

DOCUMENT RESUME

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[TVA Expenses and Deductions]. EMD-77-14; B-114850. February 2, 1977. Released February 7, 1977. 5 pp.

Report to Rep. Clifford Allen; by Elmer B. Staats, Comptroller General.

Issue Area: Accounting and Financial Reporting (2800).

Contact: Energy and Minerals Div.

Budget Function: Natural Resources, Environment, and Energy:

Energy (305); General Government: Central Fiscal Operations (803).

Organization Concerned: Tennessee Valley Authority.

Congressional Relevance: Rep. Clifford Allen.

Authority: TVA Act (16 U.S.C. 831n-4(c)).

The accuracy and integrity of TVA's accounting procedures and financial statements for fiscal year 1976 were questioned, and the reasons why TVA's net income dropped from \$163.2 million on March 31, 1976, to \$126.1 million by yearend were investigated. Findings/Conclusions: TVA's fuel expense exceeded budget expenses by about \$15.9 billion. The unit cost of power generated was higher than budgeted, accounting for about \$5.3 million of the overrun. Another \$10.6 million of unbudgeted fuel expense resulted from a higher than anticipated coal inventory shortage. Purchased power expenses exceeded budgeted expense by \$50.7 million. Maintenance expenses during the fourth quarter exceeded budget estimates by about \$20.9 million. This overrun was attributable to difficulties in estimating repair costs and stepped-up maintenance at coal fired steamplants. It was noted that increases in the cost of fuel and purchased power are billed to consumers two months after costs are incurred. (RRS)



COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON, D.C. 20548

Specific approval by the Office of Congressional Affairs

00170

B-114850

RELEASED

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The Honorable Clifford Allen  
House of Representatives

Dear Mr. Allen:

Your August 25, 1976, letter questioned the accuracy and integrity of The Tennessee Valley Authority's (TVA) accounting procedures and financial statements for fiscal year 1976. You asked us to investigate why TVA's net income for the year dropped from \$163.2 million at March 31, 1976, to \$126.1 million by yearend. You also asked us to explain several expenses and deductions which you noted were itemized in TVA's yearend financial statements, but not shown individually in TVA's financial statements at March 31, 1976.

ANALYSIS OF NET INCOME

TVA's budgeted and actual net income for the pertinent periods discussed are shown below.

	<u>Net income</u>		
	<u>Budgeted</u>	<u>Actual</u>	<u>Difference</u>
		(millions)	
July 1, 1975, to March 31, 1976	\$164.4	\$163.2	\$ -1.2
April 1, to June 30, 1976	<u>40.2</u>	<u>-37.1</u>	<u>-77.3</u>
Total	<u>\$204.6</u>	<u>\$126.1</u>	<u>\$-78.5</u>

Since actual net income approximately equalled budgeted net income as of March 31, 1976, we limited our examination to identifying the differences between budgeted and actual fourth quarter operations.

The major differences occurred in operating expenses-- fuel, purchased power, and maintenance. Budgeted and actual fourth quarter operating expenses are shown in the following table.

<u>Operating expense</u>	<u>Fourth quarter FY 1976 (million)</u>		
	<u>Budgeted</u>	<u>Actual</u> (millions)	<u>Difference</u>
Fuel	\$182.2	\$198.1	\$15.9
Purchased power	1.7	52.4	50.7
Maintenance	47.6	68.5	20.9
Total	<u>\$231.5</u>	<u>\$319.0</u>	<u>\$87.5</u>

A portion of these higher operating costs was offset by lower than budgeted interest expenses and slightly higher revenues.

The following sections discuss the budget estimates and actual expenses for fuel, purchased power, and maintenance expenses during the fourth quarter.

#### Fuel expense

TVA's fuel expense exceeded budgeted expenses by about \$15.9 million. The unit cost of power generated was higher than budgeted, accounting for about \$5.3 million of the overrun. TVA's budget assumed an average cost of 7.66 mills per kilowatt-hour generated. Actual costs during the fourth quarter averaged 9.14 mills per kilowatt-hour generated. The higher average cost was caused by increased generation from its higher cost steamplants, rather than increases in the price of coal purchased. TVA increased generation at the higher cost plants to compensate for generation lost from steamplants because of unexpected, or longer than expected, maintenance outages.

Another \$10.6 million of unbudgeted fuel expense resulted from a higher than anticipated coal inventory shortage. In June 1976, as a result of physical inventories of coal stockpiles, TVA discovered that the physical count differed from the book inventory by \$15.3 million. TVA had anticipated an inventory difference of \$4.7 million during the year and had adjusted its inventory records by this amount through May 1976. After the discovery of the coal shortage, TVA formed a coal task force to identify the cause of the shortage and develop recommendations and procedures to better account for coal received, burned, and stored. The task force's preliminary report, dated September 9, 1976, did not conclusively explain the reasons for the inventory shortages, but reported that, at some plants, (1) scales used for measuring coal burned were inadequate and outmoded, and (2) administrative procedures should be improved to insure accurate measurements of the coal burned at plants.

The task force did not identify any significant differences between the quantity of coal purchased and received.

TVA's chairman of the board and general manager concluded that the annual inventory adjustment represented the cumulative effect of an entire year's operations and was not properly classified as a fuel cost for a given month. Therefore, the annual inventory adjustment for fiscal year 1976 was not passed through to power customers under TVA's fuel adjustment clause, which reduced TVA's future revenues by \$12.5 million.

#### Purchased power expense

TVA's purchased power expenses exceeded budgeted expense by \$50.7 million. About \$10.8 million of the overruns resulted from unit costs which were higher than budgeted. TVA's budget assumed an average cost of 15.87 mills per kilowatt-hour, but actual costs averaged 20 mills per kilowatt-hour of purchased power.

TVA required more purchased power than budgeted to meet consumer demand in the fourth quarter, accounting for the remaining \$39.9 million of the budget overrun. Actual purchase power exceeded the budgeted estimate by approximately 2.6 billion kilowatt-hours. The increase in purchased power resulted directly from delays in restarting the Browns Ferry nuclear plant. TVA had estimated that Browns Ferry would generate approximately 3.4 billion kilowatt-hours of electricity during the fourth quarter. When the nuclear plant remained out of service the entire period, TVA had to purchase power from other electric systems to meet consumer demand.

#### Maintenance expenses

Historically, the fourth quarter is a period of relatively low demand in the Tennessee Valley, therefore, TVA generally does a considerable portion of its maintenance during the period. Maintenance expenses during the period exceeded budget estimates by about \$20.9 million. TVA officials attributed the overrun to (1) difficulties in estimating repair costs and (2) stepped up maintenance at TVA's coal fired steamplants to compensate for the fact that the Browns Ferry nuclear plant would not be available during the following summer months of high consumer demand.

When it became apparent that the Browns Ferry nuclear plant would not be available to help meet summer power demands, TVA did maintenance not previously scheduled at

some plants to assure maximum system availability during the peak period. As a result, system availability for July 1976 was 87.5 percent, compared to 79.5 percent during the fourth quarter of fiscal year 1976. An estimate 1-percent increase in annual system availability saves the consumer about \$8.6 million in purchased power costs.

PRESENTATION OF EXPENSE ACCOUNTS IN  
TVA'S FINANCIAL STATEMENTS

You noted six items of expenses and deductions-- Transmission, Customer Accounts, Demonstration of Power Use, Administrative and General, Other Interest Expenses, and Social Security Taxes--which were itemized in TVA's yearend financial statements, but not shown individually in TVA's report for the 9 months ended March 31, 1976. We found that these items were consolidated with each other or with other accounts in the March 31, 1976, report. Transmission, Customer Accounts, Demonstration of Power Use, and Administrative and General Expenses were consolidated at March 31, 1976, as Other Expenses. Social Security Taxes was combined with Payments in Lieu of Taxes and shown as Taxes and Payments in Lieu of Taxes. Also at March 31, 1976, Other Interest Expenses was combined with Interest on Long-Term Debt and presented as Interest on Debt.

CONCLUSIONS

As required by the Government Corporation Control Act (31 U.S.C. 850), we periodically examine TVA's financial statements. In addition, since 1960, as provided by section 15d(c) of the TVA Act (16 U.S.C. 831n-4(c)), TVA has employed a firm of certified public accountants to audit its accounts and financial statements for each fiscal year to facilitate its issuance and sale of revenue bonds. As a part of our examination, we also observe and test the firm's audit work. The firm completed its audit on August 25, 1976, and expressed its opinion that TVA's financial statements present fairly the results of its operations for the year ended June 30, 1976, in conformity with generally accepted accounting principles applied on a consistent basis.

We have completed our examination of TVA's financial statements for the year ended June 30, 1976, and expect to report that TVA's reported net income of \$126.1 million presents fairly the results of its operations for the year ended June 30, 1976, in conformity with generally accepted

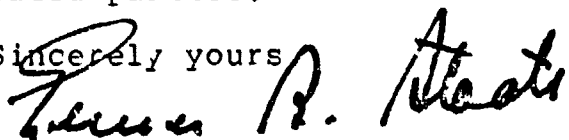
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accounting principles applied on a consistent basis.

Variations between estimated net income and actual net income for the fourth quarter of fiscal year 1976 resulted from unanticipated operating problems. It should be noted, however, that as provided by TVA's fuel adjustment addendum, increases in the cost of fuel and purchased power are billed to consumers 2 months after the costs are incurred. In July and August 1976, TVA received, through customer billings, about \$62.4 million from fuel adjustment clause increases based on unanticipated increases in fuel and purchased power costs incurred during the fourth quarter of fiscal year 1976. Additional information regarding TVA's fuel adjustment addendum is provided in the report on our examination of TVA's financial statements for fiscal year 1975 (FOD-76-6).

In accordance with arrangements with you, we will subsequently send copies of this report to the oversight committees, TVA, and other interested parties.

Sincerely yours

A handwritten signature in black ink, appearing to read "Thomas R. Acosta". The signature is written in a cursive style with a large initial "T" and "A".

Comptroller General  
of the United States