of County Commissioners, which holds open hearings and has power to exclude certain sections from the proposed district. In both states a majority vote of the electors establishes the district. In Nebraska the District Court can exclude from the district any units which voted against it.

After the districts have been properly approved officials are elected to take control, and in both states care is taken that all units of government represented in the district are also represented in the control of the power district. The districts are given broad powers to make surveys of the district's needs, to issue bonds and to develop power plants. The Nebraska law reads in part:

"Said hydro-electric district shall be a corporation and possess all the usual powers of a corporation for public purposes, and in its name may sue and be sued, purchase, hold and sell personal property and real estate; and shall have the sole management and control of hydro-electric and auxiliary

steam electric power plant or plants, and transmission lines within or without said hydro-electric district, now or hereafter owned or leased by said district. Said power plants and distribution lines connected therewith are hereby declared to be works of internal improvement. Said hydro-electric district shall also have the power of eminent domain for condemnation and appropriation of private property, so far as may necessarily be required by said district in the construction of new power plants, transmission lines and necessary distribution lines only."

When bonds are to be issued they must be approved by the voters in the district. In Nebraska this applies to all the bonds. In Washington it applies to bonds that exceed one and one-half per cent of the total value of the real property in the district. In both states 60 per cent of the voters must favor the bonds, or they cannot be issued. In Nebraska if the first bonds proposed by the district fail to be approved, the district ends, and must wind up its affairs at once. Various other safeguarding provisions are included. In Nebraska all work over \$500 in amount must be let by contract to the lowest responsible bidder. In Washington any materials purchased or work ordered over \$5,000 in amount shall be awarded by contract. In condemnation proceedings the Washington law exempts municipal plants from condemnation except upon the vote of the people of the municipality owning such a plant. It orders that in condemnation proceedings the court shall submit to the jury the values placed on the property involved by the local taxing authorities, and in respect to the condemnation of privately owned utilities operating without a franchise, orders the court to consider the fact that such property, plants and facilities are subject to being removed from the highways by reason of being operated without franchises.

The new Nebraska law permits cities and towns which own plants and distributing lines to extend them beyond the municipal borders to cover such territory "as may be

deemed expedient." It also provides that such extensions are to be paid out of earnings. No municipal plant is to be sold until sixty per cent of the voters approve. There is a definite limit set to the amount which can be spent in a campaign to influence such sales. This law is aimed to help the rural districts.

The significant fact here is that even with all the limitations imposed upon their liberty of action through votes on bonds and appeals to the courts, they are nevertheless free to combine the power facilities of considerable areas for the common benefit of all people in those areas, and to plan the power development in connection with the irrigation, flood control and drinking water needs of the areas. The existing irrigation districts in California have developed power largely as a means of paying for their irrigation work. They have been able to do this while charging rates which seem low in comparison with the rates given in the previous chapter for such heavily settled states as New Jersey and Massachusetts. A comparison may be made:

	40 kw/h.	80 kw/h.
Turlock District ²	\$2.25	\$3.25
Modesto District	2.15	3.15
New Jersey (private)	3.485	5.856
Massachusetts (private)	2.995	5.189.

This is first hand evidence that power districts can operate efficiently and give lower rates, even in small sparsely settled communities, than the private super-power systems covering well populated and industrial states such as New Jersey and Massachusetts.

Further evidence to this effect is given by the workings of the league of Ontario municipalities under the leadership of the Ontario Hydro-Electric Commission, just North of the states of Michigan, Ohio, Pennsylvania and New York. Here is a publicly owned super-power system. It can be compared, after due consideration is given

to certain factors, with the private super-power systems operating in this country. In the comparison it should be remembered (1) that the Ontario plants contribute to the city funds in the form of street lighting rates which are lower than those of the private companies in the United States, (2) that their rates include charges devoted to retiring the debt for the benefit of future consumers, which are not paralleled by the private plants in the United States, (3) that a large part of the Ontario power, although not all, comes from cheap waterpower sources, (4) that the Province of Ontario is more sparsely settled than many states South of the border, (5) that the Ontario system acts as a tax collecting agency, much as the private companies in the United States, but collects less in taxes than they do.

Comparisons of private systems in the United States with Ontario have frequently been made by the private power companies, but as far as I am aware no comparison made by anyone, who was not paid by them, has been unfavorable to the Ontario system. Every unpaid student of the situation finds the advantage more or less heavily on the side of the public super-power system.

Stating that his Muscle Shoals bill was modeled after Ontario and that, "keeping in mind the difference in conditions between this country and Ontario, the same things that have been done there can be done in Tennessee, Alabama, Mississippi and Georgia if the bill which the Senate has passed will be acted upon favorably by the House and signed by the President," Senator Norris made certain important comparisons between rates.³ His first comparison was that of the average cost of domestic lighting in 32 big cities in the United States with the same costs in all the larger Ontario cities, 21 in number. The figures for United States cities up to 1927 were taken from a memorandum furnished by the Joint Committee of the National Utility Associations, and for 1927 and 1928 by

the Commissioner of Labor Statistics of the Department of Labor. The Ontario figures were taken from the reports of the Commission. The cities compared were:

United States		Ontario	
Population		Population	
Atlanta	250,000	Brantford	28,010
Baltimore	819,000	Chatham	14,118
Birmingham	217,000	Galt	12,686
Boston	793,000	Guelph	19,219
Buffalo	550,000	Hamilton	122,238
Chicago	3,102,000	Kingston	21,621
Cincinnati	412,000	Kitchener	24,805
Cleveland	984,000	London	63,339
Denver	289,000	Niagara Falls ...	16,819
Detroit	1,334,000	Ottawa	118,088
Houston	256,000	Owen Sound	12,231
Indianapolis	374,000	Peterborough ...	21,726
Jacksonville	137,000	Port Arthur	17,021
Kansas City	383,000	St. Catharines ...	21,810
Los Angeles	1,300,000	St. Thomas	17,152
Memphis	179,000	Sarnia	15,588
Minneapolis	447,000	Stratford	18,888
Mobile	66,000	Toronto	542,187
New Orleans	424,000	Welland	8,942
New York	5,970,000	Windsor	52,638
Norfolk	179,000	Woodstock	10,114
Philadelphia	2,035,000		
Pittsburgh	665,000		
Portland, Me.	76,000		
Portland, Ore.	340,000		
Richmond	191,000		
St. Louis	839,000		
San Francisco ...	576,000		
Savannah	96,000		
Scranton	143,000		
Seattle	411,000		
Washington	540,000		
Total	25,377,000	Total	1,179,240

It will be seen at once that the American cities include the public plants of Los Angeles, Jacksonsville, Cleveland,

San Francisco and Seattle. For some of the years the United States' average is lowered by the weight of the lower rates in these municipal plants.

The following chart was presented to show "the net average cost per kilowatt-hour for domestic electricity" in the two groups of cities from 1910 through 1928.* It should be noted that the 1910 cost in Ontario was under private ownership, and is higher than the cost in that year in the United States cities. The drop in rates since that day has been fairly constant in both countries, but almost four times as much in Ontario as in the United States cities.

Year	United States, cost kilowatt-hour		Ontario, cost kilowatt-hour	
	cents		cents	
1910	9.2	9.0	9.30	9.30
1911	9.0	8.9	.....	.....
1912	8.9	8.7	6.00	6.00
1913	8.7	8.5	5.06	5.06
1914	8.5	8.0	4.86	4.86
1915	8.0	8.05	3.83	3.83
1916	8.05	8.1	3.08	3.08
1917	8.1	7.9	2.89	2.89
1918	7.9	7.8	2.72	2.72
1919	7.8	7.8	2.55	2.55
1920	8.0	7.9	2.29	2.29
1921	7.9	7.7	2.20	2.20
1922	7.8	7.6	1.98	1.98
1923	7.7	7.5	1.83	1.83
1924	7.6	7.4	1.73	1.73
1925	7.5	7.4	1.71	1.71
1926	7.4	7.4	1.66	1.66
1927	7.4	7.2	1.63	1.63
1928	7.2	7.2	1.55	1.55

This chart can be recast in simple form to show how much the domestic consumers of electricity in the United States cities have had to pay year in and year out in comparison with the amounts paid by similar consumers across the border in Ontario. Throughout this compari-

son, however, it should be remembered that Ontario rates have been so low that people there use the electricity very freely and get low rates for large use. In the United States cities smaller amounts are used and the rates for those smaller amounts are high. A comparison of bills for similar amounts would show a somewhat less lopsided advantage in favor of the Ontario system.

Keeping in mind that only the average net costs of all domestic lighting are being compared, and that the Ontario consumers receive the advantage of lower rates due to larger use, the figures above show the following differences:

	Ontario Cities	United States Cities
1912	\$100	\$158.07
1913	100	173.13
1914	100	175.18
1915	100	208.80
1916	100	260.82
1917	100	280.26
1918	100	289.93
1919	100	305.76
1920	100	348.80
1921	100	358.66
1922	100	393.90
1923	100	420.42
1924	100	438.52
1925	100	438.00
1926	100	445.48
1927	100	453.62
1928	100	464.40

A closer comparison of domestic lighting rates can be made. On the basis of 1928 rates I compiled figures for all the Ontario towns over 1,000 population, showing the rates for users of 40 and 80 kwh. a month. These can be contrasted with the figures previously given for the private companies in the cities of some of our states. They do not include the smaller towns in those states. The bills for users of such amounts were the basis for

the calculation. The result is also heavily in favor of the cheapness and efficiency of the Ontario public power system, although not as heavily as the above comparison of net costs to consumers for all domestic lighting.

	40 kwh.	80 kwh.	Difference over Ontario	
New York (private) ..	\$2.936	\$	168.6%	267.5%
New Jersey (private) .	3.485	5.858	218.8%	174.0%
Massachusetts (private)	2.995	5.189	191.6%	273.8%
Kansas (private)	3.188	5.959		
Ontario (public)	1.093	1.594		

These figures are conservative. They include many small Ontario towns where costs are relatively high, and exclude such towns in the calculations for the states on this side of the border. For example, the New York charges in 1928 for consumers of 40 kwh. a month were \$3.21 when the towns and villages in that state were included. In the comparison here those towns and villages are not included, and only the average charge for the cities is given, which is much lower, \$2.93. This table may be restated in terms similar to the restatement of the figures given by Senator Norris. It shows the essential figures when contrasted with payments of \$100 by Ontario consumers.

	Users of 40 kwh. monthly	Users of 80 kwh. monthly
Ontario	\$100.00	\$100.00
New York	268.60	367.50
New Jersey	318.80	325.50
Massachusetts	274.00	373.80
Kansas	291.60	

These figures indicate conclusively that as far as the four states involved in the first comparison go and the three states involved in the second one, the average con-

sumer of 40 kwh. a month pays our private companies close to three times as much as the Ontario consumer (\$288.25 to \$100), and the somewhat larger domestic consumer in our states, who uses 80 kwh. monthly, pays over three and a half times as much (\$355.43 to \$100).

In attempts to answer evidence such as this the power companies have made two claims, one to the effect that while the domestic lighting rates may be lower in Ontario, the power rates are higher; the other to the effect that the taxes collected by the private companies here are so much larger than the contributions made by the Ontario plants that they account for the higher rates of the private companies. If either of these two claims is true, a good part of the weight of Ontario as a successful demonstration of social planning and financing for the common good would be lost.

In answering the first point, Senator Norris in May, 1930, presented figures showing the average cost to the ultimate consumers of industrial power in the United States and in Ontario for a period of four years through 1928. The United States figures are taken from the organ of the industry, the *Electrical World*. The Ontario figures are taken from the reports of the Hydro-Electric Commission.⁶

Total United States			
Year	Kilowatt-hours sold	Revenue	Average kwh. cents
1925	36,431,000,000	\$420,810,000	1.15
1926	41,964,000,000	519,100,000	1.23
1927	47,093,000,000	636,545,000	1.35
1928	51,140,000,000	686,015,000	1.34
	176,628,000,000	2,262,470,000	1.28

Total Ontario Hydro

1925	1,894,440,816	\$11,580,778	0.61
1926	2,156,391,288	13,088,534	.60
1927	2,219,738,463	13,924,606	.62
1928	2,426,384,841	14,655,714	.60
	8,696,955,408	\$53,249,632	.61

These figures indicate that the industrial consumers of the United States, far from paying less for power than the Ontario consumers of industrial power, pay more than twice as much. For every hundred dollars paid in Ontario our industrial consumers pay \$209.79.

In spite of such evidence the National Electric Light Association takes the lead in attempting to misrepresent the situation entirely. In March, 1930, for example, one of the news releases from their Department of Public Information claims that one of the fundamental principles of the power industry here is that each service shall carry its own load and that under no circumstances shall any particular class of service be penalized to subsidize any other class of service, while, "in Ontario, with Government ownership and operation, the theory is entirely different. There business and industry, as well as the general taxpayer, have been penalized for the benefit of the small consumer, and more particularly the rural consumer."

In addition to giving the above figures by way of answer, Senator Norris quoted the Chamber of Commerce of Niagara Falls, N. Y. It petitioned Congress for an increase in the tariff on cyanamid salts, which are produced there with Niagara Falls power. The Chamber of Commerce said:

"Large units of power are consumed in the manufacture of this product, and the cost of power is a very important item in its manufacture; and partly as a result of our treaty

arrangements with Great Britain and partly as a result of the wisdom of the Canadian Government in the handling of its power matters, the Canadian manufacturer gets his power at approximately one-half of what the American manufacturer on this side of the river has to pay for power. He is therefore able to undersell the American in the American market. . . ."

The National Sand and Gravel Association, in asking for a tariff on their products in 1930, made somewhat similar statements to the effect that the Ontario power is supplied to Ontario sand and gravel people approximately at cost and was about 60 per cent lower in Ontario than in the United States.

In view of the widely differing statements on this important matter of rates the whole subject was gone into recently by Dr. William E. Mosher and other faculty members of the University of Syracuse. Their conclusions were published as part of a book, *Electrical Utilities*, which appeared in 1929. They took the form of rate comparison for Ontario and New York cities. It was recognized that there were important differences between the two units, Ontario being sparsely settled and primarily rural while New York State is highly industrialized and well-populated. Further, when the Hydro Commission began operations in Ontario it had a relatively clean slate and could work out an integrated system. In New York State consolidation of recent years has meant the scrapping of a great deal of investment that did not serve the unified system to the best advantage. New York State produces much of its power from steam plants, while Ontario produces most of its power from hydro plants. Finally, the differences from source of supply vary in both governmental units.

The authors discard as unreliable the method of combining revenues for all electric service classifications in one territory and division by the sum of kilowatt hours

sold as a method that would show accurate costs to consumers. In proof they state that an "example of the gross errors which the method gives rise to is afforded by a comparison in a recent report (September, 1928) of the Rate Research Committee of the National Electric Light Association, concerning the operation of privately owned and municipally owned plants in the United States. Among other things it compares average revenue per kilowatt hour for both light and power, erroneously assuming such data to be criteria of average rates." ⁶ This resulted in a claim by the N.E.L.A. that if the customers of the municipal plants of the country had paid for their energy at the same rate paid by the customers of the private plants they would have saved some \$25,900,407. The authors of *Electrical Utilities* show that the jumbling of light and power classifications is incorrect. Far from such effecting a saving through the payment of private rates, if the customers of the municipal plants had been forced to pay the rates charged by the private plants they would have actually had to pay \$5,268,825 more than they did. Again, if the customers of the private plants had been free to pay the lower municipal rates they would have had to pay \$7,907,977 less than they paid to the private companies.⁷ The authors conclude that "the above comparisons clearly demonstrate that it is possible to arrive at conclusions by the use of kilowatt hour averages, which run directly counter to basic facts." They therefore discarded the comparison between Ontario and New York cities on the basis of averages and substituted comparisons of monthly bills for corresponding services.

They chose nine typical monthly bills and listed six cities in Ontario and 18 in New York according to payments required for such bills in March, 1929. The results were as follows:

Case 1. The domestic consumer using 36 kwh. monthly. All the Ontario cities were under \$1.04, ranging from

\$95 to \$1.03. The New York cities were all higher, ranging from \$1.59 in Buffalo to \$3.60 in Yonkers.

Case 2. The domestic consumer using 175 kwh. monthly for lighting and cooking, etc. All the Ontario cities were lower than the New York cities, ranging from \$1.93 to \$2.97. The New York cities ranged from \$4.85 to \$15.00.

Case 3. The commercial lighting consumer using 200 kwh. monthly for lighting. All the Ontario cities were lower, ranging from \$3.24 to \$5.49. The New York cities ranged from \$6.75 charged by the public plant at Jamestown to \$19.00.

Case 4. The commercial lighting consumer using 1,000 kwh. monthly. Five of the six Ontario cities were lowest, ranging from \$16.16 to \$23.03. One New York city ranked sixth. One Ontario city ranked seventh at \$27.45. The remaining New York cities had higher costs, ranging from \$28.35 at Jamestown (public) to \$73.00 at Yonkers.

Case 5. The commercial consumer using energy for lighting, cash-carriers and elevators, 3,000 kwh. monthly. Five Ontario cities were lowest, ranging from \$35.44 to \$50.63. Three New York cities followed, ranging from \$55.00 to \$60.50. Toronto, Ontario, is in ninth place with \$64.80. The other New York cities follow, ranging from \$73.35 to \$174.27.

Case 6. The commercial consumer using energy for lighting, cash-carriers and elevators, 6,000 kwh. monthly. Three Ontario cities are lowest, ranging from \$62.22 to \$88.88. Niagara Falls, N. Y., is in fourth place with a \$90.00 charge. Two more Ontario cities follow, then two more New York cities, then Toronto, Ont., at \$117.00. Eleven New York cities are higher than Toronto, ranging from \$128.00 to \$306.25.

Case 7. The small industrial user of 2,000 kwh. monthly, on a 10 kw. connected load and an 85 per

cent load factor. All the Ontario cities are lower, ranging from \$22.75 to \$28.04. The New York cities range from \$35.00 in Buffalo to \$131.40 in Yonkers.

Case 8. The industrial user of 10,000 kwh. monthly on a measured demand of 30 kw. and an 85 per cent load factor. All the Ontario cities are lower, ranging from \$73.22 to \$94.01. The New York cities range from \$95.45 to \$500.00, and sixteen of them are above \$100.00 and eight of them above \$200.00.

Case 9. The industrial consumer using 21,600 kwh. monthly on a measured demand of 100 kw. and an 85 per cent load factor. Here the order is Buffalo, N. Y., Niagara Falls, N. Y., Ottawa and Kitchener, Ont., North Tonawanda, N. Y., then the remaining four Ontario cities with \$258.50 as a high, then 14 New York cities ranging from \$284.00 to \$1,080.00.

Case 10. The industrial consumer using 75,600 kwh. monthly, on a measured demand of 300 kw. and an 85 per cent load factor. Two New York cities are lowest, then follow three Ontario cities, one New York city, three Ontario cities and 15 New York cities. The highest Ontario city is \$804.56. The 15 last New York cities range from \$806.25 to \$2,500.00 and 14 of them are above \$1,000.00.

Case 11. The industrial consumer using 288,000 kwh. monthly on a measured demand of 1,000 kw. and an 85 per cent load factor. Two New York cities are lowest, three Ontario cities follow, two New York cities are sixth and seventh, three Ontario cities follow, the highest being \$2,778.65, then the remaining 13 New York cities ranging from \$3,288.00 to \$5,409.97. Ten of them are above \$4,000.00.

In order to facilitate comparison the authors of *Electrical Utilities* expressed the comparisons as ratios, with the Ontario average cost for each case expressed as unity (\$1.00).^{*}

Case Numbers

	Domestic		Commercial					Industrial		
	1	2	3	4	5	6	7	8	9	10
Ontario	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Western New York	1.03	2.06	2.06	1.63	1.38	1.34	1.60	1.62	1.07	1.03
Upstate West (N.Y.)	2.76	3.19	2.51	2.09	1.93	1.76	2.37	2.55	1.88	1.63
Upstate East (N.Y.)	2.95	3.92	4.10	3.05	...	2.44	2.74	1.82	1.74	1.76
Lower Hudson (N.Y.)	3.00	3.79	3.90	3.37	3.13	3.29	3.58	3.96	2.66	2.34

The conclusions from this study may be expressed as follows.

1. Cost of domestic service in most of the cities in New York State varies from about two to three times as much as in Ontario. For every \$100 paid by the very small Ontario consumer the New York consumers pay from \$193 to \$300. For every \$100 paid by the larger domestic consumer in Ontario the New York consumer pays from \$206 to \$379.

2. Cost of commercial lighting is over 40 per cent higher in New York State than in Ontario, for each \$100 spent in Ontario the New York consumers in four groups pay from \$206 to \$410, from \$163 to \$337, from \$138 to \$313 and from \$134 to \$329.

3. Large power users in New York State, outside of Buffalo and Niagara Falls, pay from 60 to 170 per cent more than in Ontario. For each \$100 paid in Ontario cities, the large industrial users in New York State cities pay, in each of the five groups, from \$160 to \$358, from \$162 to \$396, from \$107 to \$269, from \$103 to \$234 and from \$100 to \$191.

To the extent that the rates charged in the New York cities are typical of the country at large this study would seem to add conclusive weight to the belief that the Ontario system is not subsidizing its low domestic rates by charging high rates to the power consumers. There remains only their further contention that the rates are

higher in this country because of the taxes the private companies collect from their consumers and turn over to the cities and states.

On this point Professor H. W. Peck of Syracuse, one of the co-authors of *Electrical Utilities*, made certain important findings. He computed the average tax for the New York companies and the Ontario municipal plants. The taxes paid by each were:

New York companies09250 cents per kwh.
Ontario system00723 cents per kwh.

The New York companies paid less than 1 mill per kwh. in taxes, but this was larger than the sum paid in taxes by the Ontario system.

However, the Ontario system plants collected in their rates certain amounts which more than offset these taxes, and gave certain public services at a lower rate than the private companies. They gave cheaper municipal lighting rates, and added to the public credit in the form of an increase in equity in the hydro-generating and transmission system by large charges for retirement, and also added to the public credit through charges for retiring the local debts on the local distribution plants. According to Professor Peck, "From these various sources, in terms of kilowatt hours, the Ontario municipalities collected .268 cents, or almost three times as much as was realized on this side of the border from the net payment in the form of taxes contributed by companies."⁹

This should dispose of the private utility propaganda to the effect that rates in the United States are higher than in Ontario because of the taxes collected by the private companies here. The New York State private companies paid .0925 cents in taxes, and the Ontario plants contributed in various ways almost three times as much, .268 cents per kwh. In spite of this contribution which was almost three times as large as taxes on this side of the

border, they charge rates so much lower than most of the rates charged by the inter-connected private super-power systems in New York State that the difference in source of generation does not begin to explain the difference.

The Ontario Hydro-Electric Commission represents the principle of a public power district applied to a whole large state. It represents social planning under unified direction like nothing we have as yet had on this side of the border. It represents the determination not to turn over natural resources to private profit. It represents stimulation of a rising standard of living in city homes and farms by rates low enough to encourage use of modern conveniences. It represents the intelligent use of government and municipal credit to bring down the cost of living to the citizens. It represents an intelligent social care for the interest of future consumers by regularly retiring large parts of the debt and lowering the capital charges which will have to be paid by future consumers.

In this chapter and the preceding one evidence has been presented which seems to indicate that the engineers and managers have been able to give their services to the public in varying degrees; first and best in a public super-power system; second, in municipal plants; third, in private companies under the pressure of the example of low rates in near-by municipal plants; fourth, in a state with a strong regulatory commission but no important municipal plants to furnish any incentive to rate reduction.

Hidden here is the essence of the conflict between those who would continue to police the utilities and improve the regulatory laws, and those who think that as long as private interests own the control of the utilities there is no hope that the public will gain the greatest possible benefit from the work and ability of the engineers.

The cities have been held back when they should have been free to expand. The management of public busi-

ness has been held back at times by the use of forms which were adequate for an earlier day and are no longer appropriate. New types of management for public business are coming into use which promise the advance of the social good through a combination of the best features of private initiative and of social control. As the cities league together it would be to their advantage to incorporate these newer forms of management into their plans.

NOTES

- ¹ *Giant Power Survey*, Commonwealth of Pennsylvania, 1926.
- ² Bird and Ryan, *Public Ownership on Trial*, pp. 126-128.
- ³ *Congressional Record*, May 9, 1930.
- ⁴ The figures for 1927 and 1928 include 51 cities in the United States and 25 Ontario cities.
- ⁵ *Congressional Record*, May 9, 1930.
- ⁶ *Electrical Utilities*, Mosher and Associates, p. 245.
- ⁷ *Idem*, pp. 246-7.
- ⁸ *Idem*, p. 259. Table XVII.
- ⁹ *American Economic Review*, 19 Sup. 197, p. 200, February, 1930.

CHAPTER EIGHT

GOVERNMENT CORPORATIONS AND FINANCING

I. *The Present Problem*

WE have seen several things which should be kept in mind in thinking about the problem presented to the nation by the growth of the power industry under its present managers. The industry represents the spearhead of the drive toward industrial feudalism. It is a growing force not only in national, state and local political life but in the educational field as well. It has grown beyond the cities and is now growing beyond the states. It has effectively resisted such federal control as has been attempted and is now openly challenging it. Its engineers have reduced the cost of generation and transmission, but only a small proportion of these savings has been passed on to the public. Municipal plants appear to furnish cheaper service than private plants of the same size. The key to efficiency is interconnected systems. Public interconnected systems, such as the one in Ontario, render much cheaper service than private interconnected systems in the United States, although the latter are now much larger than the Ontario system. The possible savings to the public through government ownership may be well over a million dollars a day in the 1930's and much more as the industry grows in size.

The problem, from its financial side, is one of seeing to it that a public business is run in the most economical way, that the benefits of scientific progress are made available to all in order that the country's standard of living be raised. From the social side it is important not only to raise the standard of living but to prevent the growth

of an independent dominating organism inside of society.

This problem we share with other countries. We have it in a more extreme form because the others have not allowed the industry to slip so far away from the public interest. Most of them have kept a much closer rein on it from the very beginning. Nevertheless there are many similarities. In Europe the boundaries between nations offer even greater obstacles than our boundaries between states. Yet really efficient use of the engineers' contributions to the industry means transcending and crossing such borders. At the world power conference in Berlin in 1930, a German engineer, Oskar Oliver, proposed a super-power system for all Europe, tying in with a great system of high power transmission lines all the main sources of power, the waterpower of the Scandinavian countries, the coal and lignite fields of Central Germany, the waterpower of the Alps, back to the waterpower of the Rhone Valley in Southern France, North to the cheap coal of France, Belgium and England. A third North-South line would run from the German and Polish coal fields in Upper Silesia through Czechoslovakia, over Vienna to Yugoslavia and the Dalmatian coast water-powers. Still another line would begin at Rostov on the Don, North of the Black Sea, cross Southern Ukraina and the Dnieper waterpower, go to Rumania, using the oilfields there, touch the now undeveloped waterpower of the Austrian Alps and connect in at Vienna. As in the interconnected systems in the United States the plan takes advantage of the time differences East and West to spread the peak loads. The objection which will probably defer this plan is that few European governments will be willing to take the risk of developing a plan which will leave them dependent in time of war, an objection not encountered in the United States nor in the British Isles nor in such large countries as the Argentine, which is considering a five mile dam across the mouth of the

Gulf of San José in Patagonia and a 600 mile transmission line to Buenos Aires, bringing power to the capital at a quarter of a cent a kilowatt hour, cheaper even than Niagara Falls power.¹

We do, however, share with the other countries the same three choices: that of leaving or putting the planning and development in the hands of private companies, or exercising some degree of governmental supervision over the planning, as in the British Isles, or establishing part governmental and part private ownership as in Germany or full ownership by the Government, represented at its best in Ontario.

2. *Government Planning—Mixed Ownership*

In Great Britain the problem has been that of securing cheap power, of eliminating the inefficient plants. In 1926 there were in England, Scotland and Wales some 659 enterprises; about 60 per cent, 390, were public and about 40 per cent, 269, were privately developed. The first effort to eliminate the less efficient plants began in 1919, immediately after the war. Provisions for voluntary grouping were adopted. They were in effect seven years, until 1926, and had not brought about the desired results. In 1926 the Conservative Government, under Mr. Baldwin, passed the Electricity Supply Act. Its definite object is to cut down the number of power plants to an efficient fifty or sixty in 1940 and to provide for an interconnected superpower system that will serve the whole country adequately.

The law under which the power industry there has been developing for some years is an interesting mixture of governmental control and ownership and somewhat unregulated private industry. The whole problem of subordinating private interests to the general public interest was involved at once. The Weir Committee, which planned the present law, used the words: "We fully real-

ize the apparent drastic nature of our proposal, but we are convinced that in operation it will not involve any hardship to existing interests. We propose not a change of ownership, but the partial subordination of vested interests in generation to that of a new authority for the benefit of all, and this only under the proper safeguards and in a manner which will preserve the value of the incentive of private enterprise."²

In order to secure the cheapest possible generation and transmission costs a Central Electricity Board, which is a government corporation consisting of eight directors, has been set up and been given power to plan a unified system for the country and to put those plans into effect. The procedure is that a special board of engineers (the Electricity Commissioners) submits to the Board a plan for unifying each zone in the country, zoning it into industrial areas that are naturally grouped together. The Board, as a second step, can build or buy main transmission lines connecting the various sections of each zone, and the several zones. It can do this on its own account, following the plans of the engineers. For this purpose it has a revolving fund of about \$163,000,000 which it raises by sales of its own securities. The third power of the Board is to select out of the existing generating plants the most efficient in each zone, which are to sell to the Board all the electricity they produce. The Board then resells this purchased current (at cost plus sufficient advance to pay its own running expenses) to the distributing systems, except in those cases where a private distributing agency is producing it more cheaply than the Board can furnish it. The procedure here is to designate certain stations, called "designated" or "authorized" stations, to furnish the bulk of the power for each zone. This does not, however, confiscate the property of the less efficient stations. These non-authorized stations are sold power for a period of seven years at a cost less than that at

which they can produce. In other words, they get their power more cheaply than they could manufacture it themselves. Their generating plants are thus closed down, with the expectation that the investment in them which has not already been depreciated, will by then be written off. This concentrates the production for the whole country in a few efficient plants.

With this accomplished the Board can proceed to order the expansion of the selected generating stations. In case the owners refuse to obey the orders to expand, the Board can order that station sold to the local "joint electricity authority." This is also a governmental corporation, of a voluntary character, which may be set up in each zone, or even in small parts of each zone, comprising representatives of the local power interests, private and municipal, large consumers and local political subdivisions. In case this local joint authority is non-existent or does not care to buy the plant, the Board can offer it for sale to one of the authorized private stations in the vicinity. In such sales the price fixed is prudent investment less depreciation. In case neither the joint electricity authority nor a private company desires to purchase the recalcitrant station, the Board may buy the station itself and expand it.

Somewhat the same restrictions are on the Board in regard to managing the station. It must offer the operation of the station first to the joint electricity authority and then to a near-by authorized station, and only in case of refusal on their part to undertake the operation, can it operate the station itself. To date neither of these problems has arisen. The Board can, but only under the same restrictions, build entirely new generating stations in case they become necessary.

In this set-up of government planning and authority and mixed ownership there are several things of interest. The first is that the Central Electricity Board is much more like a private board of directors of a corporation

than a governmental bureau. The eight directors are chosen from electrical manufacturers, electrical enterprises, both public and private, labor, commerce and banking. They are appointed by the Minister of Transport, but are responsible only to the courts, exactly like a private board of directors. The members of this board are required to divest themselves of any securities in the power industry. The form of a private corporation is used to transact a governmental business.

The second thing of interest is that the Board is not supposed to go into the job of operating the plants. It fulfills instead the function of a controlling middleman, buying power as cheaply as it can and selling it practically at cost, and at a uniform rate, to the distributing agencies. It can own transmission lines and charge enough for the service of wholesaling over those lines to pay interest on its securities and to retire them. Only in case the private companies refuse to cooperate in selling or in expanding can the Board, after offering them for sale to other stations, go into the business of owning and operating stations.

In case any of the smaller plants which are not selected to furnish power to the Board refuse to buy power from the Board and claim that they can actually, over the seven year period, manufacture power more cheaply than the Board can sell it to them, they are then allowed a further year of life in which to prove their contention. If the contention is proved during that year of life they are allowed to continue operation, if not, they are closed down and are free to purchase power from the Board.

In these determinations of manufacturing cost there is necessarily a great deal of accounting. In 1926 a considerable change was made in the matter of purchase price. Before that year it had been "then value," roughly corresponding to our "cost of reproduction new." In 1926, however, it was set by Parliament as prudent invest-

ment less depreciation. In figuring the generation cost plus the profit to be allowed to each selected station the profit allowed was between five and six and a half per cent. But it is interesting to note that, as the law states it, "In calculating for the purposes of this section the cost of production of electricity generated by the authorized undertakers, no account shall be taken of capital charges in respect to capital expended on the generating station."³ The important consideration is that of generation costs. If these run higher than the cost at which the Board can sell the power to the station, that station must then buy its power from the Board.

Plans for five zones have been put into operation, and a sixth has been prepared. They now cover Central Scotland, Central England, Mid-east England, Southeast England, Northwest England and Northeast Wales, and the latest plan prepared is for Northeast England. When it has been adopted about 98 per cent of the population of the island will be covered. The average resale price to distributing companies is expected to be around 7 or 8 mills per kilowatt hour.

Perhaps the most important part of the scheme from the consumers' point of view is the way in which the final price is regulated. The Minister of Transport has the power, as Professor Hormell points out, to revise the maximum and standard prices charged by a power company where the company takes its supply from the Central Electricity Board. He is directed to take into account the reductions in the price effected by the operations of the Board.⁴ This is, at best, a cumbersome procedure, even in England which is a much smaller country than the United States. But in addition there is a provision for a sliding scale of dividends and charges imposed on distributing companies taking their supply from the Board. Such a sliding scale was adopted for the companies operating in London, in 1925. A great many of the distrib-

uting companies are, however, municipal systems, many of the largest industrial cities being so served. While their lighting rates seem to be considerably below those of private distributing companies they have operated on somewhat the same principle as the German municipal and government power systems, of collecting rates high enough to allow them to make a considerable contribution to the running expenses of the cities in which they were operating. Under the 1926 act the municipal power authorities are narrowly limited in the amount they may turn over to the cities. It provides that the major share of the surplus shall go toward reducing rates and paying off capital loans.

In view of the acquiescence of the engineers in the system now operating in the United States, which was referred to in a previous chapter, it is noteworthy to find that the engineers of Great Britain took a leading part in establishing this system of governmental planning and wholesaling. Professor Hormell states: "The act was sponsored in the main by three groups or classes of interests: first, by the technical engineers under such able leaders as Sir John Snell. Their interest was in the scientific development of the industry as a whole, and they were generally free from local, parochial and individual interests which dominated many municipalities, private distributing companies and power companies."⁵ The second group were the industrialists who understood the need for cheaper production costs if England hoped to retain or regain her position in the manufacturing world. The third group were governmental leaders acting under the same pressure.

3. *Part or Full Government Participation*

While in Britain there are private plants and public plants operating side by side, in Germany there has been a significant form of combination between the two. There

are not only national, state and municipal plants, which furnish about 44 per cent of the total production of the country, and private plants which furnish a little less than a quarter of the production, there are also plants under mixed ownership, furnishing about a third of the national production.*

In Germany it has long been considered good city business for the municipalities to own their own utilities, water, gas and electricity. The technical development of high-power transmission found a whole series of very large communities with their own plants. Private companies had some generating stations and quite a few distributing systems. The German municipal plants were used quite frankly as revenue collecting agencies. The aim was stable and prosperous utilities, and earnings were not cut to the minimum for the advantage of the consumers. In some cases German cities before the war received as much as two-thirds of their income from their utilities. The states became interested in the development because they were afraid that the interests of the surrounding communities would be neglected, that the cities would charge the rural areas higher rates than necessary.

In view of the opposition of the private power companies in this country to government construction of large power developments on the St. Lawrence, at Muscle Shoals, Boulder Dam and other places, it is interesting to note that in Germany the private interests tried to persuade the Government to build large plants, but desired to keep the distribution systems in their own hands.⁷ In a large measure this has been the plan followed. Thus the Elektrowerke, one of the largest of all producing companies, whose stock is owned entirely by the national government, sells current at wholesale only. The smaller private, mixed and municipal enterprises are connected with the state and national network and receive all or

part of their power from the larger plants. The private companies have about held their pre-war share of the distribution business.

The government corporation, exemplified in this country after the war by the Port Authority of New York and New Jersey, has long been a form of transacting governmental business in Germany. These corporations cannot only proceed as our own do, by condemning and buying whole properties, they can buy stock in private companies and secure control in that manner. Thus the State of Prussia owns three large central power stations, and also large blocks of securities in other electric power plants, including the Rheinisch-Westfälische Elektrizitätswerk A. G., formerly owned by Stinnes and now owned in bulk by the cities of the Ruhr district. At the same time the Federal Government, the Reich, has a holding company called Vag, which not only controls the big Elektrowerke but some forty other enterprises including potash, aluminum and coal. Even the cities resort to governmental corporations which issue stock and bonds on their own credit. One of the largest of these is in the third city in the world, Berlin. The city owns all of the stock of the Berlin City Electric Company, which sells 90 per cent of all the current used there.

As in England and in this country prior to the formal separation of the General Electric and the Electric Bond and Share, the manufacturers of electrical machinery in Germany have a large financial interest in the producing power companies. In Britain it is the Thomson Houston Company, the controlling shares of which are held by the International General Electric of New York. In Germany it is the German General Electric (A.E.G.) and Siemens-Schubert.

The mixed interest utilities are now an old established development. They began with gas companies in 1857 and with power companies in 1892. They received sup-

port from the private electrical interests, often that of the manufacturers of equipment. They are stock companies in which, with one possible exception, the majority of the shares are held by the participating municipal interests and the minority by private interests. Money is also raised for development by the sale of bonds to the public. These companies work along the lines of private enterprise. This is one explanation of their popularity, a combination of social interest with private initiative. Other reasons have been advanced. One is that general socialization after the war was not undertaken because of fear that the revenues would have to go to reparations, and the mixed company avoided that danger to some extent. Another reason given is that during the inflation period it was easier for private business than for public business to obtain credit. Still a further reason given is that municipal electric enterprises were handicapped by social legislation in regard to hours and wages, which the mixed interest companies avoided.⁸ In general politics have been kept out of the management of both the mixed and the pure and simple municipal and state enterprises. Reasonably high salaries, permanent tenure of office and professional reputation have, it is agreed, placed public operation on a plane as high as that of private enterprise at its best.

A proposal for mixed government and private ownership for the electric power industry in the United States was made in 1930 by Mr. Donald R. Richberg of Chicago, General Counsel for the National Conference on Valuation of Railroads. He presented his plan, which bears some similarity to the German one, to the New York State Commission on Revision of the Public Service Commissions Laws. After pointing out that public utility service was essentially a public business and that all persons or corporations who undertake it are to be regarded as public agents engaged in transacting public business and per-

forming a function of the state, he mentioned the conflicting obligation resting on managers of such businesses who, as private employees, are obligated to make as much as possible for their employers and, on the other hand, as public agents are obligated not to make any more money than is "reasonable" out of handling public business. Acting under these conflicting obligations the managers of the various public utilities of the country collect over ten billion dollars a year in revenue, about one-seventh of the national income. After summarizing the present state of regulation he states: "Private property interests in public utility properties are entitled to protection; and private capital may play a useful part in providing and operating public services. But private power to operate a public business so as to produce as-much private profit as possible, is a force hostile to the public welfare and destructive of self-government. It should never have been created; it should not be increased; it ought to be gradually and systematically destroyed."⁹

His plan involves a distinction between ownership and control by private capital. There is a difference between a private property right in money and tangible property which is used in public business and a private property right in the public business itself. "The good potential in the former right," he concludes, "has blinded many to the evil inherent in the latter. If, for example, a group of investors buy the bonds of a city water works, it is evident that they have no property right in the business of furnishing water, although they may be given a lien upon the physical properties, and various other rights to insure payment of interest and eventual repayment of the money loaned. But these investors will have no interest in controlling the business so as to produce extortionate profits on the investment—nor in inflating the so-called 'value' of the physical properties, or of intangible business, so as to disguise excessive profits on the investment

as a 'reasonable return' on 'present value of the property.' Even if these investors were permitted to select a part of the directors of the enterprise, to give additional protection to their private property interests, there would be no incentive created in such directors to exploit public needs in order to produce profits which their employers could not reap."

His plan involves seven steps. 1. All public service corporations authorized to do business in a state should be organized under laws providing that the proprietary capital (which may be a nominal sum) shall be furnished by the state. 2. The appropriate regulatory commission should be authorized to name a minority (possibly one-third) of the directors, who might well be chosen from nominees offered by economic organizations of users of service, such as manufacturers' associations, chambers of commerce, small consumers' leagues. 3. The majority of the directors should be chosen by cumulative voting of those contributing capital for a fixed compensation (bonds, debentures and notes). In cases of default there would be provision for either a reorganization under the same law or, in case of necessary abandonment of the franchise and properties, there would be fixed priorities in the satisfaction of obligations, exactly as at present. If a combination of public and private investment were required, or any public guaranty of obligations, the public control of the management would be increased correspondingly. Increased security to private investors would thus be complemented by decreased private control.

As a fourth step in the arrangement, in order to induce existing private utilities to reorganize under the proposed law, Mr. Richberg suggests (a) that no authority to extend an existing public service and no further public grants of any character should be yielded thereafter except to a corporation organized under the new law and voluntarily submitting to its requirements; (b) that no direct

competition would be authorized by one public stock company with another; but (c) that public stock companies could be authorized to compete with private utilities or to supplement or extend the service furnished by them; or (d) that public stock corporations could be authorized to condemn the physical property of existing private utilities; or (e) in the event of persistent opposition by unreconstructed and essential public utilities a constitutional amendment could make the operation of a public utility service by a private utility unlawful after a fixed date. "The effect of such an amendment upon private property rights would be less harmful than the effect of the prohibition amendment; its enforcement would be attended with much less difficulty; and the community benefit would be at least equally certain."

After arranging (5) that every public service enterprise should be required to transact all of its authorized public business through the one corporation and not to engage in any other business, Mr. Richberg tackles the problem of the relation between these new public-private companies and the regulatory commissions. 6. All the directors and managing officials of a public stock corporation would be designated as public agents; but the majority directors, who would be selected by private investors, and the managing officials of the corporation, would be subject only to the general regulations or specific orders issued by the regulatory commission. Such regulations and orders would be reviewable by the courts if statutory or constitutional requirements were involved. The minority (public) directors would be special agents of the regulatory commission, and removable for acts or omissions in violation of the law. Finally, (7) all expenses of regulation should be apportioned and accounted for as operating expenses. "Thus consumers would pay for their own protection, which would be an improvement on the present

practice of compelling them to pay for their own exploitation."

This plan is essentially different from the form of ownership and operation used by the mixed ownership utilities in Germany. There the private owners have a minority voice on the board. Under Mr. Richberg's plan they would have a majority, probably two-thirds. The German system gives the minority (private) stockholders a proportionate share of the profits, and the plants are run for a profit. Here, as Mr. Richberg sees it, the government is not and should not be in the business of running utilities for a profit, that is, to secure sums enabling it to collect less in taxes. The private (majority) stockholders would collect fixed returns due to them as bondholders do in private business today. They would have majority representation on the boards of directors but no incentive to pile up profits. The changing over of the shares of common stock into fixed return obligations would give the present owners of such shares a certain position on the new boards. A private utility which is owned 20 per cent by common stockholders, 20 per cent by preferred stockholders and 60 per cent by bondholders would have, according to this plan, two-thirds of the directors of the new public stock company, divided very much along the same lines as ownership is at present. Of the directorate of the new board the public would have 33 per cent of the directors, the old bondholders about 40 per cent and the preferred and common holders together about 26 per cent.

It should be noted that the various ways in which it is proposed to have the present owners yield their controlling rights in return for fixed rights on money invested, mentioned in the fourth step of this arrangement, are very similar to the ways by which both the Massachusetts Department of Public Utilities and the Giant Power Survey in Pennsylvania proposed to bring pressure to bear on the utilities operating in that state to accept contracts

with the commonwealths for fixing the return on a basis of actual cost of investment.

4. *Considerations of Administration*

One of the contentions of the privately owned utilities which is severely and constantly pressed into service is that public ownership of utilities involves inefficient service by political appointees. This is a very serious matter to many people who have watched the utilities in action and have developed no admiration or respect for their political activities, but who have at the same time watched the elected governmental officials in the cities and states in action, and have no greater admiration for what they see there.

The government owned corporations have come along, in part, in answer to that objection. A fairly typical statement is that by Richard S. Childs, President of the National Municipal League and of the City Club of New York: "The government-owned corporation form of administrative organization has become increasingly important in view of the business functions that are being thrust upon the government, of which the Inland Waterways Corporation is an example. Inefficiency in operation has been the curse of governmental enterprises. If the government-owned corporation is a form of organization that will help to solve this problem, it is of primary importance, and possibly has a strong bearing on the future of municipal administration."¹⁰

It is interesting to note that there has been no campaign similar to the one of the privately owned utilities in this country against municipal ownership and operation in Britain or Germany on the ground that it was inefficient. In both of those countries the opportunities for engineers and managers to enter public service and to receive salaries in proportion to the value of their services has been greater than here.

The problem of securing able and efficient managers for public utilities is partly a matter of salary, and the governmental units are apt to be penny-wise at this point. But it is also a matter of prestige. Where the power companies, for example, are able to impress a section of the country with the idea that it is bolshevistic to save money for the people when that saving involves municipal ownership, then there is less likelihood that engineers brought up in that atmosphere or affected by it will care to enter municipal service, even if the salary limits were no obstacle. On the other hand where the power company propaganda has made no such headway, and it seems to the business men of the community an intelligent service for the community to save money by municipal ownership, there is good reason to expect better engineers to accept public service. The larger municipal plants on the West Coast have, in this way, secured the services of such engineers as J. D. Ross in Seattle, E. F. Scattergood and William Mulholland in Los Angeles and Kenneth Harlan in Tacoma, as well as the devoted public service of such non-engineers as Dr. John R. Haynes. The Reclamation Service has, under Dr. Elwood Mead, a number of engineers whose capabilities are widely recognized. The Army Engineers, where they are not shifted around every few years, have done able work. General Ashburn does not have to apologize for being chairman of the Inland Waterways Corporation. Across the border the Ontario Hydro-Electric Commission has had the services of non-engineers like Sir Adam Beck. The Canadian National Railways have acquired Sir Henry Thornton to manage the largest railway system on the North American continent. Securing efficient management is largely a matter of equality in salary, freedom from political control, opportunity for advancement, and prestige. Not the least of these is prestige.

To the extent that the administration of governmental

functions can be carried on through government owned corporations which are free to meet the private companies on salaries, free from political control and which are performing functions on a scale large enough to attract the most able men, it is reasonable to conclude that they will be carried on efficiently.

Other considerations are at once involved here. They have been discussed by Commissioner Joseph B. Eastman, who was appointed to the Interstate Commerce Commission from New England by President Wilson and re-appointed by President Hoover. In 1927 the Committee on Public Ownership and Operation of the National Association of Railway and Utility Commissioners had reported adversely to government ownership. In a dissenting opinion Commissioner Eastman made several significant comments and proposed an administrative plan. He said, among other things:

"The question is peculiarly one in which prejudice is likely to play a part, prejudice which may be and usually is unconscious. Aside from religion, there is perhaps nothing that so excites prejudice as the fear of being separated from the opportunity for profit. Under public ownership of railroads and other public utilities the field for profit on the part of bankers would unquestionably be curtailed very materially. The officers of the private companies fear that they would be displaced or their salaries reduced. Certain of the directors may fear the loss of the lucrative opportunities which grow out of advance knowledge of coming corporation events. . . . Even we ourselves, as a part of the present system of private operation under public regulation may possibly fear interference with our jobs. All these are sources of prejudice conscious or unconscious, against which those who wish to think soundly must be on their guard.

"The substantial advantages of public ownership, as I see them, are low cost of capital; opportunity gradually

to reduce or eliminate the capital charge without hardship on the public in the process; and above everything else, freedom from the valuation nightmare. Under the valuation doctrine the capital charge in the case of privately owned utilities can apparently never be reduced or eliminated by any sinking fund or other similar provision; it is a perpetual millstone around the public neck; and it may double in weight without any change in the underlying property if the reproduction cost theory is finally sustained. In addition the country must support a small army of valuation experts.

"It may be argued that under public ownership the Government will in some instances be too timid about investing in new enterprises and in other instances too venturesome. The answer is that experience has shown that private capital is subject to the same criticism. We have been forced to rely upon public regulation to protect ourselves against these very dangers. I refer to the powers so frequently vested in public commissions to grant or withhold certificates of exigency and to require new construction. If Government can be trusted to police private capital in this respect, can not it be trusted to police itself? . . . Reliance (on regulation) in the last analysis is upon men without prospect of large money rewards who are picked by the same purely political processes that are so horrendous when public operation is suggested."¹¹

In order to attain the public good in the most efficient manner Commissioner Eastman made a series of suggestions. Public operation of a utility should (1) not be carried on by a bureau or department and should (2) not be conducted by civil service employees. It should be carried on rather (3) by a business corporation, the stock of which is owned by the government, but which is self-supporting. (4) The board of directors should be chosen by the government as controlling stockholder, whether that

governmental unit be nation, state or city. (5) Minority stockholders should come from non-political groups having a direct interest in honest and efficient management, such as employees, chambers of commerce and the like.

This form of administrative procedure would be, in his opinion, far more desirable than private operation under regulation. In 1931 Commissioner Eastman amplified his views somewhat for the *St. Louis Post-Dispatch*. After expressing at length his conviction that the best characteristics of private initiative and public service could be combined in public corporations, he said:

"A thought which I believe to be sound is that the more important the utility is from the community point of view, the more likelihood there is that it can be safely entrusted to direct public control, particularly if a plan such as I have suggested is followed. A small, obscure operation is much more apt to fall a prey to mismanagement than one which is in the direct path of the limelight and plays a vital part in community life and prosperity. It would be difficult for a Government long to survive a corrupt and inefficient management of such a utility.

"Let me say also, and in conclusion, that if such a public undertaking can be protected, as I believe it can be, from continual petty and political interference, and its management given a degree of autonomy somewhat comparable to that existing in private undertakings, I am confident that no difficulty will be experienced in obtaining the services of men of the highest ability and character. Canada had no difficulty in obtaining the services of Sir Henry Thornton, one of the outstanding railroad men of England and, prior to that time, one of the outstanding railroad men of the United States.

"The present chairman of the board of public trustees of the Boston Elevated Railway is Henry I. Harriman, who has twice been president of the Boston Chamber of Commerce and has a distinguished record in the public

utility field. He is now serving the Commonwealth of Massachusetts as loyally as he formerly served private interests. At the present time few, if any, of the great executives of the country own or even control the properties which they manage. They all serve somebody and, if given a fair chance, I believe that many of them would actually prefer to serve their country or their State or their city to serving purely private interests and profit."

5. *Government Owned Corporations in America*

For reasons of efficiency and freedom of action, such as those advanced by Commissioner Eastman, proposals for government development of waterpower have, in recent years, been partly along the lines of government owned corporations. For Muscle Shoals Congress approved the proposal of Senator Norris of Nebraska for a "Muscle Shoals Corporation of the United States." Its direction is put into the hands of three directors, each paid \$5,000 a year. These directors are to choose a chief executive officer and two assistant managers, one trained in the production of fixed nitrogen and one in the production and distribution of electricity. The combined salaries of these three are put at \$50,000 a year. The Corporation is empowered to distribute surplus energy equitably among the states within transmission distance, to construct transmission lines if necessary and build the Cove Creek Dam which will really make Muscle Shoals a great power development. In New York State former Governor Smith and Governor Roosevelt have been planning for a similar corporation to develop the St. Lawrence power when its development is shown to be advantageous. They have based their proposals for a "St. Lawrence Power Authority" on the success of the Port of New York Authority. Relying on the success of the same institution, Representative Davenport of New York proposed a Colorado River Water Power Authority for the development

of Boulder Dam. This was not adopted, and that power is being developed under the direction of the Secretary of the Interior instead.

During the war this form of government action in the economic field was widely depended upon, and many such government owned corporations resulted. They were for the most part officered by men who had, before the war, become experts in the field of activity involved in each case, and left private positions to undertake the government work. The end of the war brought most of these war time corporations to an end. The abnormal times during which they were at work and the conflict between their long term planning and the abruptness of their closing make it difficult to appraise the success of their activities.

There remain, however, several peace time government corporations on the North American continent which are operating successfully. The Port of New York Authority is the outstanding illustration in the East. Its task is to bring some order into a port which borders on two states, a task impossible for either of the states to undertake alone. Intricate problems of freight traffic crossing the railroads and shiplines and passenger traffic crossing the port in various angles were to be solved. The two states of New Jersey and New York by compact created a Port District and an administrative authority, a body corporate and politic, with power and authority to purchase, construct, lease and operate any terminal or transportation facility within the Port District. Three commissioners are appointed by each state, and the board thus constituted employs engineers and raises money. It has raised in three issues, \$46,000,000 in bonds, paying 4.77, 4.24 and 4.01 per cent. Practically all the commissioners are bankers and were able to advise on the proper time for these issues. Several bridges have been built, including the George Washington Memorial bridge with the longest

suspension span in the world. The problem of inland freight terminals still remains unsettled. One was started in 1931.

This Port Authority is more limited in some ways than others are. The Port of Albany can tax for benefits. The Port of Montreal Commissioners own the entire waterfront and are free from taxation. Toronto and New Orleans give their Port Authorities the entire control of the port district. Unlike the authorities of London and Liverpool the Port of New York Authority is less a supervising agency than an agency for coordinating the activities of all the municipalities involved in the welfare of the port. It is limited by the provision that no property of either state or of any municipality shall be taken without its consent, nor can it pledge the credit of either state, and either of the two Governors can veto its plans. This has never been done. As a revenue producing utility it is not hampered by the limitations placed on the cities' power to bond themselves. It has been able to secure the services of very able engineers and counsel. The saving on three bridges on Staten Island was placed by the Port Authority's counsel, Mr. Julius Henry Cohen, at \$17,500,000 over what it would have cost private builders to construct the bridges and to retire the investment.

The outstanding illustration of government owned corporations in the Middle West is probably the Inland Waterways Corporation. The service of creating water transportation facilities on the Mississippi and Warrior Rivers was undertaken first during the war to supplement railroad traffic and to reduce rates on shipments in that part of the country. This did not meet with a great deal of cooperation from the railroads. At the end of the Railroad Administration in 1920, the service was continued by the government through the Inland and Coastwise Waterways Service, which lost nearly a million dollars a year during its existence from 1920 to 1924.

It operated under the direction of the Secretary of War, but the law establishing the service laid down several contradictory principles. It provided that the service should be carried on by means of Congressional appropriations, but that the facilities should be operated as if they were privately owned. Yet this could not be done because the organization had none of the powers of a private transportation agency and its very existence depended upon appropriations from Congress. Major General Ashburn, who has been head of the government corporation which succeeded this service at the end of 1924, commented: "Some of the inherent difficulties of governmental operation were rather nebulous at first, but it soon became plainly evident that if there were any chance at all for success the personnel must be kept clear of political appointments, that the operations must be conducted along sane and conservative business principles, that the project should be considered as a national one, not local, and that the public should be educated out of the belief that the prime object of rejuvenating water-borne traffic was preferential treatment for river-bank communities or bitter competition with the railroads."¹²

With these objections in mind he suggested to Congress in 1923 that it was necessary to allow the Secretary of War to do the things that he would ordinarily do as the head of a great private transportation agency, that it was also necessary to provide him with sufficient capital to overcome the conditions which militated against the success of the governmental demonstration, that it was necessary to have a permanent executive head for the service and a continuing business policy. Since water transportation could not come back through private initiative, since the causes for its collapse still existed, and since the Government had invested a good deal of money in the waterways and had the right to find out if it had not been remiss in turning those expenditures to prac-

tical account, he suggested the Inland Waterways Corporation.

This was set up in 1924. In order to secure money for necessary expenditures the Government appropriated \$5,000,000 to buy the stock of the corporation, the property at the time being valued at \$9,763,858. An advisory board of directors was created, but without executive authority. This remained with the Secretary of War, and his functions could be delegated to the Chairman of the Board, who is Major General Ashburn of the Army Engineers. The corporation was given all the powers inherent in a private corporate entity chartered by a state, and was made liable before the courts. It was given power to acquire, hold and dispose of property, to issue notes and borrow money up to 25 per cent of the assets and to conduct the business of a common carrier. Later the corporate stock allowed was raised to \$15,000,000, the assets being \$19,746,350. At the end of 1929 it had over two million dollars in cash and six million in unissued stock. During the four years from 1925 to 1928 the net average annual income was \$126,937, as opposed to a previous deficit of nearly a million a year.

In addition to maintaining the normal saving over rail hauls, amounting to 20 per cent, the corporation has applied this saving to combined rail-river hauls. It was found necessary to take over a railroad which the Southern Railway was giving up as unprofitable, the only connection between the Warrior River and the interior of Alabama. The Southern threw the line into the hands of a receiver and asked for its abandonment. This the Court did not allow but ordered the road sold for \$500,000. A subsidiary corporation of the Inland Waterways Corporation bought the line, put \$383,000 into its rehabilitation and has been operating it at a profit of over 6 per cent. General Ashburn who has been through the two forms of organization, departmental and corporate, said, "Unless

the Inland Waterways Corporation had been organized as it was with the power to act lodged absolutely in a single hand, with the responsibility for such action in the same hand, clothed with specific powers, and in addition, such powers as may be necessary or incidental to fulfill the purposes of its creation, it could not have become an efficient corporation." ¹⁸

While this is a story of a government owned corporation doing what a departmental service, handicapped in many ways, could not do, the story of the Canadian National Railways is that of a government owned corporation doing what competing private companies could not do. When Sir Henry Thornton was offered the management in 1922 of what is now the largest system on the North American Continent it consisted of eight different railroads. Only one of them, the Intercolonial, had been state owned. Another was the Grand Trunk, with 4,775 miles, which had given up the ghost as a private company in 1919. In addition the Grand Trunk Pacific, built with government assistance, had gone into receivership in the same year. Two units were constituted out of these eight, the Canadian National and the Grand Trunk. In the five units of the Canadian National Railways all the debts piled up under previous private ownership were taken over. Sir Henry puts it, "Not one single error of financing or vision has ever been wiped out. When the government took over those roads it took their debts also. Beyond one technical receivership by which the government took over the Grand Trunk Pacific, the transfer was simply a turning over of assets and liabilities from private to public ownership. In all cases the debt of securities remained intact; there had been no stepping down of stock and bond valuations to permit lower interest charges. Every handicap of bad financial judgment, overexpansion, building into nonpaying territory, excessive cost of con-

struction and the hundred and one other burdens which throw a business into bankruptcy remained."

With this handicap, the income from 22,000 miles of road was only \$2,000,000 in 1922. Under Thornton the roads were unified, brought up to date and became solvent in 1926. Rates have been lowered and wages increased. The economic development of the country has been substantially advanced.

Thornton tells the story: "There never has been any politics. But that wasn't the fault of a great many persons. Premier King kept his promise. And during the period between elections when the Conservative Party was in control no one labored harder in the real interest of the property than Sir Henry Drayton, who carried on governmental administration during the election period. Within a year a bulwark had arisen to back him—the opinion of the people of Canada. Today there is as much chance of politics getting into the Canadian National Railways as there is of an elephant walking a tight rope. Both have yet to be done. Last year, for instance, the railways which I am fortunate enough to administer bought \$99,000,000 worth of supplies. Not one cent of those purchases was dictated politically nor any that preceded them."¹⁴

Another form of successful governmental administration of a utility is represented by the Hydro-Electric Power Commission of Ontario. Its low rates and its proximity to private plants in the United States have made it the target of attacks by the privately owned utilities in this country, as already observed in Chapter Seven.

This Commission has considerable powers. It is the agency of the provincial government of Ontario, which appoints it, and to which it accounts. At the same time it is a trustee for the associated municipalities on whose behalf it generates and transmits power. It is an independent agency to the extent that it can take title to prop-

erties and vest the title in itself and make contracts. It owns and controls the generation plants and the transmission lines. It differs from the Port of New York Authority, however, in that the Province raises capital on account of the Commission. The Commission does not raise its own capital.

The second party to this arrangement is made up of the associated cities and towns. They are the direct owners of the distributing systems within their borders. They also share jointly in the equity in the properties vested in the Commission. They are financially accountable to the Commission. The Province is the constitutional source of the powers both of the Commission and of the cities and acts as guarantor of the Commission's undertakings. It also grants one form of subsidy and only one to help power expansion in rural areas. Ninety-four rural power districts have been created and have received provincial grants-in-aid of \$1,616,557, which is a small amount compared to the entire investment by the Commission and the municipalities in the system.¹⁵

The Commission began as a distributor of power. Only after seven years of life, in 1917, did it purchase generating plants and become a producing and distributing system. In 1927 the capital investment was \$286,164,745, of which the distributing systems of the municipalities accounted for \$81,792,678. A large part of the municipal development has been made from surplus revenues, as the municipal debentures outstanding amount to only \$42,891,361. "The figures from year to year show the steady progress made so that the total debt may be amortized and future consumers will profit by the elimination of debt charges. At that time the people will own their own distribution systems free of encumbrance."¹⁶

Many American cities have been able to conduct their public utility business without setting up such corpora-

tions. They have been able to draw efficient men and devoted and in many cases voluntary aid from some of their most prominent citizens. There is no intention here of drawing a detailed comparison between the types of administration. At the same time it can be noted that where more than one city is to be served, where the project involves the coöperation of various governmental units or is in the interest of larger sections of the country, the corporate form of governmental administration has its decided advantages.

NOTES

¹ *New York Times*, June 29, 1930.

² Quoted by Professor Otten C. Hornell in "Electricity in Great Britain," Supplement, *National Municipal Review*, June, 1928.

³ Electricity Supply Act, 1926, Section 14, Great Britain.

⁴ *National Municipal Review*, *supra*.

⁵ *Idem*.

⁶ Compare "Aufbau und Entwicklungsmöglichkeiten der Europäischen Elektrizitätswirtschaft," published by the bank of Schwarz, Goldsmid, Berlin, Germany, 1929. Note that Dr. Oscar Mulert, President of the German Union of Towns, quoted in *Public Management*, July, 1930, gives the figures as 22 per cent of the electric power plants municipally owned, 25 per cent state owned, 30 per cent under joint administration, and 23 per cent private.

⁷ Schmollet, *Jahrbuch fuer Gesetzgebung*, 1917, Clemens Heiss, p. 196.

⁸ Report of the Commission on Revision of the Public Service Commissions Laws, New York State, 1930, Appendix.

⁹ Donald R. Richberg, *Critical Issues in Public Utility Regulation*, 1930, p. 9. Obtainable from the author at 333 N. Michigan Ave., Chicago.

¹⁰ Quoted by Maj. Gen. T. Q. Ashburn, Chairman of the Board, Inland Waterways Corporation, speech before the City Club of New York, February 17, 1930.

¹¹ Proceedings of the Annual Convention of Railway and Utility Commissioners, 1927, report of the Committee on Public Ownership and Operation.

¹² Maj. Gen. Ashburn, *supra*.

¹³ *Idem*.

¹⁴ Sir Henry W. Thornton, "A Railroad is Never Finished," *Saturday Evening Post*, July 6, 1929.

¹⁵ Professor Harold S. Patton, *Journal of Land and Public Utility, Economics*, May and August, 1927.

¹⁶ Mosher and Associates, *Electrical Utilities*, Harpers, 1930, pp. 224-5.

which had too much at stake in speculative values to stand any opposition without retaliating.

The story of the rise of the power group has, in the telling, been lost occasionally in the description of the methods by which they achieved their exploits. Their own ideals have colored the story. The very weight of the hundreds of millions of dollars which they were busy taking, without any valid social excuse, has tended to outweigh the description of the exercise of financial and political pressure used in the process. Yet behind each exploit whether it was in a city, state or national arena, there was enough real force to secure either silence or the defeat of the opposition. There was power piled up over many years, grouped and waiting, promoted and elected.

The story is not at an end.

The cynicism which has led some of the leaders of the power group to regard this country as their oyster may some day be repudiated by the people. And if that repudiation comes, if the people finally decide that a million dollars a day is too high a price to pay for the doubtful pleasure of being chucked under the chin and told that they are fine, rugged individuals, it will probably come as a protest against their cynicism and arrogance rather than as a protest against a perfectly legal robbery. If the power people had been frank and honest about what they were doing, if they had come right out and said, "We're out to get what we can. You've farmed out a public business to us and you can take the results," the whole set-up might have been passed by as just another racket, an expensive one, but nothing more. They were not content to let it go at that. Their predecessors had flown the black flag from the masthead for all the world to see, and some of them were as genial a mess of pirates as ever scuttled an administration. But that was not good enough for this crowd. They had to claim that they were

CHAPTER NINE

A PROGRAM OF PEACE WITH POWER

THIS account started out to be something more than the story of the power fight. It started out to be the story of the rise in our country of a group which has been outstandingly active in converting those with whom it came into contact into adherents of the new industrial feudalism. That conversion has not been brought about on a particularly high level of religious expression. The converts are largely captives.

Other factors and forces were also operating at the same time to create this new era in which the bulk of working and professional men have neither security nor independence. The power group worked with, to a certain extent headed, and certainly symbolized the whole process. Its leaders probably did no worse by the country than any other group of men would have done, given the same set of ideals and the same nakedness of the country to aggressive action. If we had made the automobile men responsible for building the many excellent highways which the country now possesses, and had made them come to the states and federal government for licenses to build the roads before they could market their automobiles, we would probably have had another group acting in very much the same way. There would have been the same attempts to capitalize the growth of the communities, the same fights about toll rates, the same political influence, the same process of educating the public in press, school and club about the advantages of private ownership of the highways, the same creation of a power in the nation

the best people in the world, the greatest servants of the country, the missing link between poverty and riches, the fighters against the enemies of the people, the almost divinely appointed flag-bearers of the red-white-and-blue.

We are a simple and kindly people, and like our fun, yet there are certain limits which our good taste imposes on this sort of a show. After a while a certain feeling of nausea sets in. It is not unlike that provoked in years gone by through the antics exhibited in musical revues. For a while it was the custom of some producers, when the show was otherwise a failure, to dress the chorus girls up in red-white-and-blue and send them out on the stage kicking and saluting the flag to the blare of martial music. After it had gone on a while people began to see that, after all, here was nothing but a lot of chorus girls drumming up business, and the colors of the flag were not those that ought to be used for that purpose. The flag was something to live for or die for, but not to make money out of.

Here was the act of arrogance, of impudence. They paraded patriotism as if it were their very own, something they had bought and paid for like the council of a small town with a power plant to dispose of. They were the rightful possessors of patriotism and would communicate it straight from its source to the children in the schools, to the newspapers in towns and cities, to the women, to the farmers, to the whole nation from President down. All who disagreed with them, who thought their claim that they were performing a public business as cheaply as it could be done was a fraud, were labeled radicals and traitors. While this was going on the power men were pocketing close to a million dollars a day more than the public business should have cost. People are beginning to see that part of the show, and mercenary patriotism brings with it nausea in the end.

Most people have a feeling about the country which

is not mercenary. Most people are decent people, and want to get on and want their neighbors to get on, too. Most people believe in clean government and would like to know how to get it. Most people believe in economical and efficient government. Most people would like to see the standard of living raised, their own and everybody else's. Most people would probably, if the issue were presented to them, prefer to have the country struggle toward these ideals than surrender to the cynical and pessimistic principle that the public good can be attained only if, and when, and to the extent it happens to coincide with private profit.

In the midst of a movement which seems to be delimiting the amount and quality of economic freedom in this country, it is important for those who have an unmercenary feeling to look behind the slogans shouted and banners carried by the leaders of the power group and their allies. Behind all that tumult and shouting a situation is being created which has little in common with economic freedom. In some ways the worst result is that the men who might be most influential in directing scientific advance into channels where it will help rather than confuse our economic organization, the engineers and managers, are left with as little independence and opportunity to use their professional attainments for the social good as the simplest ditch digger. In the growing and increasingly tight alliance of banking groups controlling the bulk of the industry, and in the financial set-up of holding companies, so tenuous and thin that a few cuts in rates might drop some of their more speculative stocks fifty points, the engineers and managers can do little for the public, and little for themselves. They can not even express their opposition to the anti-social policy of the companies, for there is no other place for them to seek work.

There should be a place where the engineers can make

their contributions to society without having them checked, vetoed or appropriated by the speculative interests represented by the controllers of the power industry. Just as in the great days of this country men who did not choose to spend their lives in the mills and factories of the East could go West and find land which they could build up, they should now be free to step out of a tightening feudal industrialism into a free area. This free area might well be an important public business such as the power industry. As the Ontario Hydro-Electric system has proved to the world, it is an area where engineers and managers, when left unhampered by speculative financial controls, can contribute in large measures to the social growth, standards of living, and general welfare of the community.

The country can well use engineers and managers who are free to consider the power industry in relation to the nation's development. At present, in spite of the unifying tendency of the banking controls, the industry is not planned or developed for service to the whole nation. Power maps of such great industrial states as Pennsylvania still look like patchwork quilts of different colored interests. What we have had is competitive planning with its unnecessary expense. The engineers of the General Electric are even now working on a tube they call the thyatron which promises, according to them, to make possible the shipment of high voltage currents for distances far greater than those now in use, that converts direct current into alternating current and inverts alternating into direct without difficulty and with very little expense. Sooner or later we may expect to see the Maine and St. Lawrence waterpowers in the Northeast hooked up with the coal fields of Pennsylvania and West Virginia, and the waterpowers of the Southern states with the natural gas of Texas and Oklahoma, into one great grid system. It is not too late to call in engineers who will

plan these developments with an eye to the good of the whole country rather than to that of Mr. Morgan's various tributary companies. That means government engineers. It is not too late to prevent the capitalization of the benefits of such developments at the expense of the community. That means ownership by agencies of the governments involved.

There is no question that the governments, city, state or national, should admit that engineering ability and professional standards devoted to public service are worthy of a price at least as large as that paid by private companies. A whole new scale of values should be adopted by the governments when it comes to the employment of engineers and managers. Where governmental authorities with the powers of private companies have been created, these standards of values have begun to be realized. The engineers receive a salary that involves little or no sacrifice on their part in making their professional contribution where it should be made—to society.

This is one of the first essentials of any national program for power and peace with power. There should be one free area in the closed ranks of industrial feudalism where men can serve society. They should be paid enough so that they will have no regrets at casting their lot with the interest of the community.

The second essential in any such planning is that the groups carrying on the industry have all the freedom of private corporations. Once their purpose and function is decided upon they should be organized as government corporations, such as the proposed Muscle Shoals Corporation of the United States, to carry on the public business with freedom from civil service requirements and other checks which have been put on other governmental services. They should withstand the strict financial scrutiny of their plans which is applied private corporations when they enter the market to secure money for their purposes. The

Port of New York Authority has done this very successfully, in addition to showing sufficient engineering initiative to build the longest span bridge in the world.

The third essential requirement is that sufficient opportunity be given the ablest engineers in the country to use their ability for the social welfare. Those engineers who have taken charge of some of the larger municipal plants have shown that they could pass on the benefits of the industry in greater measure than engineers hampered by private banking controls. Those who have undertaken a public superpower system have found that they could contribute far more than single and isolated municipal plants. In this country we have a growing movement for public power districts, linking together cities and towns that are close to one another, securing the advantages of interconnection, of service by the most efficient plants in the district. Those men in Washington, Oregon, Nebraska, California, Wisconsin, New York and Pennsylvania who have been urging these districts, with growing success, are on the right track. Where they have established such districts there has been a tremendous effort on the part of the power companies to destroy them and to nullify the law. Yet those districts promise to do what was done across the border in Ontario on a small scale at first, establish a yardstick which the people will hold up against these much vaunted private companies and will find them falling far short of their claims. Such districts are of importance enough to call for the efforts of very able engineers. They should be organized as power authorities, combining the advantages of private initiative and social planning.

The case for government ownership of the power industry does not rest on these considerations solely, important as they are to the engineers and to the rest of the community. It rests on the essential premise that a governmental business should be performed at cost, and no

more. Leaving aside for a moment the record that whatever a governmental business, whether that of running a navy or a forest or oil reserve has been turned over to privateersmen there has been corruption, influence and political manipulation by those interested in getting rich, there remains the fact that the government can furnish this power service much more cheaply than the private companies are doing it. In a previous chapter figures have been given which show the basis for the claim that if the government owned the industry today it could not only pay all the exorbitant holding company fees, maintain all the expensive standby stations that have been developed as a result of competitive planning, all the banking fees and other perquisites taken, a good part of the inflation that has been pumped into the industry, but it could do all these things, and still save the consumers of light and power throughout the country a million dollars a day. If the industry grows rapidly that possible saving will, within thirty years, be about two million dollars a day.

In view of possible savings of this size it was essential for the power companies to capture patriotism and parade it as their own. Presidents and Governors have been hailed as great patriots for reducing the taxes levied on the people to carry on the army and navy and other governmental services. A move to reduce the taxes levied by the private power companies in the form of high electric rates might also have been considered patriotic had not the power companies got there first and raised the flag over the show.

The case for government ownership and development by power authorities rests largely on the ineffectiveness of regulation, present or proposed. Only where government developments of some size and importance, like those in Washington, California and Massachusetts are setting up their small yardsticks, is regulation relatively effective,

and rates relatively low. New York State, with all its waterpowers, with all its large industrial cities, with all its expensive state commission has only one yardstick of any importance at present, and, away from that city its average rates are higher than those in the rest of the nation. To improve regulation is a long fight, a never ending fight against companies which can levy funds on the very public which is fighting them. Every step forward can be held up by years of litigation. This means time, time in which the utilities can hire the brightest brains in the country to defeat and delay the efforts to combat their claims, to find ways around and through the defense lines built by the public, time also in which they can establish new claims, and keep the claim stakes hammered down. Their record in regard to federal waterpower legislation is in point.

Of course the utilities are strong supporters—the very strongest—of regulation. They have profited by it in a way which private business in a competitive field is rarely able to profit. It is nonsense to pretend that they have been restricted by regulation. It has been our great gift to them.

Is there any use in trying to improve the regulatory system? For some years the present writer has thought so, and spent some time advocating people's counsels, contract controls and the like. Various state bodies have advocated similar improvements in the regulatory system. Most of them have so far met with defeat. Years of time and effort could be spent in trying to improve the regulatory system. Years of time and effort could be spent alone in calling attention to every new move on the part of the power companies to establish claims on the income of the consumers present and future. When it is all done what is the result? What is the result with the railroads? A group that is still fighting regulation at every turn, still urging the repeal of such measures as the recapture of

excess earnings, still fighting valuations, still organizing holding companies which fight plans for unification that do not seem to offer greatest profits, still using influence concerning the regulation of busses and other competitors. It hardly seems worthwhile to go through the same procedure with the power companies, at such cost in millions of dollars, in effort and time, to achieve the same results.

It should also be remembered that the power companies have an organized force which is stronger and more effective than that used by the railroads in the days when regulation of them was put into effect. The persuasive evidence of this power is in their ability to hold up for eight years the Government's use of its own waterpower and steampower plant at Muscle Shoals. They made the mistake of thinking that the Government was sufficiently subservient to give them a plant whose capitalized profits, after all operating expenses and rentals had been paid, would range between \$143,000,000 and \$249,000,000. But nevertheless they were able to hold up for all those eight years the plan for Government operation of its own development, which would not have presented them with any such gift. This is power in the nation.

Public spirited men of constructive ability will do well to question the value of any effort they may give to an improvement of the regulatory system. They will not only meet defeat after defeat, but if they win they will have won little that is of real benefit to the community. They will have left the industrial feudalism of the country united. They will have left it in the hands of the private companies to charge over a million dollars a day more than necessary for the performance of a public service. They will have left the private power industry free to carry on its constant attempts to secure new governmental privileges and use them for its own good. They will find themselves aided to only a limited extent by many state public service commissioners. They will find these

men have built a protective wall around their jobs, a wall of thinking that separates them from their supposed duty to be on guard for the interests of the public and turns them into umpires, invests them with the mantle of judges. They will find that some of these commissioners like to consider themselves as umpires because then it is easier for them to go into service with the private companies. They will find these men, as well as some of the sharpest financiers on the Street, hiding behind the clothes of the engineers, and claiming credit because the engineers serve. They will find a whole machine of power operating to make business heroes of the one-time public servants who have demonstrated nothing more than their ability to yield to great temptations successfully.

In the end we are probably going to draw a line through all the mercenary and preposterous patriotism of the power companies, through all their efforts to educate the children and the farmers and the women and the nation, through all their claims about the advantages of holding companies, through all their claims about the way regulation protects the public—we are going to draw a line and write the word "fraud," and close the accounts.

The date at which we are going to do this does not, I fear, depend upon the valuation of such intangibles as the idealism of the country, and the desire of men to have it free. It depends very simply—and the power companies know this—on the length of time during which the power companies can hold up popular and legal decisions on power districts and on the development by states or by the nation of the remaining waterpower resources. A large municipal plant in Los Angeles convinced the business men of San Francisco that it was to the advantage of their city to have cheap power. The municipal plants in Seattle and Tacoma have been having the same influence on the business men in other cities of the Northwest. The small league of Ontario municipali-

ties gave such an illustration of superiority, purchasing all its power at first, that all the main cities in Ontario joined it within a decade. This is what may be expected from power districts in this country.

It is toward delaying and hampering the creation of these power districts and the government development of waterpowers that the power companies may be expected to spend their energies and influence during the present decade, that of the 1930's. It is here that the real power fight will center.

APPENDIX

CONCENTRATION OF CONTROL (END OF 1931)

MORGAN-BONBRIGHT-NATIONAL CITY INFLUENCE

A. United Group

<i>Total Capacity Kilowatts In- stalled (1930)</i>		<i>Total Kilowatt Hours Gener- ated (1930) (000 omitted)</i>
	I. United Gas Improvement	
998,465	Philadelphia Electric.....	3,058,481
556,450	Public Service of New Jersey.....	1,839,259
166,605	Connecticut Electric Service system	432,771
22,500	Delaware Power and Light Co.....	12,388
34,000	Erie County Electric Co.....	.....
401,050	2. Columbia Gas and Electric.....	1,158,895
1,569,991	3. Niagara Hudson Power Corp.....	5,762,366
41,100	Central Hudson Gas and Electric..	68,194
	4. Commonwealth and Southern	
795,914	Alabama Power Co.....	1,468,440
374,515	Consumers Power Co.....	954,625
407,252	Georgia Power Co.....	1,060,275
216,998	Tennessee Electric Power Co.....	541,465
314,425	Ohio Edison Co.....	792,640
39,900 ¹	Southern Indiana Gas and Electric	66,586
38,658	South Carolina Power Co.....	115,804
29,410	Mississippi Power Co.....	22,339
none	Pennsylvania Power Co.....	none *
88,800 ¹	{ Illinois Electric Power Co. }	261,297
	{ Illinois Power Co. }	
	{ Central Illinois Light Co. }	

B. Consolidated Gas Interests

2,057,700	I. New York Edison system.....	4,983,500
10,550	Westchester Lighting Co.....	none

C. Electric Bond and Share Interests

	I. American Power and Light system	
204,300	Montana Power Co.....	1,285,539
200,634 ¹	Washington Water Power Co.....	571,917
104,279 ¹	Texas Electric Service Co.....	563,835

THE POWER FIGHT

<i>Total Capacity Kilowatts In- stalled (1930)</i>		<i>Total Kilowatt Hours Gen- erated (1930) (000 omitted)</i>
65,678	Texas Power and Light Co.....	262,059
106,211	Minnesota Power and Light Co.....	455,238
52,100	Northwestern Electric Co.....	247,820
71,400	Kansas Gas and Electric Co.....	271,328
98,266	Nebraska Power Co.....	320,411
34,142	Pacific Power and Light Co.....	137,341
139,840	Florida Power and Light Co.....	206,674
15,500	Central Arizona Light and Power Co.....	.....
1,750	Superior Water, Light and Power Co. (Wis.).....	.....
393,695	2. American Gas and Electric system	1,335,162
367,840	Ohio Power Co.....	1,429,306
115,504	Appalachian Electric Power Co....	448,339
123,500	Indiana and Michigan Electric Co..	278,024
111,000	Seranton Electric Co.....	199,551
40,950	Atlantic City Electric Co.....	121,356
9,360	Indiana General Service Co.....	9,749
2,600	Wheeling Electric Co.....	114
243,079	3. Southern Ohio Public Service.....	487,936
99,032	Electric Power and Light system	521,427
71,500	Utah Power and Light Co.....	454,075
112,700	Louisiana Power and Light Co.....	350,484
51,455	Idaho Power Co.....	54,883
82,500	New Orleans Public Service, Inc..	213,549
20,085	Arkansas Power and Light Co.....	11,157
359,869	4. Dallas Power and Light Co.....	1,217,133
132,056	Mississippi Power and Light Co....	539,861
253,050	5. Lehigh Power Securities Corporation	417,729
11,700	Pennsylvania Power and Light Co..	none
54,000	National Power and Light System	194,354
6,555	Houston Lighting and Power Co....	334
	Carolina Power and Light Co.....	
	Birmingham Electric Co.....	
	Memphis Power and Light Co.....	
	Tennessee Public Service Co.....	
	CHASE, HARRIS, FORBES INFLUENCE	
444,000	1. Standard Gas and Electric	1,478,947
400,270	Duquesne Light Co.....	969,058
103,008	Northern States Power Co.....	452,367
186,098	California, Oregon Power Co.....	589,099
192,340	Oklahoma Gas and Electric Co....	326,274
	Louisville Gas and Electric Co....	

APPENDIX

<i>Total Capacity Kilowatts In- stalled (1930)</i>		<i>Total Kilowatt Hours Gen- erated (1930) (000 omitted)</i>
74,000	1. San Diego Consolidated Gas & Electric Co.....	176,288
69,370	Wisconsin Public Service Corp.....	199,906
37,615	Mountain States Power Co.....	32,587
18,742	Wisconsin Valley Electric Co.....	58,891
24,988	Southern Colorado Power Co.....	.....
57,581	2. Utilities Power and Light	104,674
103,200	Interstate Power Company system.	311,504
22,500	Indianapolis Power and Light Co..	not stated
119,251	Laclede Power and Light.....	not stated
700,052	3. International Paper and Power New England Power Association system.....	not stated
248,198	4. Associated Gas and Electric Interests	1,312,570
128,945	Pennsylvania-New Jersey system...	685,273
58,386	Rochester Gas and Electric Corp..	360,387
115,000	Pennsylvania Electric Co.....	241,809
102,705	New Bedford Gas and Edison Light Co.....	195,293
47,500	Broad River Power Co.....	163,946
36,500	Staten Island Edison Corp.....	141,086
76,346	Eric Lighting Co.....	123,839
28,800	New York State Gas and Electric Co.....	226,176
7,969	Clarton River Power Co.....	48,071
15,500	American Utilities.....	not stated
1,090	Cambridge Electric Light Co.....	not stated
	Cape and Vineyard Electric Co....	not stated
	5. Central Public Service System	584,278
157,480	Portland General Electric Co.....	not stated
106,587	Others.....	not stated
215,000	INSUL. INTERESTS	
58,194	Super Power Company of Illinois.	671,902
164,050	Florida Power Corp. and subsidia- ries.....	101,898
58,497	Jersey Central Power and Light Co.	118,217
1,090,500	Virginia Public Service Co.....	180,060
200,000	Commonwealth Edison Co.....	3,246,092
	Public Service of Northern Illinois	641,201
	Chicago District Electric Generat- ing Co.....	1,039,422
142,145	Central Illinois Public Service Co..	228,338

Total Capacity Kilowatts In- stalled (1930)		Total Kilowatt Hours Gener- ated (1930) (000 omitted)
92,285	Central Indiana Power Co.....	319,834
102,415	Northern Indiana Public Service Co.	59,359
53,987	Interstate Public Service Co.....	132,620
63,289	Wisconsin Power and Light Co.....	186,694
122,660 ¹	Central Maine Power Co.....	204,489
79,320	Public Service of Oklahoma.....	234,094
52,922	West Texas Utilities Co.....	224,201
79,062	Kentucky Utilities Co.....	218,579
78,502	Central Power and Light Co.....	249,316
46,363	Southwestern Gas and Electric Co..	125,029
60,812	Cumberland County Power and Light Co.....	136,936
80,770	Penn Central Light and Power Co..	240,630
60,484	Public Service Co. of New Hamp- shire	139,201
48,650	Terre Haute, Indianapolis and East- ern Traction Co.....	77,096
151,835	Half control of North American Light and Power Co.	274,262
NORTH AMERICAN LIGHT AND POWER SYSTEM (HALF CONTROL BY INSULL, HALF BY NORTH AMERICAN)		
86,500	Illinois Power and Light Corpora- tion	107,350
92,740	Des Moines Electric Light Co.....	183,658
75,450	Kansas Power and Light Co.....	134,285
48,980	United Power and Light Co. (Kan- sas)	123,232
NORTH AMERICAN INTERESTS		
598,420	Missouri, Illinois, Iowa group.....	1,954,395
547,000	Cleveland Electric Illuminating Co. 1,369,179	
448,524	Wisconsin and Michigan group....	1,115,943
178,000	Potomac Electric Power Co.....	488,533
151,835	North American Power and Light (Half)	274,262
846,160	DETROIT EDISON Co.	2,382,535
1,122,639	PACIFIC GAS AND ELECTRIC INTER- ESTS	3,669,319
939,640	SOUTHERN CALIFORNIA EDISON Co. 3,150,235	

Total Capacity Kilowatts In- stalled (1930)	STONE AND WEBSTER INTERESTS	Total Kilowatt Hours Gener- ated (1930) (000 omitted)
262,735	Puget Sound Power and Light Co..	855,255
161,610	Virginia Electric and Power Co....	459,871
73,000	Montaup Electric Co.....	374,034
81,123	Gulf States Utilities Co.....	236,596
35,250	Blackstone Valley Gas and Electric Co.	13,223
37,315	Tampa Electric Co.....	167,816
60,113	El Paso Electric Co.....	72,958
10,100	Sierra Pacific Electric Co.....	not stated
19,000	Edison Electric Company of Brock- ton	not stated
9,830	Galveston-Houston Electric Co....	not stated
37,315	Tampa Electric Co.....	not stated
781,045	DUKE POWER COMPANY	1,582,832
UNITED LIGHT AND POWER (CONTINENTAL SHARES)		
238,043	Kansas City Power and Light.....	647,940
132,500	Columbus Railway, Power and Light	294,445
100,000	San Antonio Public Service.....	211,441
78,200	Moline-Rock Island Manufacturing Co.	116,344
40,411	Iowa-Nebraska Light and Power....	not stated
20,600	Southern Ohio Electric Co.....	not stated
88,684	Others .....	.....
CITIES SERVICE (DOHERTY)		
130,100	Ohio Public Service Co.....	377,599
167,000	Toledo Edison Co.....	369,434
124,500	Public Service of Colorado.....	327,386
82,400	Empire District Electric Co.....	223,795
73,000	Others .....	.....
98,238	Federal Light and Traction.....	100,000 Est.
AMERICAN WATERWORKS AND ELECTRIC		
514,414	West Penn Electric Co.....	1,839,259
500	Keyser Light and Power Co.....	.....

ALFRED GROUP

<i>Total Capacity Kilowatts In- stalled (1930)</i>		<i>Total Kilowatt Hours Gen- erated (1930) (000 omitted)</i>
257,600	Consolidated Gas, Elec. Light and Power	669,637
131,000	Pennsylvania Water and Power....	520,598
375,910	Edison Electric Illuminating (Boston)	989,754
148,700	Los Angeles Gas and Electric Corp.	388,282
140,000	Hartford Electric Light Company	356,250
161,335	Western Massachusetts Com- panies	312,000
80,430	Nevada-California Electric Corp.	203,581
44,776	United Illuminating Company...	283,362
79,055	American Electric Power Com- pany	171,097
GOVERNMENT PLANTS		
184,000	Muscle Shoals.....	306,119
127,500	City of Seattle.....	389,749
98,625	City of Tacoma.....	216,290
96,605	City of Los Angeles.....	269,531
83,000	City and County of San Francisco..	493,888
80,000	City of Detroit.....	193,244
70,050	Salt River Valley Water Users As- sociation	201,123
50,000	City of Cleveland.....	189,761

789,730

¹ Moody's *Manual of Public Utilities*, 1931.² Purchases all its power, 232,425,592 kilowatt hours.

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