THE NATIONAL CONTROVERSY REGARDING THE EXPANSION OF THE TENNESSEE VALLEY AUTHORITY IN THE FIELD OF STEAM-GENERATED ELECTRIC POWER

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CHAPTER I

GENERAL INTRODUCTION

Why this study? The Tennessee Valley Authority has brought many material benefits to the region it serves in the form of flood prevention, improved navigation, increased electric power, reforestation program, greater recreation facilities and other indirect benefits that come as a by-product of the ones mentioned above. The benefits of the Tennessee Valley Authority program are felt in both tangible and intangible forms, not only in other parts of the United States, but also in the rest of the world. Wherever there is a river the waters of which go into the sea without being used, wherever there are valleys that are flooded by seasonal overflow of water in the rivers, and wherever there is poverty in the midst of this potential source of wealth - people have looked to the TVA idea for an improvement in their economic status. The governments from every continent on the earth are attempting to develop projects similar to the ones developed by the Tennessee Valley Authority. The Government of the Republic of India has staked the very future of the country on the development of multipurpose projects on its various rivers, based on the idea of the Tennessee Valley Authority.

There are not many persons in the United States of

America who disapprove of the idea that is represented by the basic features of the Tennessee Valley Authority. According to the survey conducted by the Opinion Research Corporation and reported in the New Republic,

> Sixty-three percent of the people approve of the TVA, only 10 percent disapprove; 83 percent of the editors and educators polled approve, only 7 percent disapprove; 55 percent of Republicans approve, only 17 percent disapprove.[1]

However, in spite of the general approval of the basic idea, voices have been raised against certain aspects of the program or the manner in which they are being operated. The most important and the latest of all objections has been voiced by people who object to the idea of TVA getting into steam produced electric power generation. They think it is the first step towards nationalization of the public utilities.[2] Related to this question is the charge that the TVA power producing program is not an accurate "yardstick" to measure the effectiveness of privately owned public utility companies. They hold that TVA is able to maintain low power-rates because it is able to escape many expenses that a privately owned company cannot. In the words of Eugene A. Stephenson:

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[1] "A Case of Semantics," New Republic, 123: 4-9, July 29, 1950.

[2] "Creeping Socialism" is the current popular term that is being used to express the idea.

> These include a variety of taxes, such as certain local property taxes and franchise payments, unemployment, sales and use taxes, Federal corporation-income, electric energy, together with such frequently forgotten items as automobile licenses and state and Federal gasoline taxes.[3]

It is also charged that interest on most of the money that is invested in the power program is not shown in the public financial statements. If all these items are added and included in the accounts, the figures arrived at would show a loss on the power program. If proper allocation of expenses were made between the various major phases of the program, the new figures, it is charged, would further demonstrate the uneconomical operation of the power program.

Purpose. It is the purpose of this study (1) to survey these charges and the ones allied to them; (2) to examine the arguments on both sides of the controversy; (3) to arrive at a conclusion after weighing all the evidence. In the beginning, in order to acquaint the reader with the problem, a quick survey of the operations and activities of the TVA is made.

Scope and limitations. An attempt is made to confine the discussion to the question of the steam power generation activity of the Tennessee Valley Authority and the problems

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[3]Eugene A. Stephenson, "The Electric Power Supplied by TVA Isn't So 'Cheap'," The Saturday Evening Post, 226:10, September 26, 1953.

related to it. This limitation is necessary in order to treat the subject adequately as well as to avoid getting involved in too broad a field.

Method of approach. The study starts with a brief survey of the history, activities and the accomplishments of the Tennessee Valley Authority. It then goes into pertinent aspects of the financial statements as well as the steam-plant power program of TVA. Next, the controversial points of the TVA steam-generated power program are taken up and discussed. The general approach to that section of the study is first, to present arguments on both sides of the question; second, to examine the facts; and, third, to draw conclusions. Finally, the question of the charge of "creeping socialism" against TVA's steam-generated power program is discussed. An attempt is made towards the end to sum up the whole study and to present an overall evaluation of the question.

The Tennessee Valley Authority is such a vast subject that the present writer had to eliminate many aspects of the TVA program from the discussion in order to confine attention to one particular aspect that could be dealt with adequately and thoroughly. The subject chosen is of particular interest at the present time because of the President's directive requiring the Atomic Energy Commission to negotiate a contract with private electric power companies to supply electric

energy to the TVA system in exchange for power supplied to atomic plants by the TVA. According to the New York Times:

> This would involve the private construction under A.E.C. contract of a $107,250,000 steam plant at West Memphis, Ark.
>
> Power from this plant would feed 600,000 kilowatts into the T.V.A. system to replace an equal amount of power the T.V.A. is delivering to the atomic plant at Paducah, Ky.[4]

This directive of the President has revived an old controversy and has been partly responsible for one of the longest around-the-clock debates in the history of the United States Senate. It has once again raised the question of whether TVA should expand into the steam-generated electric power field.

The main features of the controversy which is centered around the proposed contract between the AEC and the Dixon-Yates private power group are also included in the discussion.

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[4]New York Times (June 18, 1954), p. 1.

CHAPTER II

TVA - TODAY

The watershed of the Tennessee River consists of parts of seven states, including most of Tennessee, much of Alabama and North Carolina, and smaller parts of Virginia, Kentucky, Georgia and Mississippi. The Tennessee River is the chief tributary of the Ohio River which, in its turn is the main tributary of the Mississippi River. The Tennessee Valley has an area of 41,000 square miles, or 26 million acres. The average rainfall in the Valley is 52 inches. It rains as much as 84 inches in some areas. Most of this rain falls during a definite season, instead of being uniformly spread throughout the year. This seasonality of course, creates overflow problems. Before the TVA dams were built the rains used to cause widespread floods at irregular intervals from fifteen to twenty-five years. Chattanooga, the largest city in the Valley, is situated on low land beside the river and hence was subject to serious damage.[5] Floods were also common because the tributaries of the Tennessee River had a tremendous drop and the waters charged downhill at a torrential pace. For example, in a hundred miles the drop is approximately from 6,000 feet to

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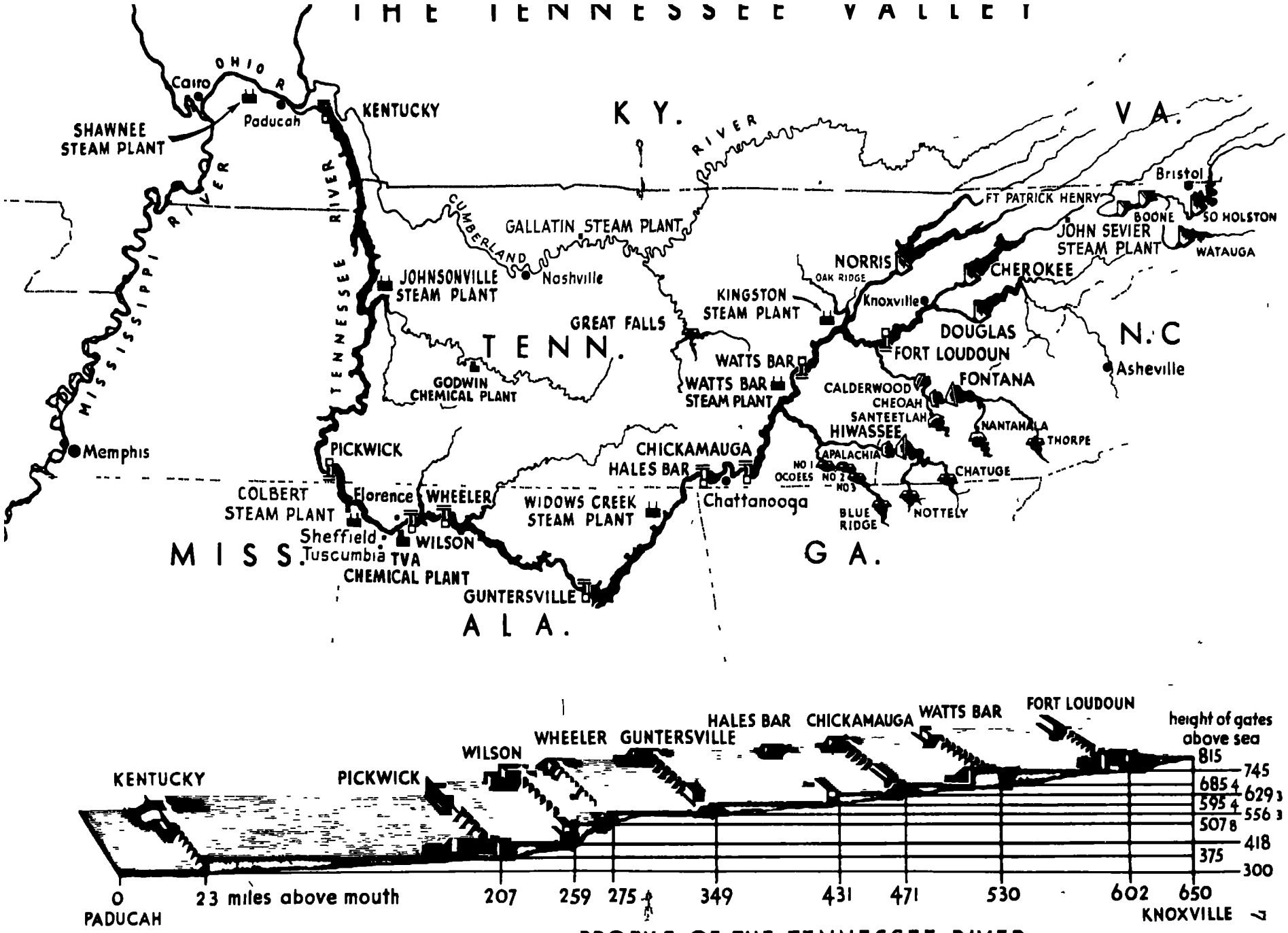
[5]See map on p. 7.



PROFILE OF THE TENNESSEE RIVER

SOURCE FACTS ABOUT TVA
OPERATION Pp 10-11

933 feet (at Knoxville).[6]

The Valley area possesses a great diversity of soils. More than 1,200 different soil types and phases are found here. Most of these are suitable for growing a wide variety of crops and plant products. The growing season varies from 150 days at the highest elevation, to 300 days in the lowlands, thus allowing growth of many kinds of soil products.[7]

The forest resources of the Valley include most of the hardwood species found in eastern United States. Among the different species to be found in the region are several southern pines and in the Appalachian highlands, many of the typically northern conifers such as white pine, hemlock, spruce and fir.[8]

The estimated present population in the Valley is 5,800,000. It is made up of relatively homogenous groups, a large percentage of which are native-born inhabitants. The Tennessee Valley is primarily an agricultural area with most of its people living in rural areas. Though the region is developing industrially today much faster than the United

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[6]Sherman M. Woodward and Van Court M. Hare, "A Great Public Utility," Queen's Quarterly, 55:1:1-2, Spring, 1948.

[7]M. H. Satterfield, Tennessee Valley Resources - Their Development and Use (Knoxville, Tennessee: Tennessee Valley Authority, 1947), p. 2.

[8]Loc. cit.

States as a whole, industrialization during the 18th and 19th centuries was far less than in the East or the Middle West.

The industrial backwardness of the South was dramatically put by Henry W. Grady, editor of the Atlanta Constitution in 1895. At the time of the death of a "one-gallus" Mr. Grady is quoted as saying:

> They cut through solid marble to make his grave, and yet a little tombstone they put above him was from Vermont. They buried him in the heart of a pine forest, and yet the pine coffin was imported from Cincinnati. They buried him by the side of the best sheep-grazing country in the world, and yet the wool in the coffin bands and the coffin bands themselves were brought from the North. They buried him in a New York coat and a Boston pair of shoes and a shirt from Cincinnati. The South didn't furnish a thing on earth for the funeral but the corpse and the hole in the ground.[9]

The quotation above was applicable to the Tennessee Valley because, despite great natural and human resources the Valley was far behind the nation in economic development in 1933. Many of the region's resources were undeveloped while some were badly depleted - soil and forest resources being some of them.[10]

Historical background. The potential wealth of the Tennessee Valley was recognized long ago and as early as 1824 Congress considered the improvement of navigation at Muscle

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[9]Harry A. Curtiss, "The TVA and the Tennessee Valley - What of the Future," Land Economics, 58:4:339, November, 1952.

[10]Satterfield, op. cit., p. 3.

Shoals, where the Tennessee River dropped nearly a hundred feet in fifteen miles. In 1831 construction was started on a canal around the shoals. In 1834 it was opened for navigation but proved inadequate. Through the succeeding years other means were considered, but not until 1917 were adequate measures undertaken.[11]

Congress authorized the War Department during the First World War to construct two nitrate plants and the Muscle Shoals Dam. The Dam was to be used to generate power for the nitrate plants and to facilitate navigation. It was completed in 1926 and became known as Wilson Dam.[12]

The idea of the TVA had its birth at some of these and earlier experiments where it was realized that multiple-purpose advantages could be derived from the unified development of the natural resources of a valley region. Immediately after the end of the war, the disposition of Muscle Shoals properties became a controversial subject. There were those who wanted the Federal Government to continue operating them, while there were others who were strongly in favor of transferring the properties over to private enterprise, either by sale or lease. Several proposals were made by private interests to take over the properties. Most seriously considered

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[11]Sherman M. Woodward and Van Court M. Hare, "A Great Public Utility - The Tennessee Valley Authority," Queen's Quarterly, 55:1-3, Spring, 1948.

[12]Ibid.

was the offer of Henry Ford to purchase the nitrate plants and to lease the Dam. On the other hand, there was great pressure to develop the facilities as public property. The TVA Annual Report for 1953 quotes a summary which reveals that from July 1921 to May 1933 there were no less than 138 bills introduced in Congress affecting the disposition of Muscle Shoals. Many of these embodied the proposals of private power or chemical companies or other industrialists; the others were general leasing bills or proposals for outright public operation.[13]

Senator George W. Norris of Nebraska was a very staunch advocate of government operation of the facilities at Muscle Shoals and of expanding its benefits. He sponsored a series of bills to this effect. Initially he encountered great opposition and two of his bills were vetoed by President Coolidge and President Hoover. However, due to his persistent efforts and due to national, political and economic changes, an act was eventually passed for the unified development of the Tennessee Valley and the taking over of the Muscle Shoals properties. The Act was to be known as the Tennessee Valley Authority Act of 1933. It was approved by President Roosevelt

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[13]Annual Report of the Tennessee Valley Authority, 1953 (Washington, D. C.: United States Government Printing Office, 1953), p. 77.

on May 18, 1933.[14]

Before the basic provisions of the TVA Act are examined, it would be well to take a look at the economic and social conditions that prevailed in the Tennessee Valley at the time of the passage of the Act.

The diet of the people of the region was inadequate and medical facilities were poor. In the year 1934, one person out of every four had an attack of malaria. Per capita income in the 122 counties of the Valley was $148 a year, in contrast to the national average of $368. This poverty was reflected in the schools, hospitals and highways of the region which were generally of "meager or of poor quality."[15]

Seven million acres in the Valley were suffering from progressive erosion. Top soil was gone on one million acres and 220,000 farms in the basin were faced with soil destruction. Due to wasteful practices large sections of the 14 million acres of the timber resources of the region were beginning to show "scars of burning, wasteful logging and uncontrolled or illmanaged grazing."[16]

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[14]TVA Annual Report, 1953, pp. 80-81.

[15]Bernard Frank and Anthony Netboy, "TVA's Unfinished Business," Yale Review, 40:45, Summer, 1950.

[16]Ibid.

Basic purpose of TVA Act. The purpose and guiding principle of the TVA Act were defined as follows:

> To improve the navigability and to provide for the flood control of the Tennessee River; to provide for reforestation and the proper use of marginal lands in the Tennessee Valley; to provide for the agricultural and industrial development of said valley; to provide for the national defense by the creation of a corporation for operation of government properties at and near Muscle Shoals in the state of Alabama, and for other purposes.[17]

The President was authorized by Congress who, in turn authorized the TVA to aid in

> . . . the proper use, conservation and the development of the natural resources of the Tennessee River drainage and adjoining territory as may be related to or materially affected by the development consequent to this Act, and to provide for the general welfare of the citizens of said areas.[18]

It was further stated that the purpose of TVA would be to achieve:

> (1) The maximum amount of flood control; (2) the maximum development of said Tennessee River for navigation purposes; (3) the maximum generation of electric power consistent with flood control and navigation; (4) the proper use of marginal lands; (5) the proper methods of reforestation of all lands in said drainage basin suitable for reforestation; and (6) the economic and social well-being of the people living in said river basin.[19]

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[17] United States Statutes At Large, Vol. 48, Part 1 (Washington, D. C.: United States Printing Office, 1934), p. 58.

[18] Satterfield, op. cit., pp. 5-6.

[19] U. S. Statutes, op. cit., p. 69.

The Act granted wide powers to the TVA in such general terms that, in order to carry out the mandate given it by Congress, the Board of Directors of the Authority had to make certain basic policy decisions in the early days in order to translate the general purposes into specific activities. As Mr. Curtiss, one of the Directors of TVA said, "It is correct to say that the essential characteristics of TVA as it exists today, while conforming to the requirements and spirit of the Act, are basically the result of many decisions made by the TVA Board over the years since 1933."[20]

An examination of how the six aforementioned provisions of the Act have been put into practice and the activities that TVA has undertaken is appropriate at this time.

Administration. In order to put into practice the basic purposes of the Act the Congress set up a government corporation which, in the words of President Roosevelt was to be "clothed with the power of government, but possessed of the flexibility and initiative of a private enterprise." The corporation directly reported to the President and the Congress. It was completely independent of interference by any other branch of government. It was to be located in the region it was supposed to serve. The name of the corporation

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[20]Curtiss, op. cit., p. 334.

was to be the Tennessee Valley Authority.[21]

According to Section (2) of the Act the administration of the TVA Act was to be in the hands of a three-man board of directors, appointed by the President by and with the advice and consent of the Senate. The Chairman of the board was to be designated by the President.[22] The directors were subject to removal at any time by a concurrent resolution of the Senate and House of Representatives.[23]

The actual administrative setup of the Authority was left to the board of directors and the Congress placed no statutory limitation on them. The Act merely provided that:

> The board shall . . . appoint such managers, assistant managers, officers, employees, attorneys and agents as are necessary for the transaction of its business, fix their compensation, define their duties, require bonds of such of them as the board may designate and provide a system of organization to fix responsibility and promote efficiency.[24]

Merit and efficiency were to be the sole test in the selection of an employee for the Authority and no political consideration was to be given in such appointments.

The board of directors of TVA follows a policy of laying a clear and broad framework of policy within which

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[21] TVA Annual Report, 1953, p. 82.

[22] U. S. Statutes, op. cit., p. 59.

[23] Ibid., p. 60 (Section 4-f).

[24] Ibid., p. 59 (Section 3).

TVA activities are to proceed, leaving to specialists the making of decisions within that framework. Each department has its own written administrative bulletin, explicitly stating the duties and responsibilities of the department, the divisional organization within the department and powers and duties of its officials.[25]

In addition to its autonomous status TVA is also unique in the respect that for the first time a federal agency is given the responsibility of developing all the resources of a region. The development of resources in one field is interdependent on the development of resources in another field. For example:

> . . . river regulation for navigation, flood control, power and malaria control benefits industry, forestry, and agriculture, which in turn affect the river and the protection of its watershed; that industrial and agricultural practices affect stream sanitation which is related to recreation and to fish life. Similarly, the reservoir projects cannot be considered independent of one another, whether for engineering design or for operation.[26]

Financial. In the past twenty years the source of TVA funds have been largely congressional appropriations, although issue of bonds and increased earnings from its operations have accounted for some of the funds the Authority has used.

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[25]Herman C. Prichett, "The Tennessee Valley Authority," A Study in Public Administration (Chapell Hill: The University of North Carolina Press, 1943), p. 169.

[26]Satterfield, op. cit., p. 7.

Transfer of properties, etc., have also accounted for some available funds for the Authority.

Figure 1 shows the funds that have been made available through Congressional appropriations as well as through operation of the facilities of the Authority.[27]

The figure shows a more or less uniform rate of appropriation for the first seven years of TVA's operations. This was the period of normal growth for the Authority. On the average, about one dam was completed per year of TVA operation. Then came the war and with it a greater demand for power to supply the defense industries. Work was speeded up on the construction of dams and within three months (February, March and April) in 1942, four dams were completed. Two other dams were completed in 1943. Looking at the figure we find Congressional appropriations were pretty close to $200,000,000 in 1942, and $140,000,000 in 1943. 1942 also saw the construction of the first steam plant in the Valley. It was the Watts Bar Steam Plant. The appropriations for the next few years were not very substantial and the years up to 1950 saw the completion of only three more dams. Then came the years 1951 and 1952, which saw TVA get into the steam plant generation of power and the demand for funds once

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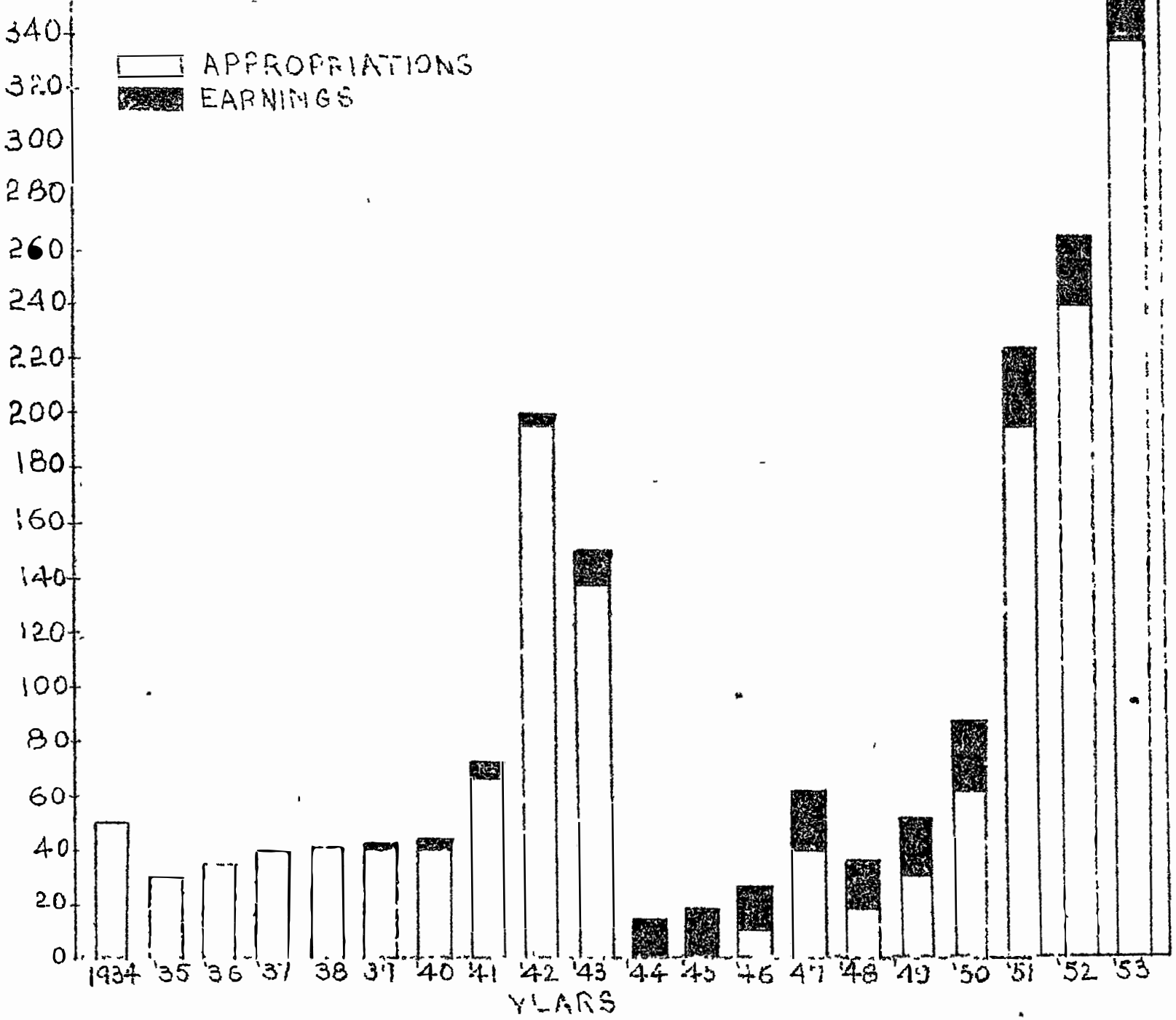
[27]Information obtained from the Annual Reports of the Tennessee Valley Authority, 1934-53.



SOURCE TVA ANNUAL REPORTS, 1934-53

again skyrocketed. The appropriations for the year ending June 30, 1953 reached $336,027,000. These three years saw the completion of some of the greatest steam plants in the world. An investment of $84,775,340 was needed for the completion of Johnsonville steam plant alone. Except for the Kentucky dam, this plant represents the highest investment that the Authority has made in any single physical unit.[28]

Taking an overall view of the sources and disposition of all funds for the twenty year period ending June 30, 1953 some interesting facts are revealed as shown in Table I.

Total Congressional appropriations for this period amount to $1,597 million. Proceeds from the sale of bonds were $65 million (of this $34 million worth have been retired and are included in the amount showing repayments to Treasury). $45 million worth of property was transferred from other federal agencies, such as Army Engineers, to TVA during this period. The gross revenue from the income-producing programs was equivalent to $877 million. The total funds available to TVA were $2,584 million.

The total net investment in plants was $1,149 million. (This did not include a $170 million depreciation figure which is shown under "expended for operations" heading). Projects under construction as of June 30, 1953 amounted to $210

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[28]See Appendix A.

TABLE I*

SOURCES AND DISPOSITION OF TVA FUNDS
1933 - JUNE 30, 1953

	Millions	
Received from the U.S. Treasury		$1,707
Appropriations	$1,597	
Bond proceeds	65	
Property	45	
Received from customers		877
Gross power revenues	695	
Gross chemical revenues	187	
		$2,584
Invested in plant (net)		1,359
In service (Power $803; other $346)	1,149	
Under construction	210	
Expended for operations (including depreciation)		798
Power	469	
Chemical production	171	
Navigation, flood control, chemical research and testing, resource development	158	
Repaid to the U.S. Treasury		98
From power proceeds	81	
From other proceeds	17	
		$2,255
On hand (Cash, receivables and inventories, less current liabilities)		329
		$2,584

*Director of Information TVA, Facts About TVA Operations (Knoxville, Tennessee: Tennessee Valley Authority, 1954), p. 19.

million. $798 million were spent for operations (including depreciation) of the TVA program. $98 million were returned to the U. S. Treasury. This included the retirement of $31 million worth of Bonds. The balance of the funds accounted for the cash, receivable, etc.

The net amount of $1,149 million represents the net investment in all TVA assets. The depreciated value of this investment is $1,319 million. If the investment of $56 million be reduced from this amount for chemical and general plants, $1,263 million are left for water control and power production. These joint costs are allocated by TVA to various programs. The costs for the power program are allocated in the manner described below.

The power facilities of TVA are divided into two groups. One group consists of facilities which are used for the sole purpose of producing power. They consist of single-purpose dams for production of hydro-electric power, steam-plants and other power facilities. The other group consists of multiple-purpose projects which are used for navigation and flood-control, as well as for the production of power.

The TVA is directed by Section 14 of the TVA Act of 1933 to allocate the costs of multiple-purpose facilities to the various programs. For purposes of allocation TVA divides the investment in multiple-purpose projects into two classes: (1) Costs of facilities used for a single purpose and

assigned entirely to that purpose, such as powerhouses and generators provided for the production of power, sluiceways and portions of reservoirs to maintain flood control storage, or locks and river channel improvements provided for navigation; and (2) costs of facilities which serve several purposes jointly, such as most of the investment in dams and reservoirs, which are allocated among the several purposes served.[29]

As of June 30, 1953 the total investment in water control and power facilities (not including depreciation and construction in progress) was $1,263.5 million. $718.7 million of this was in multiple-purpose facilities and $544.7 million was in single-purpose facilities, the latter being exclusively for the production of power.

The power program accounted for $379.77 million of the total investment of $718.7 million in the multiple-purpose projects. This was 52.8% of the total. Of the total investment $1,263.5 in water control and power facilities the power program accounted for $924.5 million, or 73.2% of the total. Details of the allocation can be more easily examined in Table II.

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[29]Facts About TVA Operations, p. 3.

TABLE II*

ALLOCATION OF INVESTMENT IN MULTIPLE-PURPOSE PROJECTS
JUNE 30, 1953

Purpose	Direct costs	Allocation of common costs		Total	
		Percent	Amount	Amount	Percent
Navigation	$45,934,051	27.0	$110,646,189	$156,580,240	21.8
Flood control	55,367,000	31.0	127,038,217	182,405,217	25.4
Power	207,649,707	42.0	172,116,294	379,766,001	52.8
Total	308,950,758	100.0	409,800,700	718,751,458	100.0

ALLOCATION OF TOTAL SYSTEM INVESTMENT

	Allocated investment in multiple-purpose hydro-projects	Single-purpose hydro, steam-electric and other electric plants	Total	
			Amount	Percent
Navigation	$156,580,240	- - - - - - - - - -	$156,580,240	12.4
Flood control	182,405,217	- - - - - - - - - -	182,405,217	14.4
Power	379,766,001	$544,747,489	924,513,490	73.2
Total	718,751,458	544,747,489	$1,263,498,947	100.0

*TVA Annual Report, 1953, p. A89.

TVA activities.[30] The Tennessee Valley Authority in 1953 owned and operated twenty-nine major dams, nineteen of which were built by the TVA itself. TVA's chain of reservoirs provided nearly twelve million acre-feet of storage for flood waters. The 630 mile navigation channel provided a minimum of eleven foot depth for barges and towboats over river reaches where limiting low-water depths in 1933 ranged from one to four feet. In 1952 about 800 million ton-miles of freight were transported, while in 1933 the river carried only thirty-three million ton-miles.

TVA generated twenty-four billion kilowatt-hours of electricity at its hydro and steam plants during the year 1953, while in 1933 the entire region now served by TVA used but 1½ billion kilowatt-hours for all purposes. Pointing to the benefits of the power program of the TVA - the Annual (1953) Report of the Authority records:

> One hundred forty-eight municipal and rural cooperative systems, locally owned and managed, distributed more than ten billion kw-hr. of TVA power to 1,300,000 home, farm, business and industrial consumers. This included 423,000 farms and 163,000 people living in small rural communities, most of whom had no electricity twenty years ago - and little prospect of obtaining it. Due to the aggressive rural electrification programs of the municipal and cooperative systems, the proportion of farms electrified has risen from three percent in 1933 to

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[30]Main source of information under this heading has been the Annual Report of Tennessee Valley Authority for the fiscal year ending June 30, 1953.

> ninety percent today . . . In the fiscal year 1953, the average valley region home used over 4,300 kw-hr., or nearly double the national average home use. Comparative annual bills were $56 in the valley and $62 in the nation.[31]

The rest of the energy was used by the Atomic Energy Commission and other heavy consumers in the region.

Another activity of the TVA is in the recreation field. "By the end of 1952, the recreation facilities and equipment on TVA lakes and shorelines were valued at $40 million, owned by private businesses, individuals and state and local governments."[32] Fish are found in abundance on the TVA lakes. The lakes are open for sport fishing, all the year around. Commercial fishing is also allowed. Over two million pounds of fish and over 8,000 tons of mussel shells earned over $800,000 for commercial operators. TVA's chemical plant facilities at Muscle Shoals in Alabama and at Columbia, Tennessee produced 42,000 tons of calcium metaphosphate, 141,000 tons of concentrated superphosphate, 26,000 tons of fused tricalcium phosphate and 197,000 tons of ammonium nitrate fertilizers during the year 1952-1953.

The chemical facilities of the TVA were of benefit to the nation in various other ways. The installations are

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[31] Annual Report of the Tennessee Valley Authority, 1953 (Washington, D. C.: United States Government Printing Office, 1953), p. 4.

[32] Ibid., p. 5.

easily convertible into munitions plants and laboratories at short notice (as during the Korean War); knowledge of research carried on at these laboratories has been made available to the fertilizer industry in the past; phosphate and nitrogen fertilizers produced by TVA were used on farms in thirty-six states as part of the program built around recommendations of the agriculture extension services; a small proportion of the TVA fertilizer output was used in test demonstrations on private farms in twenty-one states. During the fiscal year 1953 about 2,400 farmers in twenty-one states received fertilizers for test demonstrations from TVA facilities.[33]

TVA has helped in improving the forest resources of the region. Over half of the valley land area consists of forests and woodlands and is mostly in private ownership.

> In 1953, nearly 3,900 landowners planted on 15,500 acres about 16.5 million seedlings provided by TVA nurseries. In the past twenty years, about 212,000 acres have been reforested in the Valley. TVA nurseries have produced 295 million seedlings.[34]

> In 1942, few if any private forest holdings were being managed for sustained production. Since then 285 forest management demonstrations have been established throughout the Valley, dealing with all major forest types and reaching all classes of ownership, large and small,

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[33] Annual Report of the TVA, 1953, p. 6.

[34] Ibid., p. 7.

institutional and private. State extension and forestry agencies and private landowners have worked with TVA in this effort.35

The economic expansion in the TVA region has been comparatively higher than the rest of the nation. The report says:

> Since 1929, there has been an increase of about 1,600 manufacturing and processing plants in the Tennessee Valley and the area served by TVA power. Between 1929 and 1950, the number of jobs in manufacturing establishments increased by 72 percent, as compared with an increase of 41 percent in the Nation as a whole. The per capita income of the region, which was 44 percent of the national average in 1929, was 61 percent in 1952. The seven States of which the Tennessee Valley is a part have been paying an increasing proportion of the total individual income taxes of the Nation. In 1933, the people of these States paid 3.4 percent of the total of individual income taxes in the country; in 1952, the payments from these same seven States was 6.2 percent of the total - almost double the proportion of twenty years before.36

35Annual Report of the TVA, 1953, p. 7.

36Ibid, p. 8.

CHAPTER III

STEAM GENERATED ELECTRIC POWER

The legal aspect. The Tennessee Valley Authority is basically organized for the purpose of developing multiple-purpose projects in the Tennessee Valley. The TVA idea itself is associated in the popular mind with dams built across rivers for flood-control, navigation and generation of hydro-electric power. Therefore, when the TVA announces its intention of building steam plants to fulfill its power obligations the question is raised if the TVA is not overstepping the bounds prescribed to it by law.

An examination of TVA Act of 1933 reveals that at three different places the Congress gave an indication of its intention to let TVA operate in the steam generated electric power field. Section 16 of the Act clearly specifies that the TVA was to complete the construction of the steam plants near the nitrate plants, and to operate them.[37]

In Section 15 of the Act the Congress authorized the TVA to issue bonds for the "construction of any future dam, steam plant, or other facility to be used in whole or in part for generation or transmission of electric power."[38]

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[37] U. S. Statutes, p. 161.

[38] Ibid., p. 66.

The Congress gave wider powers to the TVA in Section 4 of the Act in which it was authorized to "construct dams, reservoirs, power houses, power structures, transmission lines, navigation projects and incidental works" in the Tennessee River and its tributaries and "to unite the various power installations into one or more systems by transmission lines."[39]

In 1948 when the TVA was trying to obtain appropriations for the construction of Johnsonville Steam Plant, the question of the legality of the proposed construction was brought up.[40] In the opinion of some observers it was the first time that the problem of the expansion of TVA power facilities was to be faced with a clear-cut question. In the past it was felt the power phase of TVA's expansion program was always linked with other aspects of TVA's activities. Thus, the power question was not discussed wholly on its merits.[41]

Mr. Joseph C. Swidler, TVA General Counsel, in a memorandum to the Board of Directors on the constitutionality of "Proposed Steam Plant at Johnsonville, Tennessee" stated

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[39] U. S. Statutes, p. 61.

[40] "TVA plan would break the tie that binds federal power systems to rivers; requests funds to build steam-power plant," Electric World, 129:17, March 20, 1948.

[41] "TVA's Burning Issue (Fuel)," Public Utilities Fortnightly, 41:786, June 3, 1948.

that in his opinion, TVA had the statutory authority to construct steam plants. He also pointed out the fact that the legislative history of the TVA Act proved that Congress itself did not regard the construction of steam plants as presenting a constitutional problem.[42] In the controversy that has followed since, the construction of steam plants by TVA has not been challenged on legal grounds.

Why steam plants? As we have seen, TVA was not prohibited by law to build steam plants, either by issuing bonds or from direct Congressional Appropriations, yet it was not until July 31, 1940 that the construction of the first steam-plant was authorized by the President.[43] This need for steam plants to supplement the hydroelectric power is inherent in the type of activities the TVA has undertaken.

The continuous supply of hydroelectric energy depends upon the constant flow of a river within definite level limits. But the level of water in the rivers depends upon the unpredictable weather. In the Tennessee River and its tributaries the water level varies considerably because of the

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[42] Congressional Record, Vol. 94, Part 9 (Washington, D. C.: United States Government Printing Office, 1948), p. A1171.

[43] Annual Report of the Tennessee Valley Authority, 1941 (Washington, D. C.: United States Government Printing Office, 1941), p. 12.

seasonal rainfall in the region. In periods of ample supply of water the turbines of the hydroelectric power houses generate ample electricity, but in dry periods there is a shortage of power. The hydroelectric companies generally contract to sell power at their peak capacity level. They have to maintain a steam plant as a standby to supply power to the system when it does not rain adequately.[44]

Cheap hydroelectric power itself serves as a factor in creating a demand for more power. With the availability of cheap power, new industries move into the region. With new industries come more people who consume more power. This growth continues until a ceiling is reached for the capacity of hydroelectric plants. In order to meet the increasing demand for power the system builds steam plants.[45]

Steam plants can be built quicker and cheaper than hydroelectric plants. In times of emergency power is needed at short notice. Cost of power is not the most important consideration. During the war the defense industries in the Valley region needed power and the Congress authorized the building of the Watts Bar Steam Plant.[46]

Since the end of the war the power requirements of

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[44]"TVA Moves Into Steam to Fill Power Needs for Atom," Business Week, June 16, 1951, p. 99.

[45]Ibid.

[46]Ibid., p. 100.

the defense plants of the region have been increasing and the TVA has been able to meet most of this demand. The demand of atomic plants has been quite spectacular. In 1950, Atomic Energy Commission was drawing 250,000 kilowatts from TVA. It was expected to increase gradually to 640,000 kilowatts in two years. Then came the Commission's demand to supply 1,288,000 kilowatts of power to its Paducah, Kentucky plant. TVA agreed to supply half of it by building a steam plant.[47] AEC's demands have still been increasing and the TVA has been building more steam plants to meet these demands. The situation now is that about 50% of TVA power goes to AEC, 25% to industries connected with defense program and the rest to meet other needs.

Development of steam plants. The TVA completed the Watts Bar Steam Plant on February 15, 1942. It was the first steam plant to be constructed by TVA. Long before that date, however, TVA was already owning and operating several steam plants. At the time the Authority was created, Congress transferred to the new corporation the Wilson Dam and the steam plant at Muscle Shoals. In addition, during the fiscal year ending June 30, 1935 the TVA acquired four small stand-by steam plants as incident to the purchase of certain

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[47] "TVA Moves Into Steam to Fill Power Needs for Atom," p. 99.

lines from the Mississippi Power Company.[48]

Then, in 1939 TVA purchased some steam units from the Tennessee Power Company.[49] After the construction of the Watts Bar Steam Plant Congress was reluctant to appropriate more money for the construction of steam plants. In 1949 the Congress finally appropriated funds for the construction of Johnsonville plant. The plant was completed on October, 1951. Two more steam plants were subsequently built: Widow's Creek completed in July, 1952; and Shawnee in April, 1953.[50] Construction is continuing at Kingston, Colbert and some smaller steam plants.[51] In 1953, TVA tried to get appropriations for the Fulton Plant near Memphis, Tennessee and was met with opposition from the President and the Congress.[52]

The table on the following page shows the date of completion of steam-plants by TVA and their costs. It also shows the cost of acquired plants.

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[48]Annual TVA Report, 1935, p. 15.

[49]Congressional Record, Vol. 94, Part 10, p. A2860.

[50]Annual TVA Report, 1953, p. A88.

[51]"More Steam Plants for TVA - Goals Set by Chief Engineer," Engineering News Record, 149:60, July 24, 1952.

[52]"Fight Over TVA's Future," Business Week, February 13, 1954, p. 29.

TABLE III*

STEAM PLANTS BUILT AND ACQUIRED BY TVA

Steam		
Watts Bar	Feb. 15, 1942	$18,975,824
Johnsonville	Oct. 27, 1951	84,775,340
Widow's Creek	July 1, 1952	57,433,542
Shawnee	April 9, 1953	51,775,385
8 Steam plants acquired by TVA		14,166,571
		$227,126,662

Twenty-five percent of a total investment of $925.5 million in the power program as of June 30, 1953 constituted the investment in steam-plants. If appropriation for the Fulton plant were granted this percentage would have increased to about 35%. Opponents of TVA argued that if the trend towards steam plants continued, TVA would eventually monopolize a formidable segment of the public utility field in the area rendering private companies ineffective in competing with it.

* TVA Annual Report for 1953, p. A68.

CHAPTER IV

POINTS OF CONTROVERSY

Adequacy of "yardstick." At the time when the TVA Act was passed it was expected that the power operations of the new corporation would be run on the most efficient and economical basis. The power rates and the actual operations of the power program were to serve as a "yardstick" to measure the efficiency of the operations of private power companies.

Critics of the TVA yardstick attack TVA power operations basically on the following points: (1) TVA does not pay state and local taxes on the same basis as the private power companies; (2) TVA does not pay interest on the total investment in the program; and, (3) TVA pays no federal taxes. The question of interest and taxes is examined in the following pages. In order to further evaluate the adequacy of the yardstick an examination is made of the costs of two directly competing power plants which are to supply electricity to the atomic plants at Paducah, Kentucky. One is the Shawnee Plant being built by the TVA and the other one is being built by a private power company, the Electric Energy, Inc., at Joppa, Illinois.

Critics of TVA, particularly the private power companies of the TVA region feel they are being discriminated

against because the TVA does not pay any federal taxes. They also complain that the amounts TVA pays for local and state taxes are assessed on a lower basis than the private utility companies.

Mr. C. H. Moses, Chairman of the Board of Directors of the Arkansas Power and Light Company, testifying before a Senate Subcommittee, made several charges against the TVA on the question of taxes.[53] He felt that TVA was getting preferential treatment in the matter of state and local taxes as compared with the private utility companies in the area. He argued that if TVA was taxed on private property on the same basis as other utilities in the area, it would pay $79,000,600 in taxes rather than the $3,418,000 that it paid in the fiscal year ending in 1953.[54] Mr. Moses based this figure on the depreciated value of the total power plant assets.[55] This figure, according to Mr. Moses, was $1,009,165,256 and the taxes paid came out to be about .23% of this figure.[56] However, $1,009,165,256 includes $205,684,170 which is the amount of money that is involved in the construction and investigation

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[53]Hearings before the Subcommittee of the Committee on Appropriations, United States Senate, "Independent Offices Appropriations, 1955" (Washington, D. C., United States Government Printing Office, 1954), pp. 384-402.

[54]Ibid., p. 388.

[55]TVA Annual Report, 1953, op. cit., p. A4.

[56]Ibid.

of new projects.[57] Projects under construction pay substantially less taxes than completed projects. Therefore, if we do not consider the amount spent on projects under construction, the percentage of taxes paid to the net plant value comes out to be approximately .46%.

The Citizens for TVA, Inc., places this percentage at a much higher figure. According to it, the net investment in the completed plant was about $710 million in the year 1953 and at the end of the calendar year 1952, the figure was $665,709,000.[58] On the basis of these figures the percentages would be .49 and .52 respectively. Whether the Citizens for TVA's figures are accepted or not, it is clear that the percentage figures presented by Mr. Moses are not acceptable on the grounds that units under construction cannot be accepted to pay the same taxes as complete units.

Mr. Moses also suggests that if TVA were to pay taxes on the same basis as five utility companies (chosen by Mr. Moses) operating in Tennessee, it would pay approximately 15 times the state and local taxes it paid in 1953. These companies paid approximately 5.05% of the net utility plant in taxes. Citizens for TVA do not feel this figure is a good comparison. They cite figures for other companies that pay

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[57] Hearings, op. cit., p. 399.

[58] Ibid.

lower taxes. They say that, for the year 1953, Arkansas Power and Light Company paid 1.7% of its net utility plant value in taxes, Mid-South Utilities paid 2.75%, Southern Bell 3.20% and the five utilities 5.05%. According to Mr. Moses' own theory, Arkansas Power and Light Company should have paid 1½ to 3 times the amount of taxes it paid. And using these same comparisons for TVA with its reduced net plant figures, the amount it would be expected to pay in taxes would be much less than 15 times the taxes paid. Citizens for TVA claim it would be about 4 times.[59]

The net plant value as a basis for comparing the local and state taxes payments of TVA and the private power (utility) companies is open to serious question. Only about half the state and local taxes are based upon net utility plant values. The other half of the taxes are income taxes, franchise taxes and generating taxes, etc.[60] It is also unreasonable to expect TVA to pay property taxes on the same basis as private utility companies because TVA is a producer and wholesaler of electricity while most private companies generate as well as distribute power at retail. TVA owns no plants in cities, thus it pays no municipal taxes. Private distributing companies pay these taxes which are higher than

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[59]Hearings, op. cit., p. 400.

[60]Ibid., p. 399.

taxes charged on TVA properties at dam sites and places far away from municipalities.

It appears that in order to make a fairer comparison between private utility companies and the TVA tax payments, the taxes paid by TVA's distributors should be added to the TVA tax figures. This total comes out to be $8,557,000.[61]

Looking at the tax picture from the total revenue point of view, it is observed that TVA and its distributors paid approximately 6.5% of its total revenues from ultimate consumers in state and local taxes. Figures for 12 large private utility companies in the adjacent area averaged 7.8%[62]

The local and state tax issue, as other issues in the TVA controversy, is presented by the two sides in a manner that would advance their point of view. It is clear from the discussion above that Mr. C. H. Moses of Arkansas Power and Light Company has based his arguments on assumptions that would show TVA in a bad light as far as payment of these taxes are concerned. During the discussion, it has been indicated where his assumptions are disputable. Yet it is true that TVA pays less local and state taxes than other private

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[61] Hearings, op. cit., p. 399.

[62] Director of Information, TVA, "Facts About TVA Operations" (Knoxville, Tennessee, Tennessee Valley Authority, 1953), p. 6.

utility companies. As a governmental agency it enjoys certain tax exemptions which are not peculiar to itself. Under Section 13 of the TVA Act, TVA is required to pay at least 5% of its gross revenues from sale of power (exclusive of sale to federal agencies) to states and counties in which it owns property or carries on power operations. The minimum payment is the amount of state and local ad valorem property taxes paid on property now used by the TVA power program.[63] In the fiscal year, 1952, TVA and its distributors paid $7,369,547. All taxes paid when the properties were under private ownership was $3,233,792 - about $4,135,655 less.[64]

It is clear that TVA is paying local and state taxes according to the limits prescribed to it by law. As we have seen above, these taxes are at a lower rate than private utility companies (based on net plant value). But they are not as low percentagewise as the private utility groups make it out to be.

Even if one accepts Mr. Moses' assumptions, TVA was certainly in a position to pay 4 times the local and state taxes that it paid in 1953. Its income from power operations for the year after paying $3,418 million in taxes was $16.626

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[63]Director of Information, TVA, op. cit., p. 5.

[64]Congressional Record, Appendix, Vol. 99, Part 9, p. 346.

million.[65] It could have paid taxes on the same basis as Mr. Moses' company and still have made a profit.

It appears the most effective way to handle the problem of taxes would be to try and get the TVA Act amended so that TVA is treated as a business enterprise and taxed accordingly. It is doubtful if the taxing agencies will claim from TVA, 15 times the present rates paid by it, as Mr. Moses desires.

On the question of federal taxes, the private power groups again feel they are discriminated against. They say the TVA pays no taxes (federal). Mr. Moses takes his same five utility companies and says that if TVA were to pay federal taxes on the same basis as those companies paid in 1952, it would be paying $28,660,000 to the Federal Government. This is 2.84% of the net utility plant value.

Here again Mr. Moses makes his assumptions to suit his aim. The federal taxes are not based on net utility plant but on the profit a company makes. TVA was not set up as a profit-making concern. Mr. Sturdevant of the Citizens for TVA claims that the objective of TVA is to be self-supporting and not to pile profits or collect taxes for the Federal Government.[66] Yet TVA's earnings since 1933 have amounted to

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[65] TVA Annual Report, 1953, op. cit., p. A12.

[66] Hearings, op. cit., p. 400.

4.1% of its net plant value.

As to the charge the Federal Government pays no federal taxes, supporters of TVA argue that all of TVA's net income belongs to the Federal Government and not just a portion of its income as is the case with the private utility companies. Since 1933 to June 30, 1952, TVA had paid $40 million of power revenues into the general fund of the United States Treasury and had retired over $26 million in bonds. Out of net income from power sales, TVA at the beginning of the 1953 fiscal year had financed $207 million of power plant and other assets.[67]

On the question of interest, Mr. John T. Flynn wrote a very interesting article in the December, 1947 issue of the Reader's Digest.[68] According to him, it had cost $762 million to build TVA. He argued that the Federal Government borrowed this money and paid interest on it. He calculated the interest on $762,000,000 and added it to the operating costs for the 14 year period and came out with a figure of $339 million. He then cited $209 million as the revenue for the period and then by simple mathematical interpretation he presented an actual deficit figure of $130 million for the

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[67]Director of Information, TVA, op. cit., p. 5.

[68]John T. Flynn, "The Hidden Red Ink in TVA's Books," Reader's Digest, 51:129-34, December, 1947.

14 years the TVA had been in operation.

The argument TVA presents is twofold. First, it argues that TVA is engaged in a series of activities most of which are not supposed to bring in any revenue. Thus, the operating expenses cited above include costs of flood control, navigation and other activities of the TVA. Secondly, TVA presents the argument, according to Mr. Kirschten, that it does not regard the money spent in building its facilities as borrowed money. It regards the money as an investment of the American taxpayer in the TVA program.[69] The dividends are in the form of money paid back by TVA to the Treasury, as well as in terms of public security and well-being.[70]

It appears that TVA stands on sound grounds when it claims that the efficiency of the power operations should not be judged or its ability to pay for the operation costs of all the activities of the TVA. The second contention also seems to have some basis because the Congress, by not demanding an interest on the appropriated money obviously did not regard it as a loan.

To further substantiate TVA's point of view on the question Mr. Gordon Clapp is quoted:

The charge . . . can best be answered by examining

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[69]Ernest Kirschten, "TVA - The First Fifteen Years," Nation, 166:656, June 12, 1948.

[70]Facts About TVA Operations, p. 4.

> what the books show for the fiscal year ending June 30, 1947. In that year TVA showed a net operating revenue of $21,800,000, representing a 5½% return on all money - $400,000,000 - invested in the power system. This is the sum remaining after state and local advalorem tax payments, straight-line depreciating, and all operating expenses incurred in generating and transmitting power. The $21,800,000, therefore, corresponds to the sum which a private corporation, utility or otherwise, has to divide among those who have invested money in the business and to pay federal income taxes. It is the significant figure in determining the financial soundness of the enterprise.
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> . . . All of this $21,800,000, or 5½% return, is the property of the Federal Government. It can be divided up according to any theory you care to use. For example, if interest were charged at 2%, the average cost of money to the Government during the period, on the entire TVA average net power investment of $400,000,000, there would still remain $13,800,000. If income taxes were calculated at the rate charged large corporations, 38% on net income after interest, or roughly and generously $5,300,000, there still remains a surplus of $8,500,000.[71]

The statement of Mr. Clapp very adequately answers the question that might be raised by critics of TVA. It is true, though, that Mr. Clapp has used certain figures that prove their point. For example, Mr. Clapp assumes a 2% interest charge but this, according to Arkansas Power and Light Company, ought to be between 4½% to 6%.[72] There is bound to be a difference of opinion about the exact figures that are used to illustrate a point. Supporters of TVA have, in the opinion of the writer, successfully shown that several of the

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[71]Ernest Kirschten, "TVA - The First Fifteen Years," Nation, Vol. 166, p. 658, June 12, 1948.

[72]Hearings, op. cit., p. 401.

charges that have been leveled against TVA are based on questionable grounds.

Before the question of "creeping socialism" is taken up, one very important aspect of the yearstick should be examined in detail. The main subject we are exploring is the question of the expansion of the TVA in the field of steam-generated electric power. An examination of the question of taxes and interest was necessary in order to later determine the desirability of governmental entry into the power field. But a factual examination of the effectiveness of TVA as compared to private utilities in the steam-generated electric power field is essential to find an answer to our main question.

Comparison of figures for private power companies and the TVA has been difficult. This was seen in our earlier discussion. But for the first time, in 1950, the Atomic Energy Commission opened the way to a competition that was to be a step towards providing a direct basis of comparison between the costs of TVA and the private utility companies. In 1950, the Atomic Energy Commission contracted with the Tennessee Valley Authority and a private utility group, the Electric Energy, Inc., to construct separate steam plants to supply power to the Atomic Energy Commission plants at

Paducah, Kentucky.[73] The TVA plant was to be at Shawnee, Tennessee, and EEI's plant was to be at Joppa, Illinois. Dick Allen, writing a series of articles in the Commercial Appeal of Memphis, Tennessee, describes the plants, their problems and accomplishments.[74] Shawnee is a 10-unit project, capable, when completed, of producing 1,500,000 kilowatts. The Joppa plant is a 6-unit project, capable, when completed, of generating 966,000 kilowatts. Shawnee's cost is estimated at $216,500,000; cost of Joppa is estimated at $195,000,000. Dick Allen says:

> The design and manufacture of boilers, turbines and generators; the fabrication of steel; the erection of steel on the site; the operation of excavating equipment, and the placing of concrete are much the same types of operations whether at Shawnee or Joppa. Both projects depended on private manufacturers for boilers, turbogenerators and the thousands of items of equipment making up a modern steam plant.[75]

Both TVA and EEI encountered difficulties in obtaining equipment. Both projects had their share of labor trouble. Shawnee was started in January, 1951; Joppa, the following month. The first unit of Joppa was supposed to have started operating three months ahead of Shawnee. But Shawnee beat

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[73]"TVA Claims Better A-Plant Record," Electric World, 140:70, September 7, 1953.

[74]Congressional Record, Appendix, Vol. 100, March 25, 1954, pp. 2278-2280.

[75]Ibid., p. 2279.

Joppa at construction. Its first unit started operating on April 9, 1953 and the second unit on June 21, 1953. Joppa's first unit went up weeks after that.[76]

This dual construction program was regarded by many as a race between private power and public power which would determine the superiority of one over the other. As will be shown later, the record proved that TVA could construct steam plants more quickly than private companies.[77]

As far as costs are concerned, EEI has again come out a poor second to TVA. The following table illustrates the point.

TABLE III

A-PLANT COMPARISONS[78]

Plant	TVA-Shawnee	EEI-Joppa
No. of units	10	6
Rate of capacity (kw)	1,350,000	750,000*
Capability (kw)	1,500,000	966,000
Cost of plant	216,500,000($)	182,152,000($)
Estimated cost per kw	145	188

*EEI has contracted to supply AEC with 735,000 kw as compared with 750,000 kw rated capacity.

** Based on capability.

Figures filed with SEC revealed that EEI increased its

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[76]Congressional Record, loc. cit.

[77]Ibid.

[78]Electric World, September 7, 1953, op. cit., p. 70.

estimated plant costs per kilowatt capacity from $126 to $184, and the estimated cost for 4 original units increased from $81 million to $118,252,000 in May, 1951. Total cost estimated of 6 units is $182,152,000 or $188, per kw; a comparative figure for TVA is $145. TVA is reported to have kept its costs within estimated limits. The estimated costs for Joppa project have project have further increased to $195,000,000 as indicated.

Both the TVA and EEI include a basic rate in the AEC contract which is based on cost of building the plants. The basic rates are subject to escalator clauses. Private companies base the escalators on the costs they actually experience, thus having in effect a cost-plus contract. TVA's rates are projectd on the basis of national indexes such as the building cost index of the Engineering News-Record. The rates therefore are affected only by changes in costs over which TVA has no control.[79]

Until the two plants are completely constructed, it is not possible to predict the rates that the two plants would charge the AEC. But spokesman predicted that when the plants are completed the rates will be approximately 4.2 mills per Kilowatt hour for Joppa and 3.69 mills per kilowatt

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[79]Congressional Record, Appendix, Vol. 100, March 25, 1954, p. 2280.

hour for Shawnee.[80]

As was indicated before, the philosophy behind the question of taxes and interest will be discussed in the following section. But judging from the facts and figures revealed in the first open competition between TVA and a private power group, TVA seems to have come out victorious. The issue cannot be hidden behind taxes and interest. TVA has passed the test for efficiency in speed and cost of constructing a steam plant.

It is interesting to note that when the Eisenhower Administration decided to give the contract for a new plant to a private power company instead of the TVA, the Director of the Bureau of the Budget approached the President of the Electric Energy, Inc., first. He is reported to have expressed no interest in it.[81] He could hardly have been satisfied with his Company's construction performance in the past since he declined to consider a new offer. Another point of interest is the fact that the only reference to support their performance that EEI people cite is a series of four articles in the Chicago Tribune by Mr. Clayton Kirkpatrick.[82] But upon

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[80]Congressional Record, Appendix, Vol. 100, April 27, 1954, p. 3057.

[81]New York Times, August 22, 1954, p. 53:4.

[82]Chicago Sunday Tribune, October 3, 1954 and Chicago Daily Tribune, October 4,5,6, 1954.

examination of those articles, the writer found no refutation of the figures quoted before, nor any satisfactory explanation of the poor performance of the company.

"Creeping Socialism." One of the major issues in the long and around-the-clock debate on the revision of the Atomic Energy Act of 1946 was related to the question of further expansion of the Tennessee Valley Authority in the steam-generated electric power field. The issue got involved with the Atomic Energy Bill because of an earlier directive of President Eisenhower to the Atomic Energy Commission. In the directive the President had asked the Commission to negotiate with two southern utility companies, the Middle-South Utilities, Inc., and the Southern Company for a contract for the construction of a steam plant worth $107,950,000 at West Memphis, Arkansas. The plant would supply 600,000 kilowatts of energy to the TVA at Memphis, Tennessee in exchange for the power the Authority is to supply the atomic plants at Paducah, Kentucky.[83]

The order was a clear indication of the fact that the administration did not intend to permit further expansion of TVA's activities in the steam power field. TVA had appealed unsuccessfully for more funds to build a new steam plant in

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[83]New York Times, July 17, 1954, p. 4:8.

the Memphis region in order to meet the normal increase in demand of the region for electric power. The appropriation was not requested by the President in his budget message to Congress. The administration instead decided to meet the increased demand by contracting with private power companies to supply this power to the TVA system through the Atomic Energy Commission.

Supporters of TVA were infuriated; when the bill came before the Senate they debated for eighty-five hours and forty-eight minutes. They offered several amendments. One of the most important amendments was offered by Senator Anderson of New Mexico, who tried to halt action on the President's order by proposing that AEC be empowered to contract for power with private companies only for direct supply to their plants. The amendment was defeated when it came to vote.[84]

The President had decided to halt the expansion of TVA in the steam-generated power field because of his basic philosophy on the subject. In June, 1953, President Eisenhower, for the first time, indicated that he thought that the vast operations of the Tennessee Valley Authority were to him an example of "creeping socialism" in the United States. He thought that TVA operations represented a subsidy

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[84]New York Times, July 22, 1954, p. 1:2.

of a particular region by the Federal Government. He wanted a revaluation of what he called the socialistic theory by which taxes from all the county were used to subsidize a particular region, which in turn, sought to draw business from other areas.[85]

The question that has been raised by the President can be best answered by starting with the fundamentals and then moving forward step by step to arrive at a general conclusion. In order to do that, the rest of this section deals with the following topics: (1) the implication of the phrase "creeping socialism;" (2) what is socialism; (3) is socialism bad; (4) do TVA activities and its power operations represent socialism; (5) are TVA activities justified if examined in the background of conditions prevailing in 1933; (6) what actually is the basis of the charge; and, (7) the evaluation of the whole question.

In the United States of America, there is a tradition of free enterprise. Even though governmental help and interference has been sought at times, the prosperity of America has been considered by a large number of people to be due to the freedom from governmental interference in the business activities. Socialism, on the other hand, is considered to be against the American tradition and the national interest.

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[85]New York Times, June 18, 1953, p. 1.

Thus, when the President referred to TVA as an example of "creeping socialism" he obviously implied that there was something socialistic about the TVA power operations. The use of the word "creeping" indicated that, in the President's view, without realizing it, the American people were supporting a socialistic experiment. His directive implied a sinister encroachment on the part of the Federal Government through the TVA to enter into a field that is commonly developed by private enterprise. Twenty-two years ago the former Republican Administration had similar views. Former President Hoover had frankly stated that it was his view that the Federal Government should not go into the business of "either generation or distributing electric power."

The word "socialism" itself is one that means different things to different people. Webster's New International Dictionary defines socialism as a political and economic theory of social organization based on collective or governmental ownership and democratic management of the essential means for the production and distribution of goods. To President Eisenhower, one aspect of socialism is "when taxes from all the county are used to subsidize a particular region."[86]

On the other extreme, we have Karl Marx's view of

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[86]New York Times, July 22, 1954, p. 1:2.

socialism. To him, socialism is the second stage of a society that is making a transition from capitalism to communism.[87] First phase is the dictatorship of the proletariat which is a democracy to the proletarians but a dictatorship in relation to the bourgeoisie. The second phase is socialism under which there is no private property, little of classes, no exploitation and everybody is obliged to work. The last phase is communism, which to Marx, is an example of one can say "heaven on earth."

Then there are other interpretations of socialism. In varying degrees several governments of the world are considered socialistic because they own and operate certain business enterprises for the common good of the nation. TVA power operations are considered socialistic by some in this country while in England the state has owned and operated railroads and broadcasting under several governments; yet, not all these governments were labeled socialistic.

In view of the varying definitions of socialism, it is very difficult to say whether socialism is good or bad. It depends upon which definition one is using and also what one considers good and bad. The definition used by Karl Marx can be readily rejected. A democratic society presupposes equality of rights and majority rule. Right to life, liberty and

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[87]M. M. Bober, Karl Marx's Interpretation of History, (Cambridge, Massachusetts: Harvard University Press, 1948), p. 274.

property is basic in all democratic societies. Socialism, according to Marx's definition denies the existence of private property. Most important of all, socialism comes about only after the dictatorship of the proletariat has been first established. This definition is unacceptable as it presupposed the establishment of unequal rights between the proletarian and the bourgeoisie and is hardly applicable to the present problem.

Next, we take President Eisenhower's concept of socialism with respect to TVA. He thinks TVA is an example where a particular region is being subsidized by the whole nation. This, according to him, is a socialistic concept. The question of subsidy can be dealt with by determining if the TVA power operations are self-supporting.[88] The question of self-support again involves us in a discussion of taxes and interest because these items are so large that one interpretation shows large returns from these operations.[89]

It appears that the question of power operations of the TVA cannot be isolated from the TVA program as a whole, because the Tennessee Valley Authority was established for the unified development of the Tennessee valley. This

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[88]Non-incoming producing programs of TVA are not expected to be self-supporting by law. No responsible critic of TVA has seriously expected it to do so.

[89]As has been observed in the last section.

development was to be in the field of navigation, flood control and power development among other things. Development in one field was interdependent upon the development in another field. In the case of power, the TVA Act had specifically provided for its distribution at the lowest possible rates, with the aim of increasing the use of electricity. TVA, however, was expected to pay all costs of its power operations.

The question of subsidy by the nation to the TVA region can therefore be judged only by comparing the benefits the nation has derived from the TVA. Mr. Gordon Clapp, ex-chairman of the Board of Directors of the Tennessee Valley Authority, said that TVA made substantial contributions in the field of national defense during the war.[90] The navigation channel, according to this, relieved pressure on the national transportation systems, fertilizer plants were supplying phosphorous for the Army and the power facilities were supplying power to the aluminum plants and the atomic plants.

In the field of chemical engineering, forest research and agriculture, TVA is helping various sections of the country. More than this, however, is the fact that increased construction in the Valley and the increased standard of

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[90]Gordon R. Clapp, "National Dividends from the Tennessee Valley," The South Atlantic Quarterly, 49:1:3-4, January 1950.

living has helped bring prosperity in other parts of the United States. Mr. Gordon Clapp says:

> More food was purchased from the Middle West, the far West and Florida. Last year (1948), for example, users of TVA power expended $50,000,000 in the purchase of electric ranges, water heaters, washing machines and $530,000,000 for such items as generators, raw materials and miscellaneous services. Of this sum, $292,000,000, or more than half, was expended outside the Tennessee Valley states. TVA purchases exceeded $75,000,000 in Pennsylvania, $39,000,000 in New York, $34,000,000 in Ohio, $32,000,000 in Wisconsin, $30,000,000 in Illinois and $13,000,000 in Massachusetts, to mention but a few states.[91]

In 1953 TVA spent over $866 million outside the region. The purchase of items manufactured outside the region by the consumers of the Valley, as well as the Tennessee Valley Authority, helped keep men employed in other regions. It was therefore an indirect contribution of TVA towards the prosperity of the nation.[92]

The Federal Government for its investment in the Valley is being repaid in forms other than the amortization of TVA power operations. In 1933, seven states of the Valley paid 3.4% of total national income taxes. In 1952, they were paying as high as 6.2%[93] The Atomic Energy Commission alone is saving $45 million to $50 million a year on the cost

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[91]"National Dividends from the Tennessee Valley," p. 2.

[92]Congressional Record, Appendix, Vol. 100, January 25, 1954, p. 551.

[93]Ibid., p. 551.

of its power because of the cheap rates provided by the TVA.[94]

It appears that in the form of national welfare, the Federal Government is getting back much more than its investment in the TVA program. The charge of subsidy against the TVA does not seem justified when there are various programs of the Federal Government which can be better described as an example of federal subsidy than the TVA.

Many governmental expenditures, if one wanted to see them as such, could be considered as federal subsidy. Many charge that Henry Kaiser prospered on federal loans (subsidy) during the war, yet noone can deny that he did make a significant contribution towards winning the war. What are the operations of the Federal Housing Administration? Do they not represent a federal subsidy? The farm price-support program is definitely a subsidy program. If one applied the same argument the President applied on the TVA one could reasonably ask why should the whole nation's taxes subsidize one segment of the nation's population? The President himself has been responsible for continuing price supports for farmers in the current (1954) year.

The taming of rivers, the controlling of floods, the unified development of a valley and the building of numerous

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[94]Congressional Record, Appendix, Vol. 100, January 14, 1954, p. 209.

multi-purpose dams are activities which even a group of individuals cannot undertake. These activities can be undertaken only by an agency which has the financial and other resources of the government. Mr. Edward H. Smoot, President of the Florence, Alabama Chamber of Commerce, puts it very clearly when he says:

> No private company would place its dams at points along the Tennessee to assure a continuous navigation channel; no private power company would, nor could it be compelled to, discharge from its reservoirs, water which might later be used for power generation in order to maintain storage space for flood control. TVA has done both.95

It appears that it was right that an agency of the federal government took up the problem of the development of the Tennessee Valley. No local or state government could have undertaken the task because the drainage area of the Tennessee River comprises parts of seven states and jurisdictional and other disputes would have arisen. Besides, hardly any one state would have been able to supply all the technical and financial resources needed for such vast operations as those of the TVA. By establishing a central agency it has been possible to make overall plans and to take effective measures of implementing them.

It is comparatively easy in the year 1954 to sit back and criticize the TVA program as an example of socialism.

95Congressional Record, Appendix, Vol. 100, March 5, 1954, p. 1123.

The country has had more than 15 years of continuous prosperity and the memory of the depression days has become blurred. But looking at the economic situation existing in the year 1933, when the Tennessee Valley Authority was created by an act of the Congress, one finds that TVA brought some hope to the depressing situation existing at the time. Along with other programs of the Roosevelt Administration, the TVA also provided jobs for the people of the area. It used building equipment and materials that helped put people to work in other regions of the country. And, whatever name one might give to the TVA operations today, its purposes and activities were generally accepted by the people in 1933.

There has however, been one consistent group that has opposed the Tennessee Valley Authority and its power operations from the time the Authority was formed. This group has been the private power group in the country and the politicians supporting their point of view. By and large the private utility companies near and around the Tennessee Valley area have been most vocal in their denunciation. The Arkansas Power and Light Company, as we have seen, has made the most substantial accusations. The Edison Electric Institute and the United States Chamber of Commerce have also been critical of TVA's operations.

Of the politicians, it has been mostly Republicans who have opposed TVA. Herbert Hoover, Wendell Wilkie and

President Eisenhower are only a few of the prominent men who have been critical of TVA philosophy. On the other side of the ledger one could name a long line of Democrats and few Republicans, like Senator Cooper of Kentucky and other prominent men, including former Presidents Roosevelt and Truman.

The influence of the private power groups on politicians opposing TVA appears obvious. This label of socialism that the Administration has attached to TVA was very methodically and cleverly worked out by private power groups. They knew that more than a majority of the people in the United States favored TVA.[96] They also knew that approximately 69% of the people thought socialism was bad. According to the New Republic, the private utility companies then changed the strategy. It quotes from a circular issued by these companies which says:

> From the preceeding charts (showing favorable reaction to the TVA), it is apparent that to link our fight to the TVA question would run us into a lot of opposition, most of it based on lack of knowledge. But to link our fight to socialism is something else again. The people do not want socialism. We're on favorable grounds there.[97]

It is interesting to note that one of the highest paid lobbyists in the United States is Mr. Purcell L. Smith, President of the National Association of Electric Companies. He

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[96]See page 2.

[97]"A Case of Semantics: public power and socialism synonymous?" New Republic, 123:9, July 24, 1950.

gets $50,000 a year for his job and last year (1953) his organization spent $547,789.32 for influencing legislation and other activities. This amount is over $200,000 more than the expenses of any other lobby in Washington. Mr. Smith claimed that his organization got its money's worth this year and among one of its most important accomplishments he listed its "effectiveness in keeping TVA's appropriations to a reduced amount."[98]

It need hardly be said that an indirect influence also works on legislators in Washington from TVA supporters. Numerous editorials in the newspapers, resolutions of private and public groups of the area and individual letters from constituents do have their effect on law makers. Most of this pressure is exerted by people who live in the Valley and have seen and felt the improvements in the economic condition of the Valley as a result of TVA operations.[99] To them TVA has brought prosperity to the Valley and they want to see it prosper and continue.

The argument of national subsidy to the region and the charge of "creeping socialism" against TVA hardly seems justified. They sound more unreasonable because there are various programs of the Federal Government which amount to direct subsidy and yet they are not labeled as such.

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[98]Congressional Record, Vol. 100, May 3, 1954, p. 5547.

[99]As indicated in Chapter I.

The Dixon-Yates Contract Controversy. Since June 17, 1954 the United States has seen a national controversy that may continue endlessly. The Dixon-Yates contract controversy has gotten involved in various technical details and side issues, although the basic point of contention seems to be the question that is being discussed in this paper. The question in the final analysis resolves itself to the proposition "should the TVA be allowed to further expand in the production of electric power (specifically steam-produced electric power) or should the private power companies develop that field?"[100]

As Elie Abel, writing in the New York Times said, that the root of the controversy is ignored "which concerns competing philosophy of government rather than the merits of a particular business transaction."[101]

Examining the controversy chronologically we find that the 1955 budget had not recommended a sum of $100 million asked by TVA for the construction of a steam plant at Fulton, Tennessee to meet the expanding needs of TVA customers in Memphis area. The President in his budget message had said that arrangements were being made with private companies to supply 600,000 kilowatts of energy to AEC whereby

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[100]New York Times, September 5, 1954, 4:8:3.

[101]Ibid.

AEC would be able to release the same amount back to the TVA system from its Paducah, Kentucky plant.

In the meantime the Director of the Bureau of the Budget was exploring the possibility of interesting a private company or a group of private companies into building the required steam plant. The EE Inc. was not interested in the proposal but suggested the names of Mr. Dixon and Mr. Yates to the Bureau Director.[102]

Mr. Edgar A. Dixon, President of the Middle South Utilities, Inc., and Mr. Eugene Yates, Chairman of the Southern Company were receptive to the idea and submitted a proposal in February to build the required plant. The proposal met with some objections from the Administration so it was withdrawn and a revised proposal was submitted April 10, 1954.[103]

On April 28, 1954 the Administration heard of a proposal that was being prepared by Mr. Walter von Treskow, a financial and economic consultant of New York City. Accordingly the action on Dixon-Yates proposal was delayed. The von Treskow proposal was submitted on May 26. It was rejected by the Administration on grounds (1) that the proposal would make the government pay all costs and take all

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[102] New York Times, August 22, 1954, p. 53:4.

[103] Ibid., p. 53:6.

risks and yet pay $4 million fee; (2) that the ability of the contractors was improved; and that (3) the cost did not appear to be less than Dixon-Yates proposal.[104]

The Dixon-Yates proposal was presented to the President and the Congressional leaders on June 14, 1954. The letter of approval and the President's directive to the AEC were mailed on June 16, 1954 and were published in the newspapers on June 17, 1954.[105]

A series of interesting developments followed the issuance of the President's directive.

1. It was disclosed that a majority of AEC members did not favor the idea of AEC contracting for power that was to be fed into TVA lines. However, the majority agreed to accept responsibility if directed by the President or Congress.[106]

2. A letter from Admiral L. Strauss to Chairman of AEC was presented which showed his dissatisfaction with the way the private company was supplying power to the AEC plants at Paducah, Kentucky.[107]

3. The Director of the Bureau of the Budget declared that under the terms of the contract all local, state and

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[104]New York Times, August 22, 1954, p. 53:4.

[105]Ibid.

[106]New York Times, June 18, 1954, p. 1:4.

[107]Ibid., p. 12:5.

federal taxes paid by the Dixon-Yates group would be borne by AEC. TVA was to bear all costs for receiving power at delivery points and for moving it into the TVA system.[108]

4. On June 18, 1954 it was disclosed that Mr. Frank W. Weitzel, Acting Controller General of the General Accounting Office questioned the President's directive on the ground there was no competitive bidding.[109]

5. On July 14, 1954 during the debate for the revision of the Atomic Energy Act of 1946 Senator Clinton P. Anderson of New Mexico introduced an amendment which would have limited AEC's authority to sign power contracts only for direct delivery to AEC installations.[110] The amendment was defeated on July 21, 1954.[111]

6. Two members of the TVA Board objected to the proposal because they saw no way TVA could have any control over costs it might incur.

7. On August 16, 1954 Mr. Stephen A. Mitchell, Chairman of the Democratic National Committee charged favoritism and corruption at the highest level in accepting the Dixon-Yates proposal without competitive bidding.[112]

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[108] New York Times, June 18, 1954, p. 12:3.

[109] Ibid., June 19, 1954, p. 1:3.

[110] Ibid., June 15, 1954, p. 1:2.

[111] Ibid., June 22, 1954, p. 13:1.

[112] Ibid., August 17, 1954, p. 1:2.

8. Mr. Walter von Treskow charged that he was not given a proper hearing by the Administration and that in case his proposal was accepted there would have been a total saving of $152,354,000 over a period of 30 years over the Dixon-Yates proposal.[113]

9. Mr. J. D. Stietenroth, Secretary-Treasurer of Mississippi Power and Light Company, a subsidiary of Middle South Utility, Inc., declared that the Company maintained two sets of books, one in Missippi and the other in New York, and that power rates were dictated by "Wall Street interests."[114]

10. Mr. Arthur E. McLean, president of the Commercial National Bank of Little Rock, Arkansas said that Arkansas Power and Light Company, a subsidiary of Middle South was "the most corrupt and ruthless corporation that ever operated within the bounds of the State." He said that the Company interferes in State politics and that it reimburses candidates for any financial loss they might have incurred in campaigning.[115] These charges were denied by the Company.[116]

11. Mr. Sidney S. McMath, former Governor of Arkansas testified that his refusal to do the bidding of Arkansas

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[113] New York Times, September 15, 1954, p. 21:2.

[114] Ibid., September 26, 1954, p. 8:4.

[115] Ibid., October 22, 1954, p. 21:5.

[116] Ibid., p. 21:6.

Power and Light Company cost him re-election to a third term in 1952.[117]

12. Finally Senator William Langer, Republican of North Dakota asked, "Is it sound public policy for the Government to enter a long-term contract with these companies, which are not only monopolies but have abused their monopoly position and have perhaps unclean hands?"[118]

13. Dixon-Yates proposal has been examined by AEC, TVA and Bureau of the Budget and they indicated that TVA could supply the same power cheaper. However, each had its own interpretation and explanation.

In defense of the Presidential directive quite a few arguments have been advanced.

(1) The President himself said that he ordered the negotiation of the contract primarily to gain time. He wanted to study the TVA more thoroughly and to determine a future course for it. He said he was not sure where the truth lay but he was trying to find out.[119]

(2) Senator Fullbright, Democrat of Arkansas came out in favor of the proposal because he thought it was a step towards less governmental spending.[120]

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[117] New York Times, October 23, 1954, p. 1:4.

[118] Ibid., p. 1:6.

[119] Ibid., July 1, 1954, p. 10:8.

[120] Ibid., July 10, 1954, p. 6:16.

(3) The Bureau of the Budget did not think TVA really could produce power cheaper. It said:

> There are many activities now performed by private enterprise for the Federal Government which the government, because of its freedom from taxes and its enormous credit resources, could seem to perform more cheaply under a concept that nonpayment of taxes by the Federal Government is a true saving in cost.[121]

(4) The AEC defended absence of competitive bidding in negotiating the contract on the grounds that a cancellation clause could be included only in a contract with companies operating in the periphery of the Tennessee Valley, thus companies with transmission facilities in the area could only absorb the extra energy that would become available in the event of a cancellation by the AEC.[122] Practically the only sources of privately financed power in the Memphis area are the Electric Energy Inc., or the Dixon-Yates combination. No other company in the area was in a position to undertake such a job.[123]

The details of the contract which have been subject to great criticism and controversy were summarized by Roland Sawyer in the Christian Science Monitor of November 6, 1954. They are recorded on the following page:[124]

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[121] New York Times, July 11, 1954, p. 52:5.

[122] Ibid., September 10, 1954, p. 5:2.

[123] Chicago Daily Tribune, October 4, 1954.

[124] Christian Science Monitor, November 6, 1954, p. 6:3-6.

1. The total cost of the proposed plant, $107,250,000, is divided three ways - $104,115,000 for generating; $1,135,000 for transmission; and $2,000,000 for working capital.

2. The AEC would pay $9,668,000 annually for power, the rate being subject to adjustment for changes in price levels in coal, labor and other operating costs.

3. The AEC would reimburse the company directly for all state, local and federal taxes except federal income taxes, but the company would be allowed to include "federal income taxes in the computation or adjustment in the base rate or cost structure of the contract."

4. If for any reason the government should cancel the contract, the AEC would pay a maximum of $40,000,000 to the company, exclusive of tax liabilities, estimated at $11,000,000.

5. The West Memphis, Arkansas plant would produce 600,000 kilowatts of power. Of this 500,000 kilowatts would be straight "replacement" to the TVA for power received from the TVA by the AEC at Paducah, Kentucky. The other 100,000 kilowatts would go to the AEC's Oak Ridge plants.

6. Forty-two months after the effective date of the contract, or commencement of the third generating unit of the plant - whichever were earlier - the AEC could terminate the contract, or could reduce the requirement for power on either three or four years notice.

7. During notice period AEC could transfer power to any other agency of government at the same rate paid by AEC.

8. The Dixon-Yates group would have first call on unused or excess power which the AEC might release, and could dispose of it as it wished.

The Attorney General and the Comptroller General both assert that the AEC has a legal right to negotiate such contracts. However, the controversy does not end there. There is a requirement in the law "that such contracts must stand for 30 days while Congress is in session before taking effect,"

unless the Joint Congressional Committee on Atomic Energy waives that provision.[125]

Opponents of the Dixon-Yates proposal have found another opportunity to delay the proposal. The latest of the snags lies in the fact that the Contract is not yet signed, and unless it is officially signed the question of deciding on the waiver of the 30 day waiting period does not arise.

As pointed out in the beginning the details of this controversy are such that they tend to cloud the basic issue involved. A keen mind, however, that can dig through the mass of speeches and writings on the subject, will find that basically the controversy is a struggle between those who want to curb TVA expansion in the steam generated electric power field and those who want to expand it. In a still broader perspective the struggle represents the struggle between those favoring public control of public utilities and those opposing it. Looking at it from another point of view, the Dixon-Yates controversy represents a struggle between two different philosophies of government. Whichever side wins in the controversy will show what temporarily is the philosophy of government the American people favor.

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[125]Christian Science Monitor, loc. cit.

CHAPTER V

SUMMARY AND CONCLUSIONS

The Tennessee Valley Authority is a corporation set up by the Federal Government for the development of the natural resources of the Tennessee Valley area. Among its activities are included flood control, navigation and generation of power. By law, the TVA is authorized to enter into other activities in order to provide for the "economic and social well-being" of the people living in said areas.

The Tennessee Valley covers 41,000 square miles and portions of seven states fall inside it. Before TVA was established the economic condition of the people in the valley was about the lowest in the country, though the potential for economic development was great. In 1933 the TVA Act was passed for the purpose of improving navigation in the Tennessee River, developing flood-control, generating electric power and, among other things, for the economic and social well-being of the people living in the river basin.

Since 1933 TVA has built dams, improved navigation, effected flood-control on the rivers, developed power-generating units and has worked for the improvement of several other fields such as reforestation, fertilizer production, recreation and fishing.

During the Second World War TVA's fertilizer plants

and power generating facilities made a significant contribution to the war effort. The power requirements of the Aluminum plants in the Valley and the staggering demands of the Atomic Energy plants at Oak Ridge, Tennessee were met by the TVA power-generating systems.

However, the demands of the Atomic plants were so great that the hydroelectric system of TVA was insufficient to meet them. During the war TVA built one steam plant and since 1950, with increased defense requirements, TVA has had to build several other steam plants. During the war the Congress appropriated money for these steam plants to meet the emergency, but when TVA started asking money for steam plants during peace time it met with opposition. The Republican 80th Congress refused to appropriate money for steam plants and once again with the 1952 Republican landslide and the control of both the Administration and the Congress by the Republicans, TVA has experienced difficulty in getting appropriations for further expansion in the steam-generated electric power field.

In the 1955 budget no provision was made for a $100 million request of TVA for building a steam plant at Memphis, Tennessee. Instead, the President directed the AEC to contract with a private power group to supply 600,000 kilowatts of power to the TVA system in exchange for the power TVA supplies to the Atomic plants at Paducah, Kentucky.

The Presidential directive revived an old controversy which was based on two charges against TVA. The charges are: (1) if power operations of TVA were conducted on the same basis as the private power companies and books maintained in similar manner, TVA's power program would show a loss; (2) TVA's entry into steam-generated electric power field is an example of "creeping socialism."

Though these two basic charges are overshadowed by the discussion of the complicated details of the present controversy - yet they appear to form the background on which these charges are based.

A close examination of these charges and the defense against them reveals interesting facts. The first charge of the critics is based on three points: (1) TVA does not pay state and local taxes on the same basis as the private power companies; (2) TVA does not pay interest on the total investment in the program; and (3) TVA pays no federal taxes.

By law the Federal Government cannot be required to pay state and local taxes but TVA, under Section 13 of the TVA Act pays 5% of its gross revenue from sale of power to states and counties "in lieu" of taxes. TVA's power operations make enough money to pay for the interest on its investment as well as Federal taxes.[126]

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[126]See page 20, Table I.

An examination of two steam plants, one operated and constructed by TVA and the other by a private utility group, the Electric Energy Inc., proved that under competitive contitions TVA produced power not only efficiently, but more economically.[127]

The charge of "creeping socialism" is a slightly more difficult subject to deal with. One not only has to start with ordinary definition and interpretation of words and terms but also has to make value judgments to arrive at any particular conclusion.

In order to avoid getting involved in a highly theoretical and philosophical discussion the definition used by President Eisenhower is accepted in arriving at a conclusion. According to President Eisenhower a socialist concept is that in which "the taxes from the whole nation are used to subsidize a particular region." He thinks TVA is a typical example of such a socialistic theory.

But if one tries to use the President's definition and logically analyzes other activities of the Federal Government one can find several examples of federal subsidy, many of which are supported by the President himself. The operations of the Federal Housing Authority and the Agricultural price support program are examples of such subsidy.

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[127]See discussion on pages 34-38.

If the latter two are not examples of socialism it still remains to be proved that TVA operations are an example of socialism.

The controversy on the Dixon-Yates contract is based upon the same principle. If one has logically followed the reasoning developed in this paper, one would find: (1) that TVA power operations are not losing money; (2) that TVA has, by its past performance in competition with a private power group, proved that it can build steam plants more efficiently and economically; and (3) that in the light of other examples TVA power operations cannot be considered an example of "creeping socialism." Therefore to supply the additional electric power required by the Memphis area it would be better to appropriate funds for the TVA to build a steam plant at Fulton, Tennessee than for the AEC to contract with the Dixon-Yates group to supply power to the TVA lines at Memphis, Tennessee in exchange for power TVA supplies to the Atomic plants at Paducah, Kentucky.

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APPENDIXES

APPENDIX A*

Project	Date in service for TVA system use	Investment as of June 30, 1953
Multiple-purpose projects (costs subject to allocation):		
Wilson (acquired)	June 16, 1933	$47,371,548
Norris	July 28, 1936	30,063,896
Wheeler	Nov. 9, 1936	45,908,380
Pickwick Landing	June 29, 1938	42,022,799
Guntersville	Aug. 1, 1939	34,292,976
Hales Bar (acquired)	Aug. 16, 1939	29,604,185
Chickamauga	Mar. 4, 1940	36,917,712
Hiwassee	May 21, 1940	16,609,768
Nottely	Feb. 1, 1942	5,377,814
Watts Bar	Feb. 11, 1942	32,583,837
Chatuge	Mar. 1, 1942	7,037,848
Cherokee	Apr. 17, 1942	32,428,735
Douglas	Mar. 21, 1943	41,467,960
Fort Loudoun	Nov. 9, 1943	39,034,076
Kentucky	Sep. 14, 1944	114,382,302
Fontana	Jan. 20, 1945	70,134,425
Watauga	Aug. 30, 1949	31,615,729
South Holston	Feb. 13, 1951	30,555,211
Boone	Mar. 16, 1953	21,087,987
Navigation channel improvements		10,254,270
Subtotal		718,751,458
Single-purpose projects (costs charged to power):		
Hydroelectric projects, constructed by TVA:		
Ocoee No. 3	Apr. 30, 1943	7,984,111
Apalachia	Sep. 22, 1943	22,269,085
Subtotal		30,253,196
Hydroelectric projects, acquired by TVA: 7 plants		18,505,252

*TVA Annual Report, 1953, p. A88.

Project	Date in service for TVA system use	Investment as of June 30, 1953
Steam-electric plants, constructed by TVA:		
Watts Bar	Feb. 15, 1942	18,975,824
Johnsonville	Oct. 27, 1951	84,775,340
Widows Creek	July 1, 1952	57,433,542
Shawnee	Apr. 9, 1953	51,775,385
Subtotal		212,960,091
Steam-electric plants, acquired by TVA: 8 plants		14,166,571
Other electric plants (costs charged to power): Transmission lines, substations, general plant and land		268,862,379
Total investment		1,263,498,947

APPENDIX B

Below are given selected questions raised by Arkansas Power and Light Company regarding the payment of taxes and interest by the TVA and the answers of Citizens for TVA, Inc.*

STATE AND LOCAL TAXES

Arkansas Power & Light Co. - "State and local payments (in lieu of taxes) made by TVA for the 12-month period ended June 30, 1953, totaled $3,418,110."

Citizens for TVA. - This is correct, but it overlooks payments made by TVA's distributors (municipal and cooperative systems), which must be included if a comparison is to be made with private utilities. TVA is a wholesaler of power. Most utilities generate and retail power. TVA and its distributors (the retailers) together made State and local tax payments of $8,557,000.

Arkansas Power & Light Co. - "The $3,418,110 in TVA tax payments to State and local governments is 0.34 percent of TVA's net utility plant of $1,009,165,256."

Citizens for TVA. - This figure is misleading, and is not to be found in the pages of the TVA financial statement Mr. Moses says it is. Mr. Moses seeks to give the impression that private utilities pay State and local taxes on the basis of "net utility plant." In practice, only about half of State and local taxes are based on the value of net utility plant. Others are income taxes, franchise taxes, generating taxes, etc. Even on a net plant basis, however, his figures are misleading. Actually the average TVA net investment in completed plant in 1953 was about $300 million less than Mr. Moses says it was - the correct figure is $710 million. To take another figure - the net cost of power plant in service at the end of the calendar year 1952 was $665,709,000.

FEDERAL TAXES

Arkansas Power & Light Co. - "TVA pays no Federal taxes."

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*Independent Office Appropriations, 1955, Ibid., pp. 309-401.

Citizens for TVA. - Not as such. The Federal Government does not tax itself. But all of TVA's net income belongs to the Federal Government, whereas the Government gets only about half of private utility taxable income.

Arkansas Power & Light Co. - "Five utility companies operating in Tennessee paid $1,003,708 in Federal taxes in 1952 on net utility plant of $35,358,575 at December 31, 1952. This is 2.84 percent of these companies' net utility plant."

Citizens for TVA. - Federal taxes are based on net income (profits), not on net utility plant. TVA was not set up to see how much money it could make. It was told to be self-supporting, which it is, and to amortize its power investment, which it does. After that its objective is to set its rates so as to encourage residential and rural use, not to pile up earnings and collect a lot of taxes for the Federal Government. Nevertheless, over the years TVA's earnings on its net plant have amounted to 4.1 percent. If 2 percent of this were regarded as interest on the investment (2 percent is the average cost of money to the Federal Government,[1] and is a rate suggested as reasonable by Mr. Moses on the back page of his pamphlet), the remainder amounts to 2.1 percent - all clear for Uncle Sam and his taxpayers. Arkansas Power & Light returned 2.68 percent in taxes.

INTEREST

Arkansas Power & Light Co. - "The Government makes loans to other types of businesses and charges from 4⅛ to 6 percent. Privately owned companies must pay 6 percent for their money."

Citizens for TVA. - Arkansas Power & Light pays 3 percent. In 1952 it paid $2,718,833 in interest on long-term debt. The debt was $83 million at the end of 1951 and $97 million at the end of 1952. The 3 percent is obtained by relating interest paid to an average debt of $90 million.

Arkansas Power & Light Co. - "TVA's financial statements for the fiscal year 1953 show that the net non-interest-bearing funds that the United States Treasury has put up for the TVA power program amount to $800,489,722 as of June 30, 1933."

Citizens for TVA. - Total investment of non-interest-bearing funds in use through all of fiscal 1953 was $409

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[1]From annual report of the Secretary of the Treasury for fiscal year 1952, p. 84.

million. Of the figure Mr. Moses uses, one-fourth was added only during the course of the fiscal year, and another $200 million represents construction in progress.

Arkansas Power & Light Co. - "Any citizen can get 3 percent on Government bonds."

Citizens for TVA. - Average cost of money to the Federal Government is about 2 percent. Mr. Moses inflates it 50 percent.

Arkansas Power & Light Co. - "If TVA is to retire the Government advances over a period of 40 years and pay 3 percent interest . . ."

Citizens for TVA. - TVA is retiring the Government advances over a period of 40 years, but private utilities, including Arkansas Power & Light Co., do not similarly retire their debt. Private utility systems accept bonds as the permanent source of about one-half of their capital investment, and about 64 percent of Arkansas Power & Light's capital is in bonds.