

**REPORT TO  
THE CONGRESS OF THE UNITED STATES**

**AUDIT OF  
EASTERN POWER SYSTEM AND RELATED ACTS  
CORPS OF ENGINEERS (CIVIL FUNCTIONS)  
DEPARTMENT OF THE ARMY  
AND  
SOUTHEASTERN POWER ADMINISTRATION  
DEPARTMENT OF THE INTERIOR  
FISCAL YEARS 1959 AND 1960**



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON 25

OCT 31 1961

B-125032

Honorable Sam Rayburn  
Speaker of the House of Representatives

Dear Mr. Speaker:

Herewith is our report on the audit of the power generating and related activities of the Corps of Engineers (Civil Functions), Department of the Army, in the southeastern area of the United States and the power marketing activities of the Southeastern Power Administration, Department of the Interior, for the fiscal years 1959 and 1960.

The report includes a recommendation to the President of the United States concerning the failure of the Secretary of the Interior to comply with a specific requirement of existing law with respect to Federal Power Commission approval of rates and charges for the sale of power from the Wolf Creek, Center Hill, and Dale Hollow Projects.

In the report we repeat our recommendation that the Department of the Interior design statements specifically for the purpose of showing clearly the status of repayment of the Government's investment in the power program. In the absence of agency statements showing this type of information, we prepared a statement which shows that in fiscal year 1960 net power revenues were greater than estimated scheduled repayment requirements by \$1 million; however, there was a cumulative estimated repayment deficiency of \$14.2 million at June 30, 1960.

Our prior reports to the Congress on Federal water resources development programs in the southeastern area contained matters for consideration by the Congress on allocations of construction costs to power and other purposes and recommendations to the Secretary of the Interior and the Chief of Engineers on accounting and financial practices. At June 30, 1960, the Department of the Interior and the Corps of Engineers had reached general agreement on the cost allocations for 8 of the 11 multiple-purpose projects including power that were then in operation. The basic difference between the two agencies on the cost allocation method and interest factor for the Wolf Creek, Center Hill, and Dale Hollow Projects has not been resolved. Because of the continuing lack of agreement on the cost allocations for these projects and because of certain accounting and financial policy deficiencies, we cannot express an opinion



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REPORT ON AUDIT  
OF  
SOUTHEASTERN POWER SYSTEM AND RELATED ACTIVITIES  
CORPS OF ENGINEERS (CIVIL FUNCTIONS)  
DEPARTMENT OF THE ARMY  
AND  
SOUTHEASTERN POWER ADMINISTRATION  
DEPARTMENT OF THE INTERIOR  
FISCAL YEARS 1959 AND 1960

The General Accounting Office has made an audit of selected activities of the CORPS OF ENGINEERS (Civil Functions), Department of the Army, in the southeastern area of the United States and the SOUTHEASTERN POWER ADMINISTRATION, Department of the Interior, for fiscal years 1959 and 1960. This audit was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67). The scope of the audit work performed is described on page 41 of this report.

GENERAL COMMENTS

The Corps of Engineers has in operation or under construction 14 multiple-purpose projects with hydroelectric facilities in the southeastern area. These projects, when completed, will represent a Federal investment totaling about \$952 million and will have an installed generating capacity of 1,807,000 kilowatts. Installed generating capacity at June 30, 1960, totaled 1,283,000 kilowatts. In addition to generation of hydroelectric energy, other purposes served by these projects include the prevention of flood damage,

aid to navigation, regulation of streamflow, and expansion of recreational or public-use facilities.

The Corps has made expenditures for advance engineering and design on nine additional multiple-purpose projects with hydroelectric facilities in the southeastern area.

Section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s) provides for delivery to the Secretary of the Interior of the excess electric power and energy generated at reservoir projects under the control of the Department of the Army. The Secretary of the Interior is directed to transmit and dispose of this excess power and energy in such manner as to encourage the most widespread use thereof at the lowest possible rates to consumers consistent with sound business principles. Pursuant to section 5 of the act, the Secretary of the Interior on March 21, 1950, established the Southeastern Power Administration (SEPA) as the power marketing agent in the States of West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, and Kentucky.

SEPA does not own or operate any transmission facilities. The power it sells is delivered to the Tennessee Valley Authority, electric utilities, and preference customers, either at the project site or by contractual arrangement over facilities of the electric utilities. The office of SEPA is located at Elberton, Georgia, and is managed by an administrator appointed by the Secretary of the Interior.<sup>1</sup>

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<sup>1</sup>See appendix IV, p. 63, for map of the power project responsibilities of the Southeastern Power Administration.

The activities of the Corps of Engineers in the southeastern area of the United States are carried out by district offices at Nashville, Tennessee, in the Ohio River Division headquartered at Cincinnati, Ohio; at Norfolk, Virginia, in the North Atlantic Division headquartered at New York City; and at Savannah, Georgia, and Mobile, Alabama, in the South Atlantic Division headquartered at Atlanta, Georgia. The district offices of the Corps are operating offices, headed by Army engineer officers, as district engineers, and generally carry out both military and civil works activities within defined areas under the general direction of division engineers. The division engineers are responsible to the Chief of Engineers who, with his staff, is located at Washington, D.C.

Separate records are maintained by the two agencies; the General Accounting Office has prepared financial statements combining the records and reports of the Corps of Engineers and the Southeastern Power Administration. We call this combined financial presentation the Southeastern Power System and Related Activities.

The principal policy-making officials of the respective agencies responsible for the activities discussed in this report were and are as follows:



Department of the Army

Date appointed

Secretary of the Army

Wilber M. Brucker

Elvis J. Stahr, Jr.

July 21, 1955

January 23, 1961

Chief of Engineers:

Lieutenant General Emerson C. Itschner

Lieutenant General Walter K.

Wilson, Jr.

October 1, 1956

May 19, 1961

Department of the Interior

Secretary of the Interior:

Fred A. Seaton

Stewart L. Udall

June 3, 1956

January 21, 1961

Assistant Secretary--Water and Power Development:

Fred G. Aandahl

Kenneth Holum

February 10, 1953

January 30, 1961

Administrator, Southeastern Power Administration:

Charles W. Leavy

January 15, 1953

Our principal finding and recommendation are summarized in the following section of this report.

## PRINCIPAL FINDING AND RECOMMENDATION

Our principal finding and recommendation are summarized below.

### DEPARTMENT OF THE INTERIOR CONTINUES TO SELL POWER AT RATES DISAPPROVED BY THE FEDERAL POWER COMMISSION

The rates and charges in the Department of the Interior agreement with the Tennessee Valley Authority (TVA) for sale of power generated at Wolf Creek, Center Hill, and Dale Hollow Projects were disapproved by the Federal Power Commission (FPC) on May 20, 1958, as not being sufficient to return the costs of these projects pursuant to the requirements of section 5 of the Flood Control Act of 1944. However, the Department of the Interior has continued to sell power to TVA at the rates provided in the agreement. As a result, the legal requirement that schedules of rates and charges become effective upon confirmation and approval by FPC has not been met.

The Department of the Interior believes that the legislative history and executive pronouncements support the basis used in determining costs of the projects to be returned under the rates and charges in the agreement with TVA. The Department also points out that the appropriate committees of the Congress, having been given the position of the Department and its expressed intentions to abide by the terms of the agreement with TVA, have not indicated any objection.

We believe that the Flood Control Act of 1944 clearly imposes a responsibility on the Secretary of the Interior to obtain FPC confirmation and approval of rate schedules for power generated at

Corps of Engineers projects. Accordingly, we are recommending that the President of the United States direct the Secretary of the Interior to submit for FPC approval revised rates and charges for the sale of power from the Wolf Creek, Center Hill, and Dale Hollow Projects, designed to comply with FPC's interpretation of existing requirements. (See pp. 24 to 28.)

## STATUS OF FINDINGS AND RECOMMENDATIONS

### IN PRIOR REPORTS

Our audit report to the Congress dated September 25, 1959, on the Southeastern Power System and Related Activities, for the fiscal years 1957 and 1958, contained comments on a number of significant matters on which corrective action was needed. These findings and recommendations and their current status are summarized below.

#### 1. FINANCIAL POSITION AND OPERATIONS OF SOUTHEASTERN POWER SYSTEM NOT PRESENTED FAIRLY

At June 30, 1958, agreement had not been reached between the Corps of Engineers and the Department of the Interior on the allocation of construction costs for 6 of the 10 multiple-purpose projects with hydroelectric facilities then in operation. A basic difference existed between the two agencies with regard to 3 of the 6 projects--Wolf Creek, Center Hill, and Dale Hollow--as to the proper method of cost allocation and the rate to be used for interest on the Federal investment repayable from power operations. Also, unresolved deficiencies and inconsistencies in accounting policies and procedures existed between projects of the Corps of Engineers in the southeastern area.

Because of the lack of firm cost allocations and the accounting deficiencies, we stated that, in our opinion, the financial statements included in our report did not present fairly the financial position of the Southeastern Power System and Related Activities at June 30, 1958, and the financial results of operations for the fiscal year then ended.

At June 30, 1960, firm cost allocations had been made on 4 of the 11 Corps of Engineer projects in operation in the southeastern area. The Corps of Engineers and the Department of the Interior have reached field-level agreement on the cost allocations for 4 other projects, and except for an expected minor adjustment the allocations are considered firm. However, there still remains a basic difference between the two agencies on the proper cost allocation method and interest rate on the Wolf Creek, Center Hill, and Dale Hollow Projects. Because the accounting records and the power rate schedules should be based upon the same interest rates and cost allocations, this basic difference between the Corps and the Department cannot be satisfactorily resolved until the power rate schedule disagreement between the Department and the Federal Power Commission has been settled. (See pp. 24 through 28.) Corps cost allocations are used in this report. On the Wolf Creek, Center Hill, and Dale Hollow Projects, the Corps allocations of the Federal investment to power total \$114.1 million or \$11.6 million more than the Department's allocations.

Some of the previously reported deficiencies and inconsistencies in accounting policies and procedures have been corrected or are being corrected by the Corps of Engineers. However, other important deficiencies have not been resolved. (See p. 19.)

Because of the lack of agreement on the cost allocation method and interest rate for the Wolf Creek, Center Hill, and Dale Hollow Projects and the remaining accounting deficiencies, we cannot express an opinion as to whether the financial statements on pages 44 to 47 present fairly the financial position of the

Southeastern Power System and Related Activities at June 30, 1960, and the financial results of operations for the fiscal year then ended. Until these matters are satisfactorily resolved the Congress will continue to be deprived of complete financial data which would permit an adequate evaluation of the Federal power program in the southeastern area.

2. PROJECT REVENUES NOT ALLOCATED TO  
AND RECORDED BY GENERATING PROJECTS

The Southeastern Power System's financial statements included in our prior report did not present fairly the results of financial operations of the System partly because at June 30, 1958, SEPA's net power revenues were not recorded or were improperly recorded in the records of the Corps generating projects, resulting in significant errors in the computation of interest on the unpaid Federal investment in power at these projects.

As the result of agreements reached in a March 1960 meeting of an interagency staff-level work group, SEPA has furnished each involved Corps district office data on the net revenues from power sales for each generating project from inception of power sales to June 30, 1960. Similar data is to be furnished for each future fiscal year.

Using the data furnished by SEPA, the Corps district offices recomputed interest from inception of power sales to June 30, 1960, for each generating project and recorded the interest adjustments in the applicable project accounts. The interest adjustments and revenues allocated are reflected in the financial statements included in this report.

The correction of this deficiency has resulted in a substantial reduction in the interest charged to power operations and in the cumulative net loss from power operations.

3. STATUS OF REPAYMENT OF FEDERAL INVESTMENT  
ALLOCATED TO POWER NOT SHOWN ADEQUATELY

In our prior reports we commented that financial and statistical data on power operations issued by the Corps and SEPA did not contain information which provided a basis for an evaluation of the adequacy of rates and revenues received in the light of scheduled repayment requirements.

During the current audit, we noted that SEPA has prepared repayment studies for 4 of the 11 multiple-purpose projects in operation at June 30, 1960. We were informed that similar studies would be prepared in the near future for the other 7 projects. Generally, these repayment schedules adequately show information regarding the expected future repayment of the Federal power investment. However, no comparison is made between actual repayment and theoretical or scheduled repayment requirements. By letter dated June 5, 1961, the Administrative Assistant Secretary of the Interior advised us that the Department does not feel that there is a requirement to recover any particular portion of the costs during any 1 year but views its financial responsibility as the requirement to recover costs, including amortization of the Federal investment, over a given repayment period. He advised that the Department's repayment studies show the projected amortization of the initial Federal investment and indicate whether or not financial responsibility is being met over the payout period.

In our opinion, a repayment schedule to be meaningful to various levels of management, such as the Department of the Interior, the Bureau of the Budget, and the Congress, should show how actual repayment compares with scheduled repayment requirements or theoretical return of funds which would be sufficient to repay the Federal investment in power within the established repayment period and should be accompanied by a comprehensive analysis of variations between actual and scheduled repayment, including comments regarding future repayment prospects. Accordingly, we are repeating our recommendation made in prior reports that the Department of the Interior design statements specifically for the purpose of showing clearly the status of repayment of the Government's investment in the power program.

The General Accounting Office has prepared a schedule comparing SEPA net revenues available for repayment of the Federal investment in power with the estimated scheduled repayment requirements based on Corps cost allocations. (See appendix III.)

In evaluating the status of repayment, shown on page 12, consideration must be given to (1) low water flows in past years, with consequent low revenues, (2) revenue losses attributable to protracted long-term contract negotiations during the period of initial project development, and (3) other factors resulting in variations between scheduled and actual repayment. Also, power rates are designed to produce revenues to repay an average amount of the investment over the years; rates cannot be frequently adjusted to coincide with fluctuating water flows. We have not attempted to evaluate these factors.



Except for Wolf Creek, Center Hill, and Dale Hollow, Corps and SEPA project cost allocations are in basic agreement, and the average annual revenues anticipated by SEPA are estimated by SEPA to be sufficient to repay either the Corps' or SEPA's cost allocations within 50 years from the date that power facilities were placed in service. For Wolf Creek, Center Hill, and Dale Hollow, the average annual revenues anticipated by SEPA are estimated by SEPA to be sufficient to repay the investment allocated to power within 50 years using SEPA's cost allocations but not the Corps of Engineers' cost allocations.

Estimated repayment deficiency

Based on the use of Corps of Engineers' cost allocations, the repayment analysis shows that in fiscal year 1960 net power revenues were greater than estimated scheduled repayment requirements by \$1,030,243; however, there was a cumulative estimated repayment deficiency of \$14,300,684 at June 30, 1960. This data is shown in the following summary.

	Cumulative to June 30, 1960	Fiscal year 1960
Gross SEPA power revenues	<u>\$111,329,290</u>	<u>\$20,646,800</u>
Less:		
Southeastern Power Administration marketing expenses	12,880,093	2,242,800
Corps of Engineers charges:		
Operation and maintenance ex- penses	16,368,547	2,566,117
Provision for replacement	3,313,381	526,364
Interest on unrepaid investment	<u>63,768,219</u>	<u>9,601,134</u>
Total deductions	<u>96,330,240</u>	<u>14,936,415</u>
Net revenues available for repayment of the Federal investment	14,999,050	5,710,385
Estimated scheduled repayment of the Federal investment	<u>29,299,714</u>	<u>4,680,142</u>
Estimated repayment deficiency or ex- cess (-)	<u>\$ 14,300,684</u>	<u>\$-1,030,243</u>

Appendix III of this report contains additional information on the repayment analysis including details on the basis for its preparation.

The current year and cumulative losses from power operations shown in the financial statements in this report (schedules 1 and 2) differ from the figures presented above on repayment of the Federal investment. The status of repayment data is based on repayment of the Federal investment over a 50-year period set by administrative policy established pursuant to law. The financial results of operation differ from the repayment data principally because the financial statements are based on a policy of spreading costs of depreciable assets on a straight-line basis over their economic lives. The economic life of depreciable assets often differs from the established repayment period.

## ELECTRIC PLANT CONSTRUCTION AND OPERATION

Project authorizations to the Corps of Engineers have provided for construction of hydroelectric power plants at many reservoir projects. Although by law the power program is generally collateral to the other purposes of multiple-purpose projects, it has developed into a major activity from a construction and operating standpoint, and the power program is the only major revenue-producing program. (See appendix I, page 58, for information on pertinent authorizing legislation.)

The authorized Federal hydroelectric power plant construction program in the southeastern area at June 30, 1960, is summarized as follows:

<u>Status of project</u>	<u>Number of projects</u>	<u>Number of generating units</u>	<u>Capacity (kilowatts)</u>
In operation	11	45	1,283,000
Under construction	3	12	524,000
Authorized for construction	<u>27</u>	Not stated	<u>1,034,700</u>
Total	<u>41</u>		<u>2,841,700</u>

### GENERATING PLANTS IN OPERATION AND UNDER CONSTRUCTION

In the Southeast, 11 Corps hydroelectric projects were generating power at June 30, 1960. These projects have 45 generating units and an installed capacity of 1,283,000 kilowatts. The total estimated construction costs, including interest during construction, and the current allocation to the power purpose by the Corps for the 11 projects follow:

Project	Initial operation of first unit (fiscal year)	Number of generating units	Capacity (kilowatts)	Estimated construction costs, including interest during construction		
				Total	Allocated to power	
					Amount	Percent
(000 omitted)						
Wolf Creek	1952	6	270,000	\$ 83,716	\$ 62,865	75.1
Center Hill	1951	3	135,000	46,879	33,839	72.2
Dale Hollow	1949	4	54,000	27,184	17,379	63.9
Old Hickory	1957	4	100,000	51,600	32,715	63.4
Cheatham						
(note a)	1960	3	36,000	32,341	18,206	56.3
Allatoona	1950	3	74,000	32,893	25,277	76.8
Belford	1957	3	86,000	46,779	41,384	88.5
Clark Hill	1953	7	280,000	84,029	75,217	89.5
Jim Woodruff	1957	3	30,000	51,621	23,395	45.3
John H. Kerr	1953	7	204,000	91,814	72,875	79.4
Philpott	1954	3	14,000	13,948	7,257	52.0
Total		45	1,281,000	\$562,804	\$410,409	72.9

<sup>a</sup>Only 2 of the 3 scheduled generators at the Cheatham Project were in full-scale operation at June 30, 1960.

Operation of the first generator at the Cheatham Project, in May 1958, disclosed instability of the turbine runner blades. Later in 1958 this same difficulty was experienced in the two other units. The turbine contractor dismantled the defective turbines and performed extensive remedial work at his own expense in accordance with the terms of the contract. The turbine operating difficulties caused the project generators to be inoperative or operative at a reduced load during fiscal year 1959 and in the early part of fiscal year 1960. As a result, during this period only a limited quantity of energy was available from the Cheatham Project for sale to the Tennessee Valley Authority. (See p. 28.)

Under construction at June 30, 1960, were 3 hydroelectric projects which will have 12 generating units with an installed capacity of 524,000 kilowatts. The total estimated construction costs, including interest during construction, and the current allocation to the power purpose by the Corps for the 3 projects follow:

Project	Planned operation of first unit (fiscal year)	Number of generating units	Capacity (kilowatts)	Estimated construction costs including interest during construction		
				Total	Allocated to power Amount	Percent
(000 omitted)						
Hartwell	1962	4	264,000	\$ 96,321	\$ 89,293	92.7
Walter F. George	1963	4	130,000	92,779	56,148	60.5
Barkley	1965	4	130,000	200,200	77,763	38.8
Total		12	524,000	\$389,300	\$223,204	57.3

On the basis of Corps estimates, the total Federal investment in southeastern multiple-purpose projects will be about \$952 million when the projects now under construction are complete; currently, nearly \$634 million of this estimated total investment has been allocated to power. Through June 30, 1960, the total Corps investment in the construction of these 14 southeastern multiple-purpose projects was nearly \$684 million, including interest during construction of \$40.6 million.

#### ENERGY PRODUCTION AND DELIVERIES

Summarized below is the net electric energy made available to SEPA by Corps generating projects in fiscal years 1960 and 1959.

Project	Fiscal year 1960		Fiscal year 1959	
	Thousand kilowatt-hours	Percentage of total	Thousand kilowatt-hours	Percentage of total
Wolf Creek	828,414	20.6	555,163	21.2
Center Hill	378,819	9.5	240,385	9.2
Dale Hollow	108,772	2.7	66,930	2.5
Old Hickory	525,098	13.1	391,551	15.0
Cheatham	138,748	3.5	78,693	3.0
Allatoona	123,034	3.1	111,149	4.2
Buford	213,880	5.3	124,725	4.8
Clark Hill	848,724	21.2	494,236	18.9
Jim Woodruff	239,497	6.0	222,111	8.5
John H. Kerr	564,263	14.1	312,834	12.0
Philpott	36,119	.9	17,467	.7
Total	4,005,368	100.0	2,615,244	100.0

The increase in energy made available to SEPA in fiscal year 1960 resulted principally from higher water flows than were experienced in fiscal year 1959. Water flows in fiscal year 1959 provided only 77 percent of an average year's expected generation from Corps projects compared with 116 percent for fiscal year 1960, exclusive of the generation at the Cheatham Project which was not in full-scale operation during both years.

While in fiscal year 1960 energy totaling 4,005,368 megawatt-hours (mwh) was made available from Corps projects to SEPA, the energy sold totaled 4,048,025 mwh. The energy sold exceeded the energy made available from Corps projects since SEPA purchases firming energy from the Virginia Electric and Power Company and the Florida Power Corporation for delivery to certain preference customers buying power from the John H. Kerr and Jim Woodruff Projects. The gross generation at the various Corps projects was 4,120,157 mwh. The difference between gross generation and energy made available is accounted for by station use, transmission losses, energy used for condensing purposes, and adjustments for differences between production and billing dates.

#### FINANCIAL RESULTS OF POWER OPERATIONS

Financial results of power operations for the fiscal years ended June 30, 1960 and 1959, based on the accounts of the Corps and of SEPA, are summarized as follows:

	<u>1960</u>	<u>1959</u>	<u>Increase or decrease (-)</u>
Operating revenues:			
Sales of electric energy	\$20,650,669	\$14,864,111	\$5,786,558
Other revenues	<u>                    -</u>	<u>                    202</u>	<u>                  -202</u>
Total operating revenues	<u>20,650,669</u>	<u>14,864,313</u>	<u>5,786,356</u>
Operating expenses:			
Purchased power	417,634	620,441	-202,807
Generation expenses:			
Specific power facilities	1,473,359	1,569,891	-96,532
Joint facilities	840,744	778,272	62,472
Transmission expenses	1,607,094	1,547,979	59,115
Supervision and administration	613,492	585,603	27,889
Provision for depreciation	<u>6,356,565</u>	<u>6,439,538</u>	<u>-82,973</u>
Total operating expenses	<u>11,308,888</u>	<u>11,541,724</u>	<u>-232,836</u>
Net operating revenues	9,341,781	3,322,589	6,019,192
Interest on the Federal investment	-9,602,850	-10,819,542	1,216,692
Miscellaneous credits, net	<u>174,629</u>	<u>96,383</u>	<u>78,246</u>
Net loss for the fiscal year	<u>\$ 86,440</u>	<u>\$ 7,400,570</u>	<u>-\$7,314,130</u>

The opinion of the General Accounting Office on the financial statements appears on page 42.

Comments on sales of energy appear on pages 21 to 33. Schedule 2, page 45, shows the results of power operations for fiscal year 1960 and cumulative net loss to June 30, 1960.

#### Unresolved policy differences

The amounts of project operation and maintenance expenses, depreciation, and interest on the Federal investment used in this financial presentation are from Corps accounting records, which are

based on Corps cost allocations. The Corps and the Department of the Interior have reached agreement on construction cost allocations for the Allatoona, Clark Hill, John H. Kerr, and Philpott Projects. In addition, SEPA and the Corps have reached field-level agreement on construction cost allocations for the Buford, Jim Woodruff and Old Hickory-Cheatham Projects, and except for a minor adjustment on Cheatham the allocations are considered firm. For the Wolf Creek, Center Hill, and Dale Hollow Projects, a basic policy difference exists between the two agencies on the cost allocation method and the interest factor to be employed in determining the project investment repayable and repaid as well as the financial results of power operations. The net losses reported would be materially less if they were based on the Department of the Interior's cost allocations for these three projects.

#### Corps accounting deficiencies

1. The Corps has not used a consistent basis in computing the amounts representing depreciation expense of the various southeastern multiple-purpose projects including power. For example, for the Wolf Creek, Center Hill, and Dale Hollow Projects, all project costs, exclusive of costs for lands and damages, are being depreciated over a 50-year period. In contrast, the Allatoona dam, powerhouse, and penstocks are being depreciated over a 150-year service life. The inconsistencies in computing depreciation expense at the various Corps district offices are discussed more fully in note 3 to the financial statements on pages 49 and 50. By letter dated June 2, 1961, the Director of Civil Works, Corps of Engineers, advised us that certain inconsistencies in depreciation



accounting would be eliminated in fiscal year 1961 and that a review of depreciation practices in general in the southeastern area had been requested.

2. Interest on the Federal investment has not been computed accurately for the projects at the Corps district offices in Savannah, Georgia, and Nashville, Tennessee. The Savannah District has not adjusted erroneous interest expense computations made during fiscal years 1953 through 1959 for the Clark Hill Project. In addition, interest expense of prior fiscal years for the Clark Hill Project was not adjusted as a result of the District's recomputing capitalized interest. Although project accounts were adjusted in fiscal year 1959 to show all prior payments to States for leasing of reservoir lands, the Nashville District has not made corresponding adjustments of interest expense for the related prior fiscal years whereas such adjustments were made at all other district offices in the southeastern area. In the letter dated June 2, 1961, the Director of Civil Works, Corps of Engineers, advised us that interest expense computations have been or will be adjusted in fiscal year 1961. The amounts involved in these adjustments are substantial.

MARKETING OF POWER BY  
SOUTHEASTERN POWER ADMINISTRATION

The Southeastern Power Administration acts as marketing agent for the Secretary of the Interior. The principal duties of its 33 employees are to negotiate and service power sales contracts, since SEPA does not own or operate transmission facilities. SEPA has entered into long-term contracts for the sale of the power available from most Corps of Engineers generating projects in operation in the southeastern area of the United States.

Customers served

Sales of electric energy for the fiscal years 1960 and 1959, expressed in dollars, thousands of kilowatt-hours, and average rate per kilowatt-hour (kwh) by the various classes of customers, are presented in the following summary:

	Fiscal year 1960			Fiscal year 1959		
	Revenue	Thousand kilowatt hours	Average rate per kwh in mills	Revenue	Thousand kilowatt hours	Average rate per kwh in mills
Tennessee Valley Authority	\$ 6,658,586	1,979,851	3.36	\$ 3,332,288	1,332,722	2.50
Electric utilities:						
Georgia Power Company	2,132,909	229,009	9.31	1,575,750	22,421	70.28
Virginia Electric and Power Company	1,493,950	232,813	6.42	1,011,601	88,384	11.45
Carolina Power and Light Company	531,905	37,539	14.17	362,605	2,328	155.76
Florida Power Corporation	361,251	112,894	3.20	397,504	106,158	3.74
Appalachian Power Company	288,334	36,119	7.98	223,836	17,567	12.81
Total electric utilities	<u>4,808,349</u>	<u>648,374</u>	7.42	<u>3,571,296</u>	<u>236,758</u>	15.08
Cooperatives and public bodies:						
6 in Florida	1,047,679	120,482	8.70	937,771	106,834	8.78
86 in Georgia	3,620,577	581,721	6.22	3,148,143	449,015	7.01
21 in North Carolina	1,127,041	156,408	7.20	1,026,650	136,136	7.65
2 in South Carolina	1,846,276	328,048	5.63	1,325,344	224,933	5.89
12 in Virginia	1,542,161	233,141	6.61	1,522,619	228,908	6.65
Total cooperatives and public bodies	<u>9,183,734</u>	<u>1,419,800</u>	6.47	<u>7,960,527</u>	<u>1,141,826</u>	6.96
Total	<u>\$20,650,669</u>	<u>4,048,025</u>	5.10	<u>\$14,864,111</u>	<u>2,713,306</u>	5.48

The \$5,786,558 increase in revenue for fiscal year 1960 over the revenue for fiscal year 1959 was made possible principally by increased project generation resulting from increased water flows.

Over-all revenues per kilowatt-hour decreased from 5.48 mills in fiscal year 1959 to 5.10 mills in fiscal year 1960, principally as a result of increased power generated and sold. Power purchases by the electric utility companies, except for the Florida Power Corporation, are primarily (1) peaking power and (2) low-cost dump energy not available for long-term sale. Therefore, when project generation increases in good water years the over-all kilowatt-hour rate decreases.

Approval of rate schedules  
by Federal Power Commission

Section 5 of the Flood Control Act of 1944 provides that rate schedules for the sale of power shall become effective upon confirmation and approval by the Federal Power Commission. Generally, SEPA rate schedules are designed to produce sufficient revenues to cover the Corps' operation and maintenance expenses and SEPA's marketing expenses and to recover the Government's investment in power facilities, including interest on the unrepaid investment, within a 50-year period.

Power generated at all projects, except Wolf Creek, Center Hill, and Dale Hollow, is being sold under approved rate schedules, as follows:

<u>Project</u>	<u>Rate approval action</u>
Allatoona ) Buford ) Clark Hill)	Interior's request of May 17, 1960, for approval of rates through June 30, 1964, was approved by FPC on March 2, 1961.
Jim Woodruff	Interior's request of September 16, 1960, for approval of rates through August 19, 1962, was approved by FPC on December 15, 1960.
Old Hickory) Cheatham )	Interior's request of June 22, 1960, for approval of rates through June 30, 1961, was approved by FPC effective July 1, 1960.
John H. Kerr) Philpott )	Interior's request of June 22, 1960, for approval of rates through July 4, 1961, was approved by FPC effective July 5, 1960.

On May 20, 1958, the FPC disapproved the proposed rate schedules for the sale of Wolf Creek, Center Hill, and Dale Hollow power to the Tennessee Valley Authority. This matter is discussed on pages 24 to 28 of this report.

Sale of energy from the Wolf Creek, Center Hill,  
and Dale Hollow Projects, Tennessee and Kentucky

By long-term agreement dated December 18, 1948, the Tennessee Valley Authority purchases the entire amount of power generated at Wolf Creek, Center Hill, and Dale Hollow. This agreement provides that TVA shall pay an annual charge based on the units in operation and adjusted in accordance with the unregulated flow of water into the Wolf Creek Reservoir. The contract, as amended, provides for revenue of \$3,950,000 in an average water year.

Because of lower-than-average water flows, SEPA received only \$1,710,000 from TVA for the fiscal year 1959 power from the Wolf Creek, Center Hill, and Dale Hollow Projects. Above-average water flows in fiscal year 1960 increased the amount received by SEPA from TVA to \$4,510,000.

Department of the Interior continues  
to sell power at rates disapproved  
by the Federal Power Commission

The rates and charges in the Department of the Interior agreement with TVA for sale of power generated at Wolf Creek, Center Hill, and Dale Hollow were disapproved on May 20, 1958, by the Federal Power Commission as not being sufficient to return the cost of these projects pursuant to the requirements of section 5 of the Flood Control Act of 1944. The Department continues to sell the power generated at these projects to TVA at the disapproved rates, even though the legal requirement is that schedules of rates and charges become effective upon confirmation and approval by FPC.

SEPA markets energy from Corps of Engineers projects pursuant to section 5 of the Flood Control Act of 1944, which provides that:

"\*\*\* the Secretary of the Interior, \*\*\* shall transmit and dispose of such power and energy \*\*\* at the lowest possible rates to consumers consistent with sound business principles, the rate schedules to become effective upon confirmation and approval by the Federal Power Commission. Rate schedules shall be drawn having regard to recovery \*\*\* of the cost of producing and transmitting such electric energy, including the amortization of the capital investment allocated to power over a reasonable period of years."

The agreement between the Department and TVA provides for sale of energy from Wolf Creek, Center Hill, and Dale Hollow at rates sufficient to repay a Federal investment in power of \$102,446,800, an investment determined by the Department using the "incremental cost" method of cost allocation<sup>1</sup> and a 2 percent interest factor. The agreement with TVA provides that the schedules of rates and charges shall become effective upon confirmation and approval by FPC and shall apply retroactively to the date of the agreement.

The agreement for sale of power from these projects, together with cost allocations and repayment studies, was filed with FPC by the Secretary of the Interior on September 15, 1955. Additional information was filed by the Secretary on February 20, 1958. On May 20, 1958, nearly 10 years after execution of the basic agreement with TVA, FPC found that the rate schedules, based on the incremental allocation of costs to power and an interest charge of only 2 percent on the unamortized power investment, were not sufficient to return the cost of these projects pursuant to the requirements of section 5 of the Flood Control Act of 1944. FPC accordingly disapproved the proposed rate schedule.

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<sup>1</sup>See appendix II, p. 59, for a summary of cost allocation methods used.

In its order disapproving the proposed rate schedule, FPC indicated that the project costs to be used as the basis for rate schedules should be greater in amount than the incremental costs used by the Secretary. FPC indicated also that the Secretary's use of a 2 percent interest rate had not been justified, pointing out that the Secretary had since 1945 used a 2.5 percent rate of interest in determining the cost to be returned by all Federal projects under his jurisdiction the rate schedules for which must be approved by FPC, except for Wolf Creek, Center Hill, and Dale Hollow. In this connection the Corps of Engineers, by using the generally accepted "separable costs--remaining benefits" method of cost allocation<sup>1</sup> and a 2.5 percent interest factor, has determined that the Federal investment in power at these three projects is \$114,083,000 or \$11,636,200 more than the Department's allocation.

By letter of May 5, 1959, the Assistant Secretary of the Interior advised the Chairman, Committee on Public Works, House of Representatives, that the Department of the Interior would continue to abide by the terms of its contract with TVA.<sup>2</sup> Identical letters were sent to the Chairmen of the Senate Committee on Public Works and the House and Senate Committees on Appropriations.

SEPA continues to sell the entire amount of power generated at Wolf Creek, Center Hill, and Dale Hollow to TVA at rates which

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<sup>1</sup>See appendix II, p. 59, for a summary of cost allocation methods used.

<sup>2</sup>A copy of this letter is included as appendix D of our audit report to the Congress dated September 25, 1959, on the Southeastern Power System and Related Activities, for fiscal years 1957 and 1958.

were disapproved by FPC in May 1958 as not being sufficient to return the cost of these projects pursuant to the requirements of controlling legislation.

By letter dated June 5, 1961, the Administrative Assistant Secretary of the Interior advised us that:

"The Department established the rates on the basis of recovering the operating costs, interest, and the investment allocated to power under the incremental cost-allocation basis. It is our position that the legislative history and executive pronouncements support this basis of allocation. The Federal Power Commission did not find that the rates and charges were not sufficient to cover all elements of costs required by Section 5 of the Flood Control Act of 1944, as determined by the Secretary of the Interior; rather it found the rates and charges unjustified after substituting its judgment for that of the Secretary as to what portion of the costs should be allocated to power and what rate of interest should be recovered on the Federal investment. Because of these circumstances, the Assistant Secretary by letter dated May 5, 1959, communicated the Department's position in considerable detail to the Congress. The appropriate committees of Congress, having been given the position of the Department and its expressed intentions to abide by the terms of the contract, have not indicated any objection. On the contrary, the House Appropriation Committee took cognizance of the matter and the Chairman of the Committee placed the Assistant Secretary's letter and attachments in the record of the Public Works appropriation hearings for Southeastern Power Administration, fiscal year 1961. (See page 685 of the Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives.)"

We believe that the Flood Control Act of 1944 clearly imposes a responsibility on the Secretary of the Interior to obtain FPC confirmation and approval of rate schedules for power generated at Corps of Engineers projects.

Recommendation to  
the President of the United States

Because of the continuing sale of power to Tennessee Valley Authority at rates that have been disapproved by the Federal Power



Commission, and the consequent failure to comply with a specific requirement of existing law, we recommend that the President of the United States resolve this matter by directing the Secretary of the Interior to submit for FPC approval revised rates and charges for the sale of power from the Wolf Creek, Center Hill, and Dale Hollow Projects, designed to comply with FPC's interpretation of existing requirements.

Sale of energy from the  
Old Hickory and Cheatham Projects, Tennessee

By long-term agreement effective July 1, 1958, all power generated at Old Hickory and Cheatham was sold to TVA under provisions generally similar to the Wolf Creek, Center Hill, and Dale Hollow marketing arrangement. When all Old Hickory and Cheatham generators are in operation, TVA will pay between \$2,100,000 and \$2,700,000 yearly for this power; annual average revenues are estimated at \$2,400,000. The \$2,400,000-annual-average revenues are estimated to be sufficient to repay the investment allocated to power, with interest.

A defect in the turbine runner blades delayed placing the generators at the Cheatham Project in commercial operation on the dates originally scheduled. The first Cheatham generator was placed in commercial operation in November 1959 and was followed by the second unit in May 1960. The contract with TVA provides that the annual payment for power generated at Old Hickory and Cheatham will be reduced by \$580 for each calendar day that each Cheatham generator is not in commercial operation after June 30, 1958. By supplemental agreement to the contract, executed December 11, 1958, effective July 1, 1958, all power generated by Cheatham generators not in full-scale operation was sold to TVA at 2 mills per kilowatt-hour.

Fiscal year 1960 and 1959 revenues from TVA for power generated at Old Hickory and Cheatham were as follows:

	<u>1960</u>	<u>1959</u>
Contract requirement	\$2,475,000	\$2,100,000
Less adjustment for period Cheatham generating units were not in commercial operation	<u>481,400</u>	<u>635,100</u>
	1,993,600	1,464,900
Plus Cheatham generation sold to TVA under temporary agreement at 2 mills per kilowatt-hour	<u>154,986</u>	<u>157,388</u>
Total	<u>\$2,148,586</u>	<u>\$1,622,288</u>

Sale of energy from the Allatoona, Buford, and Clark Hill Projects, Georgia and South Carolina

All of the energy from Allatoona and Buford and one half of the energy from Clark Hill continued to be sold during fiscal years 1959 and 1960 to 86 Georgia preference customers and to the Georgia Power Company under agreements dated September 23, 1957.

Through agreements executed March 27, 1959, and June 30, 1959, effective July 1, 1959, the other one half of the energy from Clark Hill was sold on a long-term basis to the two South Carolina preference customers--South Carolina Public Service Authority and Greenwood County Electric Power Commission. Under the terms of the agreements, the Government made a total of 75,000 kilowatts of dependable capacity available to the South Carolina preference customers to June 30, 1960, at which time total dependable capacity of 87,500 kilowatts was to be made available. The total maximum dependable capacity specified in the contracts, 96,000 kilowatts, is to be made available to these customers from June 30, 1965, to June 30, 1973, the end of the contract periods. The gradual build-up of capacity and energy sales allows for expansion of those South Carolina preference customers' electric distribution

systems which were incapable of absorbing the maximum capacity and energy available on the date the contracts were effective.

The South Carolina preference customers purchased 328 million kilowatt-hours for \$1,846,276--or 5.63 mills per kilowatt-hour--in fiscal year 1960, the first year under the new contracts, as compared with 224.9 million kilowatt-hours purchased for \$1,325,344--or 5.89 mills per kilowatt-hour--in fiscal year 1959.

A new agreement was executed on July 6, 1960, with the South Carolina Electric and Gas Company, a private utility, for the sale of any secondary and dump energy that the Government might have available from Clark Hill during fiscal year 1961. Under former arrangements, purchases by the utility were made on a monthly bid basis. No purchases were made by South Carolina Electric and Gas Company during fiscal years 1959 and 1960.

The Georgia Power Company wheels energy to the preference customers within its service area for a fee of \$65,000 monthly, paid by SEPA. Preference customers pay a composite rate of 6 mills a kwh for demand and energy for the power allocated under their Clark Hill contracts. Preference customers' energy requirements above SEPA contract amounts are obtained from the company at its regular rates. Provision also has been made for the interchange of Allatoona-Buford-Clark Hill power with Jim Woodruff power, as necessary.

#### Assessment of downstream benefits

The Federal Power Act (16 U.S.C. 803f) provides that the owner of a non-Federal project receiving benefits from the head-water improvements of a licensee, permittee, or the United States

shall make payments on account of such benefits. It is the responsibility of the Federal Power Commission (FPC) to determine the amounts that the owners of non-Federal power installations shall pay for headwater benefits.

By order dated October 27, 1959, FPC assessed the Alabama Power Company \$80,778 for benefits received by downstream plants of the company from Allatoona during calendar years 1956 and 1957. Under previous assessments, the Alabama Power Company has paid \$233,032 to FPC for benefits received for calendar years 1950 through 1955. The amounts assessed by FPC, including the 1959 assessment, have been recorded in the Corps accounting records for the Allatoona Project.

Sale of energy from the Jim Woodruff Project, Florida

By agreement executed July 19, 1957, the power generated at Jim Woodruff was sold on a long-term basis to the Florida Power Corporation and to six Florida preference customers.

Jim Woodruff is a run-of-the-river project rather than a storage project. While relatively large quantities of energy are available from its three 10,000 kilowatt generators, high tail waters will require periodic curtailment of power production. However, the relatively large quantities of energy available for sale enable SEPA to supply contractually all the energy requirements of the six Florida preference customers.

The Florida Power Corporation has agreed to (1) transmit power generated at Jim Woodruff to preference customers, (2) purchase all generation excess to preference customer requirements, (3) supply as required 16,000 kilowatts of support capacity during

periods when power production is curtailed, and (4) interchange 20,000 kilowatts of capacity between Jim Woodruff and Allatoona-Buford-Clark Hill. SEPA also has an agreement with the Georgia Power Company in connection with the interchange of power between Jim Woodruff and Allatoona-Buford-Clark Hill.

Sale of energy from the John H. Kerr Project, Virginia and North Carolina

Power generated at John H. Kerr continued to be sold during fiscal years 1959 and 1960 to the Virginia Electric and Power Company (VEPCO), the Carolina Power and Light Company (CP&L), and 33 preference customers. Delivery to the preference customers was made by using the transmission facilities of VEPCO and CP&L.

By agreement executed August 8, 1952, VEPCO sells firming energy to the Government, within certain minimum and maximum limits, for resale to the preference customers in the VEPCO service area. SEPA's contract with CP&L, executed December 7, 1955, provides for CP&L to sell energy, as needed, directly to the preference customer. Both companies wheel John H. Kerr energy to the preference customers at comparable wheeling fees.

Sale of energy from the Philpott Project, Virginia

As in former years, the entire output of Philpott was sold during fiscal years 1959 and 1960 to the Appalachian Power Company under an interim letter agreement. Annual revenues are estimated as \$237,000, on the basis of average-year generation of 25.4 million kilowatt-hours.

Fiscal year 1960 revenues totaled \$288,334, or 7.98 mills per kwh on sales of 36.1 million kwh, compared with \$223,836, or

12.81 mills per kwh on sales of 17.5 million kwh, in fiscal year 1959.

Final execution of a contract with VEPCO to integrate Philpott and John H. Kerr through the exchange of power between adjacent electric utilities has been delayed until VEPCO completes arrangements with the Appalachian Power Company for use of the latter's transmission facilities. The power available through integration is intended for sale to VEPCO and the preference customers in VEPCO's marketing area.

OTHER OPERATIONS AT MULTIPLE-PURPOSE PROJECTS

OF CORPS OF ENGINEERS IN SOUTHEASTERN AREA

Southeastern multiple-purpose reservoir projects in operation or under construction are designed for optimum development of water resources for power, flood control, navigation, and public-use purposes. Except for power, the costs of these purposes are not reimbursable to the Federal Government. Flood control is obtained at multiple-purpose projects through the reservation of storage capacity for anticipated flood control requirements. Navigation development is accomplished through the construction of locks and the regulation of project water releases so as to maintain required channel depths. To promote public use of reservoir areas, the Corps, among other activities, constructs access roads, establishes camp and housing sites, permits establishment of privately developed concessions, and leases lands for agricultural and grazing purposes.

The estimated construction costs, including interest during construction, currently allocated to the various project purposes by the Corps are shown in the following summary of cost allocations for the 14 southeastern multiple-purpose projects in operation or under construction.

<u>Purpose</u>	<u>Estimated construction costs, including interest during construction</u>	
	<u>Amount</u>	<u>Percent</u>
Power	\$633,613,200	66.5
Flood control	151,533,500	15.9
Navigation	160,036,800	16.8
Fish and wildlife	3,250,000	.3
Public utilization	2,400,161	.3
Other	<u>1,270,200</u>	<u>.2</u>
Total	<u>\$952,103,861</u>	<u>100.0</u>

Corps financial records are generally designed to accumulate the amounts of project expense charged to the nonreimbursable programs. Except for relatively small amounts representing the specific expenses of the nonreimbursable programs, these expenses are joint costs of ordinary operation and maintenance, depreciation, and interest on the Federal investment and are allocated to the various project purposes using percentages determined in the current Corps cost allocation. The detail of fiscal year 1960 Corps expense charges to the various nonreimbursable purposes, by individual projects, is presented in schedule 3 of the financial statements. The total amount of fiscal year 1960 expenses charged by the Corps to each of the nonreimbursable project purposes follows:

	<u>Total</u>	<u>Flood control</u>	<u>Navigation</u>	<u>Public utilization and other purposes</u>
Operation and maintenance expenses:				
Joint facilities	\$ 469,864	\$ 223,093	\$ 246,771	\$ -
Specific costs	528,163	60,760	261,866	205,537
Supervision and administration	<u>195,907</u>	<u>93,864</u>	<u>91,453</u>	<u>10,590</u>
Total operating expenses	1,193,934	377,717	600,090	216,127
Provision for depreciation	1,839,697	848,784	981,278	9,635
Interest on the Federal investment	3,381,686	1,931,241	1,428,641	21,804
Credits to operations and nonoperating income	<u>-44,853</u>	<u>-16,470</u>	<u>-14,423</u>	<u>-13,960</u>
Total	<u>\$6,370,464</u>	<u>\$3,141,272</u>	<u>\$2,995,586</u>	<u>\$233,606</u>



Because the basic project cost allocations are still not firm for 3 of 11 projects in operation at June 30, 1960, the totals shown above are tentative. Generally, the same qualifications stated for the costs charged to the power program apply also to the costs reported for the nonreimbursable programs.

## FINANCING OF CORPS AND SEPA ACTIVITIES

Corps' multiple-purpose projects in the Southeast are financed through appropriations by the Congress. The allotments (net) by the Office, Chief of Engineers, to Corps district offices for multiple-purpose projects including power in the Southeast, for fiscal years 1959 and 1960, from the Public Works Appropriation Act, 1959 (72 Stat. 1572), and from the Public Works Appropriation Act, 1960 (73 Stat. 491), are shown below. Accumulative allotments (net) through June 30, 1960, are also shown.

	Fiscal year <u>1959</u>	Fiscal year <u>1960</u>	Cumulative through <u>June 30, 1960</u>
Allotments for:			
Construction	\$40,718,522	\$53,775,167	\$649,398,716
Operation and main- tenance	<u>3,960,959</u>	<u>3,924,002</u>	<u>23,735,177</u>
Total	<u>\$44,679,481</u>	<u>\$57,699,169</u>	<u>\$673,133,893</u>

Appropriations to the Southeastern Power Administration by the Public Works Appropriation Act, 1959, and the Public Works Appropriation Act, 1960, were \$735,000 and \$716,625, respectively. Cumulative appropriations through June 30, 1960, net of rescissions, lapses, and transfers, amounted to \$9,313,598. Beginning in fiscal year 1959, appropriation requests of SEPA were reduced as a result of the approval by the Congress of a system of net billings between SEPA and certain of its electric utility customers. Energy firming and wheeling services are purchased from certain electric utility companies that in turn purchase power from SEPA. Through fiscal year 1958, all costs of firming energy purchases and wheeling services were paid from appropriated funds. However,

since that time such costs have been offset to the maximum extent possible against amounts owed the Government by electric utility customers. During fiscal years 1959 and 1960, revenues of \$1,959,240 and \$1,891,324, respectively, were offset against costs.

## ACCOUNTING AND FINANCIAL POLICY

The basic accounting systems of the Corps of Engineers (Civil Functions) and the Southeastern Power Administration have been approved by the Comptroller General. Accounts for power operations are maintained, to the extent practicable, in accordance with the uniform system of accounts prescribed for public utilities by the Federal Power Commission under the Federal Power Act (16 U.S.C. 825b). However, before the combined financial statements of assets and liabilities and results of operations can show meaningful financial data, the Corps of Engineers and the Department of the Interior must resolve the disagreement on the cost allocation method and interest factor to be used for the Wolf Creek, Center Hill, and Dale Hollow Projects and Corps accounting deficiencies relating to depreciation and interest on the Federal investment must be corrected. (See pp. 7 to 9.)

### COST ACCOUNTING PRACTICES

The Corps of Engineers does not bear the costs applicable to its activities of administrative and other services rendered by other Federal agencies not assignable to projects pursuant to law or administrative policy. These costs include (1) amounts for rentals and other services furnished without charge by General Services Administration and other Federal agencies, (2) death and disability claims on account of Corps employees paid by the Bureau of Employees' Compensation, Department of Labor, (3) costs incurred by the Department of Justice in processing Corps land acquisitions through the Federal courts, and (4) prior to July 1957, the Government's contribution to the Civil Service Retirement

System applicable to Corps employees. Similarly, except for the inclusion of rentals on space furnished without charge by the General Services Administration, the Southeastern Power Administration's policy is not to include in its accounts amounts for administrative and other services rendered by other Federal agencies without charge.

The costs of the Office of the Chief of Engineers and of division offices are paid from appropriations to the Corps for general expenses and are not distributed to the individual projects.

Provisions for accrued leave of employees are included in project costs and operating expenses by the Corps of Engineers and Southeastern Power Administration.

## SCOPE OF AUDIT

Our audits at the district offices of the Corps of Engineers having responsibility for water resources development programs in the southeastern area and of Southeastern Power Administration included:

1. Reviewing the basic laws authorizing the activities, and the pertinent legislative history, to ascertain the purposes of the activities and their intended scope.
2. Ascertaining the policies and procedures adopted by the Corps and the Administration and examining into their adequacy and effectiveness.
3. Examining the financial statements of the Southeastern Power System and Related Activities for the fiscal years 1959 and 1960. This examination was made in accordance with generally accepted auditing standards and included such tests of the accounting records and financial transactions and such other auditing procedures as we considered necessary in the circumstances.

The examination of accounts and financial transactions was conducted at Corps district offices in Nashville, Tennessee; Mobile, Alabama; Savannah, Georgia; and Norfolk, Virginia, and at the office of the Administration, Elberton, Georgia.

## OPINION OF FINANCIAL STATEMENTS

The accompanying statement of assets and liabilities and statements of power operations and nonpower operations (schedules 1 through 3) present on a combined basis the assets and liabilities of the multiple-purpose projects including power of the Corps of Engineers in the southeastern area of the United States and the Southeastern Power Administration, the power marketing agent. In combining the financial statements, which are based on the accounting records of these agencies, we have made certain reclassifications that do not affect the combined net results of operations for these activities.

We cannot express an opinion as to whether the accompanying financial statements present fairly the financial position of the Southeastern Power System and Related Activities at June 30, 1960, and the financial results of operations for the fiscal year then ended, mainly for the reasons set forth below, the full effect of which cannot now be determined.

1. Until the Corps and the Administration agree on the cost allocation method and interest rate for the Wolf Creek, Center Hill, and Dale Hollow Projects, it will not be possible to make accurate assignment of provisions for depreciation, accrual of interest on the Federal investment, and various other costs to power and the other purposes of the projects. (See pp. 7 to 9.)

2. The district offices of the Corps have not been consistent in their computations of depreciation of plant in service, nor have they correctly computed interest on the Federal investment in some instances. (See pp. 19 and 20.)

FINANCIAL STATEMENTS



SOUTHEASTERN POWER SYSTEM AND RELATED ACTIVITIES (note 1)

CORPS OF ENGINEERS AND SOUTHEASTERN POWER ADMINISTRATION

STATEMENT OF ASSETS AND LIABILITIES

JUNE 30, 1960

ASSETS

	Combined	Corps of Engineers	South-eastern Power Administration
<b>FIXED ASSETS, including interest during construction (notes 2 and 5):</b>			
Power	\$410,110,728	\$410,022,842	\$ 87,886
Flood control	85,132,337	85,132,337	-
Navigation	61,721,478	61,721,478	-
Public utilization	1,131,384	1,131,384	-
Multiple-purpose projects under construction, net of retirements in progress (\$78,119)	125,976,375	125,976,375	-
<b>Total</b>	<b>684,072,302</b>	<b>683,984,416</b>	<b>87,886</b>
<b>Less accumulated depreciation (note 3):</b>			
Power	41,803,524	41,768,656	34,868
Flood control	7,986,886	7,986,886	-
Navigation	4,015,019	4,015,019	-
Public utilization	50,025	50,025	-
<b>Total</b>	<b>53,855,454</b>	<b>53,820,586</b>	<b>34,868</b>
<b>Fixed assets, net</b>	<b>630,216,848</b>	<b>630,163,830</b>	<b>53,018</b>
<b>ADVANCED PLANNING ON AUTHORIZED MULTIPLE-PURPOSE PROJECTS WHICH INCLUDE POWER</b>	<b>1,791,487</b>	<b>1,791,487</b>	<b>-</b>
<b>CURRENT ASSETS:</b>			
Unexpended funds in U.S. Treasury	6,344,186	6,278,988	65,198
Accounts receivable	628,406	61,533	566,873
Accrued utility revenue	2,499,115	-	2,499,115
Prepayments, advances, and other debits	118,389	1,477	116,912
<b>Total current assets</b>	<b>9,590,056</b>	<b>6,341,998</b>	<b>3,248,058</b>
	<b>\$641,598,391</b>	<b>\$638,297,315</b>	<b>\$3,301,076</b>

LIABILITIES

	Combined	Corps of Engineers	South-eastern Power Administration
<b>INVESTMENT OF U.S. GOVERNMENT AND ACCUMULATED EXCESS OF EXPENSES OVER REVENUES:</b>			
Congressional appropriations, net (note 4):			
From general fund of U.S. Treasury	\$682,447,491	\$673,133,893	\$9,313,598
From receipts from the sale of power	50,000	-	50,000
Transfers of cost or property, net	1,796,137	1,676,821	119,316
Interest on the Federal investment (note 5)	129,998,647	129,957,603	41,044
<b>Total investment of U.S. Government</b>	<b>814,292,275</b>	<b>804,768,317</b>	<b>9,523,958</b>
<b>Less:</b>			
Funds returned to U.S. Treasury (note 6):			
By Corps of Engineers	2,568,175	2,568,175	-
By Southeastern Power Administration	104,718,071	98,449,197	6,268,874
By other agencies	343,540	343,540	-
Cumulative net cost of nonpower programs (schedule 3)	43,618,054	43,618,054	-
Profit on sale of lands and other deductions	-98,822	-98,822	-
<b>Total deductions</b>	<b>151,149,018</b>	<b>144,880,144</b>	<b>6,268,874</b>
<b>Net investment of U.S. Government</b>	<b>663,143,257</b>	<b>659,888,173</b>	<b>3,255,084</b>
<b>Less cumulative net loss from power operations (schedule 2)</b>	<b>23,829,409</b>	<b>23,832,769</b>	<b>-3,360</b>
	<b>639,313,848</b>	<b>636,055,404</b>	<b>3,258,444</b>
<b>CURRENT AND ACCRUED LIABILITIES:</b>			
Accounts payable	2,234,584	2,230,447	4,137
Employees' accrued leave	28,051	-	28,051
Other liabilities	21,908	11,464	10,444
<b>Total current and accrued liabilities</b>	<b>2,284,543</b>	<b>2,241,911</b>	<b>42,632</b>
	<b>\$641,598,391</b>	<b>\$638,297,315</b>	<b>\$3,301,076</b>

The notes on pages 48 to 56 are an integral part of this statement.

The opinion of the General Accounting Office on these financial statements appears on page 42.

SCHEDULE 2

SOUTHEASTERN POWER SYSTEM AND RELATED ACTIVITIES (note 1)

CORPS OF ENGINEERS AND  
SOUTHEASTERN POWER ADMINISTRATION

STATEMENT OF RESULTS OF POWER OPERATIONS  
FOR FISCAL YEAR 1960  
AND CUMULATIVE NET LOSS TO JUNE 30, 1960

	Southeastern Power Administration		Corps of Engineers											
	Combined	Total	Wolf Creek	Center Hill	Wells Hollow	Old Hickory	Onathan	Allatoona	Duford	Clark Hill	J.M. Woodruff	John H. Eerr	Philpot	
<b>OPERATING REVENUES:</b>														
Allocation of power revenues by SPPA (note 7)	\$20,590,660	\$ 2,845,660	\$ 18,403,000	\$ 2,358,000	\$ 1,262,000	\$ 850,000	\$1,804,000	\$316,000	\$1,220,300	\$1,697,100	\$ 3,761,200	\$1,190,700	\$ 3,524,800	\$ 293,300
<b>OPERATING EXPENSES:</b>														
Purchased power	417,634	417,634	-	-	-	-	-	-	-	-	-	-	-	
Generation expenses:														
Specific power facilities	1,473,359	-	1,473,359	174,174	149,690	146,287	159,925	119,524	95,856	85,690	189,540	100,846	180,751	71,076
Joint facilities (note 8)	840,744	-	840,744	87,385	64,042	67,042	52,933	-	55,724	41,985	154,431	57,806	236,497	22,559
Transmission expenses	1,607,094	1,607,094	426,643	26,757	23,243	22,226	25,250	10,757	51,307	54,961	99,120	39,546	62,271	10,735
Supervision and administration	613,492	186,849	6,352,283	1,205,998	677,756	358,803	686,551	99,013	267,732	202,618	985,310	498,785	959,186	182,521
Provision for depreciation	6,356,265	4,282	-	-	-	-	-	-	-	-	-	-	-	-
Total operating expenses	11,308,888	2,215,859	9,093,029	1,494,314	934,731	590,353	924,659	299,294	470,619	686,354	1,428,401	693,393	1,434,705	207,321
Net operating revenues	9,341,781	30,810	9,310,971	873,686	327,269	259,642	879,511	86,706	749,681	1,011,846	2,332,799	497,307	2,200,055	32,599
<b>INTEREST ON THE FEDERAL INVESTMENT (note 5)</b>	-9,602,850	-3,716	-9,601,134	-1,516,359	-845,592	-431,303	-818,783	-149,883	-568,321	-999,274	-1,780,284	-627,067	-1,673,519	-188,749
<b>MISCELLANEOUS CREDITS, NET (note 9)</b>	174,629	-	174,629	13,588	6,353	8,068	6,581	2,600	82,389	881	33,549	5,083	13,356	177
<b>NET LOSS OR PROFIT (-) FOR THE FISCAL YEAR</b>	\$ 86,440	\$ -29,094	\$ 115,334	\$ 629,085	\$ 509,970	\$ 163,593	\$ -67,139	\$ 60,577	\$ -263,749	\$ -13,453	\$ -586,064	\$ 124,677	\$ -537,936	\$ 95,973
<b>NET LOSS OR PROFIT (-) FROM POWER OPERATIONS TO JUNE 30, 1959</b>	\$27,458,874	-480,045,197	\$107,504,071	\$23,868,815	\$15,545,740	\$10,987,131	\$3,694,426	\$139,565	\$8,810,196	\$2,090,533	\$18,871,201	\$3,091,467	\$18,731,143	\$2,273,254
<b>NET LOSS OR PROFIT (-) FOR FISCAL YEAR 1960</b>	86,440	-29,094	115,334	629,085	509,970	163,593	-67,139	60,577	-263,749	-13,453	-586,064	124,677	-537,936	95,973
<b>PREVIOUS YEARS' ADJUSTMENTS (note 10)</b>	-3,715,905	80,070,931	-83,786,836	-16,322,571	-10,269,260	-8,118,752	-3,197,278	-144,920	-8,369,647	-1,809,713	-16,178,924	-2,268,336	-15,825,198	-1,262,173
<b>CUMULATIVE NET LOSS OR PROFIT (-) FROM POWER OPERATIONS TO JUNE 30, 1960</b>	\$23,829,409	\$ -3,360	\$ 23,832,760	\$ 7,565,329	\$ 5,786,441	\$ 3,031,972	\$ 430,009	\$ 35,222	\$ 156,800	\$ 267,367	\$ 2,106,213	\$ 957,758	\$ 2,368,009	\$1,107,642

The notes on pages 43 to 56 are an integral part of this statement.

The opinion of the General Accounting Office on these financial statements appears on page 42.

SOUTHEASTERN POWER SYSTEM AND RELATED ACTIVITIES (note 1)

CORPS OF ENGINEERS AND SOUTHEASTERN POWER ADMINISTRATION

STATEMENT OF NET COST OF NONPOWER PROGRAMS  
FOR FISCAL YEAR 1960  
AND CUMULATIVE NET COST TO JUNE 30, 1960

Projects and purposes	Fiscal year 1960							Less credits to operations and non-operating income (note 9)
	Cumulative to June 30, 1960	Net expense	Joint facilities (note 8)	Specific costs	Supervision and administration (note 8)	Provision for depreciation (note 3)	Interest on the Federal investment (note 5)	
<b>WOLF CREEK:</b>								
Flood control	\$ 7,422,958	\$ 802,422	\$ 41,592	\$ -	\$ 12,620	\$ 280,790	\$ 472,565	\$ 5,145
Public utilization	55,320	3,310	-	3,037	273	-	-	-
Total	7,478,278	805,732	41,592	3,037	12,893	280,790	472,565	5,145
<b>CENTER HILL:</b>								
Flood control	5,245,215	498,128	29,310	-	10,399	175,307	285,686	2,574
Public utilization	132,681	14,024	-	11,870	1,068	536	550	-
Total	5,377,896	512,152	29,310	11,870	11,467	175,843	286,236	2,574
<b>DALE HOLLOW:</b>								
Flood control	5,478,558	369,338	28,517	-	9,256	134,367	199,475	2,277
Public utilization	323,495	23,654	-	19,620	1,766	1,123	1,145	-
Total	5,802,053	392,992	28,517	19,620	11,022	135,490	200,620	2,277
<b>OLD HICKORY:</b>								
Navigation	2,892,517	815,136	38,660	83,144	13,227	262,471	419,903	2,269
Public utilization	28,357	10,968	-	9,779	880	266	43	-
Total	2,920,874	826,104	38,660	92,923	14,107	262,737	419,946	2,269
<b>CHEATHAM:</b>								
Navigation	4,198,745	778,240	118,054	87,736	21,397	226,885	327,617	3,449
Public utilization	5,208	1,715	-	1,573	142	-	-	-
Total	4,203,953	779,955	118,054	89,309	21,539	226,885	327,617	3,449
<b>ALLATOONA:</b>								
Flood control	2,603,209	256,556	15,544	28,639	14,311	24,006	174,276	220
Public utilization	316,859	41,275	-	34,165	1,652	1,626	9,274	5,642
Total	2,920,068	297,831	15,544	62,804	16,163	25,632	183,550	5,862
<b>BUFFORD:</b>								
Flood control	705,422	184,053	11,629	32,121	15,223	28,158	96,947	25
Public utilization	63,865	25,239	-	21,034	1,047	2,481	5,674	4,997
Total	769,287	209,292	11,629	53,155	16,270	30,639	102,621	5,022

SOUTHEASTERN POWER SYSTEM AND RELATED ACTIVITIES (note 1)

CORPS OF ENGINEERS AND SOUTHEASTERN POWER ADMINISTRATION

STATEMENT OF NET COST OF NONPOWER PROGRAMS

FOR FISCAL YEAR 1960

AND CUMULATIVE NET COST TO JUNE 30, 1960

Projects and purposes	Fiscal year 1960							Less credits to operations and nonoperating income (note 2)
	Cumulative to June 30, 1960	Net expense	Joint facilities (note 8)	Specific costs	Supervision and administration (note 8)	Provision for depreciation (note 3)	Interest on the Federal investment (note 5)	
<b>JIN WOODRUFF:</b>								
Navigation	\$ 4,171,915	\$ 1,249,035	\$ 75,480	\$ 90,986	\$ 52,173	\$ 459,164	\$ 576,771	\$ 5,539
Public utilization	45,858	29,969	-	29,186	1,532	-	2,572	3,321
Total	4,217,773	1,279,004	75,480	120,172	53,705	459,164	579,343	8,860
<b>CLARK HILL:</b>								
Flood control	1,193,580	141,097	13,427	-	4,289	30,175	96,123	2,917
Navigation	1,130,877	153,175	14,577	-	4,656	32,758	104,350	3,166
Public utilization	165,949	37,502	-	29,323	2,030	3,603	2,546	-
Total	2,491,406	331,774	28,004	29,323	10,975	66,536	203,019	6,083
<b>JOHN H. KEHR:</b>								
Flood control	5,012,980	631,489	54,756	-	14,417	113,651	451,758	3,093
Public utilization	82,919	22,082	-	22,082	-	-	-	-
Total	5,095,899	653,571	54,756	22,082	14,417	113,651	451,758	3,093
<b>PHILPOFF:</b>								
Flood control	2,302,724	258,189	28,318	-	13,349	62,330	154,411	219
Public utilization	101,843	23,868	-	23,868	-	-	-	-
Total	2,404,567	282,057	28,318	23,868	13,349	62,330	154,411	219
<b>WALTER F. GEORGE:</b>								
Navigation	-64,000	-	-	-	-	-	-	-
Public utilization	-	-	-	-	-	-	-	-
Total	-64,000	-	-	-	-	-	-	-
<b>TOTALS:</b>								
Flood control	29,964,647	3,141,272	223,093	60,760	93,864	848,784	1,931,241	16,470
Navigation	12,330,054	2,995,586	246,771	261,866	91,453	981,278	1,428,641	14,423
Public utilization	1,323,354	233,606	-	209,537	10,590	9,635	21,804	13,960
Total	\$43,618,054	\$6,370,464	\$469,864	\$528,163	\$195,907	\$1,839,697	\$3,381,686	\$44,853

The notes on pages 48 to 56 are an integral part of this statement.

The opinion of the General Accounting Office on these financial statements appears on page 42.

## EXPLANATORY NOTES TO AND COMMENTS ON THE FINANCIAL STATEMENTS

### 1. Basis of preparation

The financial statements include the transactions recorded by the Corps of Engineers for the construction and operation of multiple-purpose projects with hydroelectric facilities located in the southeastern United States and all transactions recorded by the Southeastern Power Administration, the power marketing agent. In combining the financial statements, we have made certain reclassifications and eliminations; these revisions do not affect the combined net results of operations of these activities.

Projects included in the financial statements and their status at June 30, 1960, are as follows:

<u>Projects</u>	<u>Status</u>
Wolf Creek	In operation
Center Hill	do.
Dale Hollow	do.
Old Hickory	do.
Cheatham	do. (note a)
Allatoona	do.
Buford	do.
Clark Hill	do.
Jim Woodruff	do.
John H. Kerr	do.
Philpott	do.
Hartwell	Under construction
Walter F. George	do.
Barkley	do.
Millers Ferry	Advanced planning
Jones Bluff	do.
Cordell Hull (formerly Carthage)	Deferred
Celina	do.
J. Percy Priest (formerly Stewarts Ferry)	do.
Three Island	do.
Salem Church	do.
Gathright	do.

<sup>a</sup>Only 2 of the 3 scheduled generators at the Cheatham Project were in full-sale operation at June 30, 1960.

Authorizations to the Corps have been made for other multiple-purpose projects, including power in the southeastern area, but no expenditures have been made thereon for advance planning or construction, and therefore no amounts for these projects are included in the financial statements. Also excluded from these statements are costs of those single-purpose flood control and navigation projects which, though integral components of river basin development plans, do not affect the financial presentation of power operations.

## 2. Fixed assets

The costs of fixed assets acquired for a single purpose are assigned directly to that purpose; the costs of fixed assets which serve more than one purpose are allocated to the various purposes on the basis of percentages established by cost allocation studies.

## 3. Accumulated depreciation

Depreciation has been computed by the Corps of Engineers on plant in service (stated at cost or, for property transferred, at appraised value) by the straight-line method. Service lives of units of property are based on engineering studies, except that for some units at the Wolf Creek, Center Hill, Dale Hollow, Buford, and Jim Woodruff Projects service lives have been adjusted to provide composite project depreciation on a 50-year basis.

No item of property has been assigned a service life of over 100 years, except for the Allatoona Project where depreciation of the dam, powerhouse, and penstocks has been computed using a 150-year service life.

Costs of lands and damages are not depreciated at any project. Costs of clearing land are depreciated at all projects except Allatoona and Clark Hill. Relocation costs are depreciated at the Wolf Creek, Center Hill, Dale Hollow, Old Hickory, and Cheatham Projects; similar costs are not depreciated at the other projects. Amounts representing interest during construction are not depreciated at the Allatoona Project but are depreciated at all other projects. (See note 5, p. 52, on interest during construction.)

Except for the Allatoona and Buford Projects, depreciation charges at southeastern multiple-purpose projects were computed using the "proportionate capacity" method (the ratio of capacity placed in service to total project installed capacity) and commenced on the first day of the month following the placing of each generating unit into service. Although the proportionate capacity method of allocating interest between construction and operations was used in making retroactive adjustments for the Allatoona Project in fiscal year 1960, no change was made in the basis for charging depreciation. Even though full-scale power operations began on January 3, 1950, depreciation charges for the Allatoona Project were computed from July 1, 1950.

At the Buford Project, depreciation charges for the 6,000-kw generator began in August 1957; however, depreciation of the two 40,000-kw generators (which were placed in service in June 1957 and October 1957) did not begin until July 1, 1958, since the reservoir pool was not available for full-scale power operations until that date.

4. Congressional appropriations (net)

Accumulative allotments (net) by the Corps of Engineers of congressional appropriations for construction and operation and maintenance of multiple-purpose projects in the Southeast and appropriations, net of rescissions, lapses, and transfers, to the Southeastern Power Administration for the marketing of the excess energy from these projects to June 30, 1960, have been as follows:

	<u>Total</u>	<u>Construction</u>	<u>Operation and maintenance</u>
Corps of Engineers	\$673,133,893	\$649,398,716	\$23,735,177
Southeastern Power Administration	<u>9,313,598</u>	<u>442,504</u>	<u>8,871,094</u>
Combined	<u>\$682,447,491</u>	<u>\$649,841,220</u>	<u>\$32,606,271</u>

Funds appropriated to the Corps of Engineers (Civil Functions) for construction and operation and maintenance are available until expended. Funds appropriated to the Southeastern Power Administration for operation and maintenance may be obligated only for the year for which the funds are appropriated. The construction funds appropriated to the Southeastern Power Administration were expended principally on partial construction of the Clark Hill-Greenwood transmission line, which has been sold. In addition to the \$9,313,598 appropriated to SEPA, \$3,850,564 of power revenues have been offset, under the net billing procedure approved by the Congress, against amounts SEPA owed for purchase of firming energy and wheeling services.

A continuing fund of \$50,000 in the United States Treasury for the Southeastern Power Administration was authorized by the Interior Department Appropriation Act, 1952 (16 U.S.C. 825S-2), to



be derived from receipts from the sale of electric energy. This fund may be used to defray emergency expenses necessary to insure continuity of electric service and the continuous operation of the Government facilities. SEPA neither owns nor operates any transmission facilities, and it has not been necessary for SEPA to make any expenditures from the fund to June 30, 1960.

5. Interest on the Federal Investment

Amounts recorded by the Corps of Engineers as interest on the Federal investment are classified as follows:

Interest capitalized:

Projects in operation and under construction	\$40,641,559	
Projects in advanced planning stage	<u>181,564</u>	\$ 40,823,123

Interest charged to operations:

Power programs	63,768,219
Other programs	<u>25,366,261</u>

Total	<u>\$129,957,603</u>
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The computations by the Corps of Engineers of interest during construction are based on 2.5-percent simple interest on accrued expenditures charged to construction accounts. Interest on the Federal investment in the Wolf Creek and Center Hill Projects includes interest for the period of suspension of construction activity during World War II; however, the cost allocations for repayment purposes for these projects exclude interest during that period.

During fiscal year 1960, the Southeastern Power Administration recorded in its accounts interest expense on the Federal investment in its general plant and deferred charges from inception through fiscal year 1960. SEPA's interest expense on deferred

charges for Corps projects under construction is included in pre-payments, advances, and other debits on schedule 1.

6. Funds returned to United States Treasury

Funds returned to the United States Treasury by the Corps of Engineers totaled \$2,568,175 at June 30, 1960, and were derived principally from the leasing of reservoir areas.

Amounts representing 75 percent of receipts derived from the leasing of reservoir areas are returnable to the States under the provisions of the Flood Control Act of 1941, as amended (31 U.S.C. 701c-3). At June 30, 1960, the project accounts of the Corps district offices show that amounts totaling \$1,127,211 had been returned to the States. These amounts are disbursed by the Chief of Engineers, Washington, D.C.

Funds returned to the United States Treasury by the Southeastern Power Administration totaling \$104,718,071 at June 30, 1960, were derived principally from sales of electric energy. Section 5 of the Flood Control Act of 1944 (16 U.S.C. 825s) requires that receipts from the sale of electric energy shall be deposited as miscellaneous receipts. Funds returned to the United States Treasury by SEPA have been applied as follows:

Funds returned to U.S. Treasury:		
To cover SEPA marketing expenses	\$ 5,934,489	
For Corps generating project repayment	<u>98,449,197</u>	\$104,383,686
From sale of capital assets		<u>334,385</u>
Total		<u>\$104,718,071</u>

Funds returned to the United States Treasury by other agencies consist of \$313,810 collected from beneficiaries by the Federal Power Commission for downstream benefits attributed to the

Allatoona Project, and \$29,730 collected by the General Services Administration for the account of the John H. Kerr Project.

#### 7. Allocation of power revenues

SEPA's allocation of revenues from sales of electric energy from Corps of Engineers projects is designed to cover SEPA's marketing expenses and, to the extent revenues are available, the Corps' operating costs, interest expense, and project repayment requirements.

SEPA markets the power from individual Corps projects in the southeastern area or from groups of up to three projects operated as systems. In systems where revenues can not be identified with specific projects, SEPA allocates revenues to the projects on the basis of the repayment requirements of the various projects in the system.

#### 8. Allocation of joint expenses

Expenses of the Corps of Engineers for operating and maintaining joint facilities and for supervision and administrative activities have been allocated to power and nonpower purposes on the basis of either the separable costs--remaining benefits method or the "alternative-justifiable expenditures" method of cost allocation.<sup>1</sup>

#### 9. Nonoperating revenues

Rentals from the leasing of reservoir lands have been allocated solely to the recreation program at the Allatoona, Buford, and Jim Woodruff Projects. Other miscellaneous revenues received

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<sup>1</sup>See appendix II, p. 59, for a summary of cost allocation methods used.

at these projects have been allocated to the power, flood control, and navigation programs, as applicable.

All miscellaneous revenues received from the Wolf Creek, Center Hill, Dale Hollow, Old Hickory, Cheatham, Clark Hill, John H. Kerr, and Philpott Projects have been allocated, as applicable, to the power, flood control, and navigation programs in the same ratio as the allocation of joint operation and maintenance expenses, except that revenue received in fiscal year 1960 for training in hydroelectric operations at the Wolf Creek, Center Hill, Dale Hollow, Old Hickory, and Cheatham Projects has been allocated to the power program.

10. Prior years' adjustments

During fiscal year 1960, adjustments were made in the accounts of the Corps of Engineers and Southeastern Power Administration which affected the preceding fiscal years' results from power operations. These adjustments are summarized as follows:

<u>Nature of adjustments</u>	<u>Decrease or increase (-) in cumulative net loss from power operations</u>
<b>Corps of Engineers:</b>	
Revenues (allocated by SEPA)	\$80,045,197
Interest expense	3,910,986
Depreciation expense	-210,457
Operation and maintenance expense	<u>41,110</u>
Total	<u>83,786,836</u>
<b>Southeastern Power Administration:</b>	
Revenues (allocated to Corps of Engineers)	-80,045,197
Interest expense	-26,460
Miscellaneous credits	<u>726</u>
Total	<u>-80,070,931</u>
Net prior years' adjustments	<u>\$ 3,715,905</u>

Prior years' adjustments resulted principally from the recording by the Corps of power revenues allocated to the generating projects by SEPA, the correction of interest expense because of the allocation of power revenues, the revision of depreciation expense because of changes in the cost allocation percentages for certain projects, and the recording by SEPA of interest on the Federal investment from inception of operations through fiscal year 1959.

**APPENDIXES**

AUTHORIZATIONS FOR MULTIPLE-PURPOSE WATER RESOURCE PROJECTS  
INCLUDING POWER IN SOUTHEASTERN AREA

Our prior years' audit reports to the Congress on the Southeastern Power System and Related Activities, Corps of Engineers (Civil Functions) and Southeastern Power Administration, summarized the legislative authorizations for southeastern multiple-purpose projects including power.<sup>1</sup> Except for an additional construction authorization for the Barkley Project in the Cumberland River Basin, the authorizations for southeastern projects remain as stated in our earlier reports. The additional legislation is summarized below:

The River and Harbor Act of 1954 (68 Stat. 1248) included authorization for the construction of the Barkley Project for the purposes of power, flood control, and navigation in lieu of the construction of two navigation dams as authorized by the River and Harbor Act of 1946. Monetary authorization for partial accomplishment of the Barkley Project was limited to \$36,000,000, the estimated cost of the two dams. In addition to previous authorizations, the River and Harbor Act of 1960 (74 Stat. 482) authorized the completion of the Barkley Project at an estimated additional cost of \$146,000,000, for a total of \$182,000,000.

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<sup>1</sup>Appendix A, pp. 62 and 63 of the report for fiscal years 1957 and 1958  
Appendix A, pp. 89 to 94 of the report for fiscal year 1956.

ALLOCATION OF ESTIMATED TOTAL CONSTRUCTION COSTS  
OF MULTIPLE-PURPOSE PROJECTS INCLUDING POWER  
IN OPERATION OR UNDER CONSTRUCTION AT JUNE 30, 1960

The allocation of construction costs of multiple-purpose projects is the division of costs into amounts considered equitable to charge to each of the project purposes. These allocations are significant because the charges to beneficiaries for power and certain other services are generally determined on the basis of costs incurred.

Financial records on the reimbursable Federal investment are based on ratios established by project cost allocations. These ratios are needed in financial accounting for dividing construction costs, interest on the Federal investment, depreciation, and joint operation and maintenance costs, between the several project purposes.

The Corps of Engineers and the Southeastern Power Administration have each prepared cost allocations for the southeastern multiple-purpose projects in operation at June 30, 1960. The Department of the Interior has accepted the allocations proposed by the Chief of Engineers for the Allatoona, Clark Hill, John H. Kerr, and Philpott Projects. The Corps and the Department have reached field level agreement on the cost allocations for the Buford, Jim Woodruff, and Old Hickory-Cheatham Projects and, except for a minor adjustment on Cheatham, the allocations are considered firm. However, a basic disagreement exists between the Corps and the Department with respect to the cost allocations for the Wolf Creek, Center Hill, and Dale Hollow Projects.



The Corps has used the separable costs--remaining benefits method of cost allocation for all southeastern projects except Clark Hill and Hartwell. For these latter projects, the Corps used the alternative-justifiable-expenditure method. Both methods have the objective of equitably distributing costs by limiting the costs allocated to any purpose to corresponding benefits and simultaneously providing for each project purpose to share proportionately in the savings from multiple-purpose construction. The Corps has used a 2.5-percent interest factor in all cost allocations.

The Southeastern Power Administration, for each project except Wolf Creek, Dale Hollow, and Center Hill, has used the same method of cost allocation and interest factor as that of the Corps. For these three projects, SEPA has used a 2-percent interest factor and the incremental-cost method of allocating costs to power. This method is based on the difference in the cost of a multiple-purpose project and the cost of the project with the power purpose omitted.

Summarized on the following page are the current Corps of Engineers cost allocations for southeastern multiple-purpose projects including power, in operation or under construction at June 30, 1960.

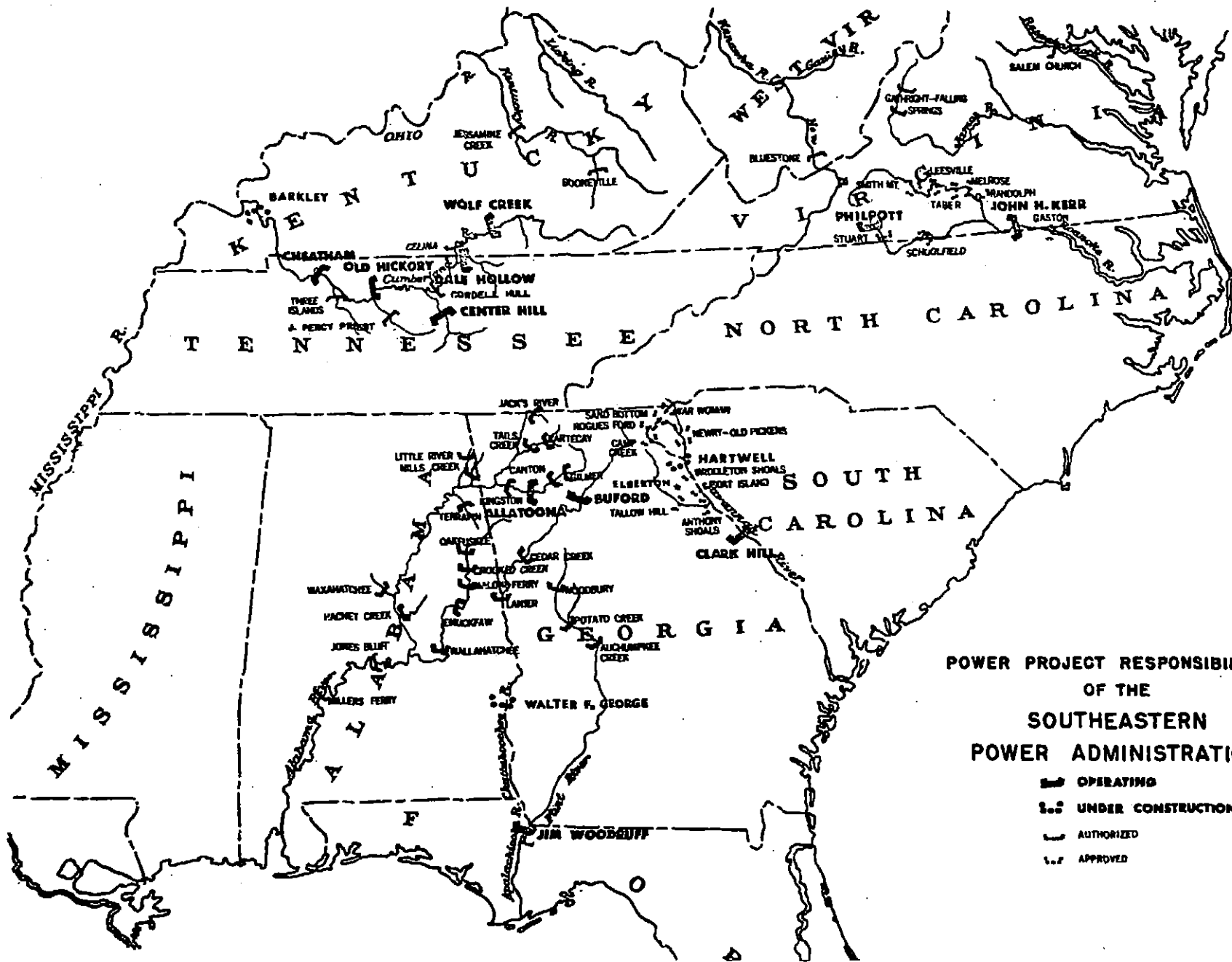


SOUTHEASTERN POWER SYSTEM AND RELATED ACTIVITIES

STATEMENT OF POWER PROGRAM REVENUES AND EXPENSES  
COMBINED WITH CORPS OF ENGINEERS COST ALLOCATION REPAYMENT ESTIMATES  
FOR FISCAL YEAR 1960 AND CUMULATIVE TO JUNE 30, 1960

	Total	Wolf Creek	Center Hill	Dale Hallow	Old Hickory	Cheatham	Allatoona	Buford	Clark Hill	Jim Woodruff	John H. Kerr	Philpott
GRASS POWER REVENUES, FISCAL YEAR 1960	\$20,646,800	\$2,378,000	\$1,272,000	\$ 860,000	\$1,818,400	\$330,200	\$1,438,200	\$1,956,000	\$4,205,000	\$1,409,100	\$4,659,900	\$ 320,000
Deduct:												
Southeastern Power Administration power marketing expenses	2,242,800	10,000	10,000	10,000	14,400	14,200	217,900	258,900	443,800	218,400	1,025,100	20,100
Corps of Engineers charges:												
Operation and maintenance ex- penses	2,566,117	274,728	228,622	227,487	231,527	127,681	120,498	181,755	409,542	193,525	466,159	104,553
Provision for replacement	526,364	67,500	37,500	13,000	60,100	7,264	54,800	49,800	71,000	58,400	97,000	10,000
Interest on the unrepaid in- vestment	9,601,134	1,516,359	845,592	431,303	818,783	149,883	568,321	994,274	1,780,234	627,067	1,675,519	183,749
Total	12,593,615	1,898,587	1,111,714	671,790	1,110,410	284,828	743,619	1,230,829	2,260,626	878,992	2,238,678	303,342
Total deductions	14,936,415	1,868,587	1,121,714	681,790	1,124,810	299,028	961,519	1,489,729	2,704,626	1,097,392	3,263,778	223,442
Net revenue available for repayment of Federal in- vestment	5,710,385	509,413	150,286	178,210	693,590	31,172	476,681	466,271	1,500,374	311,708	1,396,122	-3,442
ESTIMATED SCHEDULED REPAYMENT OF FEDERAL INVESTMENT (note a)	4,680,142	772,430	427,953	228,245	350,978	41,448	325,602	435,996	889,527	254,073	868,011	85,869
REPAYMENT DEFICIENCY OR EXCESS (-), FISCAL YEAR 1960	-1,030,243	263,017	277,677	50,035	-342,612	10,276	-151,079	-30,775	-610,847	-57,635	-528,111	89,311
REPAYMENT DEFICIENCY OR EXCESS (-) TO JUNE 30, 1959	15,330,927	3,653,253	2,903,076	1,373,111	-26,914	-5,355	1,240,461	102,728	2,195,223	363,876	2,597,173	934,295
REPAYMENT DEFICIENCY OR EXCESS (-) TO JUNE 30, 1960	\$14,300,684	\$3,916,270	\$3,180,753	\$1,423,146	\$ -369,526	\$ 4,921	\$1,089,382	\$ 72,453	\$1,584,376	\$ 306,241	\$2,069,062	\$1,023,606

<sup>a</sup>In computing the estimated scheduled repayment of the Federal investment over a 50-year period, Corps of Engineers cost allocation annual charges were used. These charges are equivalent to the annual payments required to recover the power investment with interest at 2.5 percent on the unrepaid investment. Estimated scheduled repayment was computed on a proportionate capacity basis, relating the power investment to be recovered with the number of generators in service, excluding station service generators at Allatoona and Philpott. Scheduled repayment for each generator was computed as beginning the first of the month following placement in service.



**POWER PROJECT RESPONSIBILITIES  
OF THE  
SOUTHEASTERN  
POWER ADMINISTRATION**

- OPERATING
- - -** UNDER CONSTRUCTION
- AUTHORIZED
- ...** APPROVED