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General Accounting Office
Washington, D.C. 20548

Accounting and Information
Management Division

159582

B-278576

November 19, 1997

The Honorable Zach Wamp
House of Representatives

Subject: Financial Management: Briefing on Federal Electricity Activities—TVA

Dear Mr. Wamp:

On October 20, 1997, we briefed Ms. Helen Hardin, Mr. Bob Castro, and Mr. Dick Kopper of your office on the results of our recently completed review of federal electricity activities. This work was done at the request of the House Committee on the Budget and the Subcommittee on Water and Power Resources, House Committee on Resources, and resulted in our September 19, 1997, report entitled, Federal Electricity Activities: The Federal Government's Net Cost and Potential for Future Losses (GAO/AIMD-97-110 and 97-110A). The enclosed briefing slides highlight the findings in that report. The review responded to congressional concerns about (1) any ongoing expenses incurred by the federal government to support the electricity-related activities of the Power Marketing Administrations (PMAs),¹ the Department of Agriculture's Rural Utilities Service (RUS), and the Tennessee Valley Authority (TVA) and (2) potential future losses from these activities given the move toward deregulation and increased competition in the electricity industry.

The federal government incurred net costs of over a billion dollars annually for fiscal years 1992 through 1996 to support the electricity-related activities of RUS and the PMAs. We estimated that the net costs to the federal government for fiscal year 1996 totaled about \$2.5 billion—\$0.4 billion for BPA, \$0.2 billion for the three PMAs, and about \$1.9 billion for RUS, including about \$982 million in RUS loan write-offs. Cumulatively, for fiscal years 1992 through 1996, we estimated that the net costs were about \$8.6 billion in constant 1996 dollars,

¹We reviewed four of the five PMAs: the Bonneville Power Administration (BPA) and the Southeastern, Southwestern, and Western Area Power Administrations (which we refer to as the three PMAs). The fifth PMA, the Alaska Power Administration, was excluded from our review because legislation has been enacted to sell it to nonfederal entities.

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including over \$1 billion in RUS loan write-offs. The net costs associated with TVA were minimal. Under current policies and law, the federal government will likely continue to incur many of the same types of costs; however, future RUS loan write-offs cannot be accurately predicted.

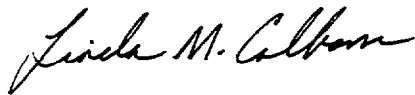
We also reported that there is risk to the federal government of future losses from each of these entities because of financial difficulties faced by RUS borrowers, TVA, BPA, and one or a few projects at each of the other three PMAs. As of September 30, 1996, the federal government was exposed in varying degrees to the risk of future losses because of its more than \$84 billion in direct and indirect financial involvement in the electricity-related activities of RUS, the PMAs, and TVA. The risk of future losses relates to the possibility that RUS borrowers, the PMAs, or TVA would be unable to repay the full \$53 billion in debt owed to the federal government or that the federal government would incur unreimbursed costs as a result of actions it took to prevent default or breach of contract on the \$31 billion in nonfederal debt owed by these entities.

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We are sending copies of this letter to interested congressional committees, and copies will also be made available to others upon request.

We appreciated the opportunity to share the results of our work. If you have questions or desire additional assistance on any of these matters, please contact me at (202) 512-8341.

Sincerely yours,



Linda M. Calbom
Director, Civil Audits

Enclosure

(913758)

GAO

**Accounting and Information
Management Division**

FEDERAL ELECTRICITY ACTIVITIES:

**The Federal Government's Net Cost
and Potential for Future
Losses**

Briefing for Congressional Staff

October 20, 1997

GAO Background

- Requesters raised concerns about:
 - The significant ongoing expenses incurred by the federal government to support the electricity-related activities of the PMAs and RUS and
 - Potential future losses from the PMAs, RUS, and TVA given the move toward deregulation and increased competition in the electricity industry
-

GAO Overall Objectives

- For the federal government's electricity-related activities, we designed our work to
 - Estimate the fiscal year 1996 net recurring cost and, where possible, fiscal years 1992 through 1996 cumulative net recurring cost and
 - Assess the likelihood of future losses beyond the net recurring costs

GAO Scope

- Rural Utilities Service
- 4 Power Marketing Administrations
 - Southeastern
 - Southwestern
 - Western
 - Bonneville
- Tennessee Valley Authority

GAO Scope Limitations

- GAO did not:
 - Estimate the forgone revenue for federal, state, or local governments resulting from the tax-exempt status of the RUS borrowers, the PMAs, and TVA
 - Assess the reasonableness of the methodologies used by the operating agencies to allocate power-related costs to the PMAs for recovery

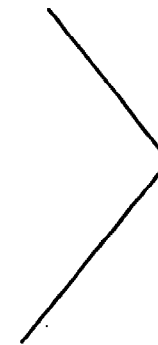
GAO Net Costs

- For fiscal year 1996, the federal government incurred net costs of about \$2.5 billion for BPA, the 3 PMAs, and RUS
 - For fiscal years 1992 through 1996, the federal government's net cost of operating these entities was about \$8.6 billion, in constant 1996 dollars
 - The net costs incurred by the federal government to operate TVA for fiscal years 1992 through 1996 were minimal
-

GAO **Net Costs**

- **Criteria used to determine net cost**

- **Federal accounting standards**
- **OMB Circular A-25**
- **Industry Practice**



**Full
Cost**

GAO Net Costs

Estimated Net Costs to the Federal Government

(Dollars in millions)

Net Costs	RUS		3 PMAs		BPA		TVA		Total	Cumulative
	1996	1992-96	1996	1992-96	1996	1992-96	1996	1992-96	1996	1992-96
Financing	\$874	\$3,812	\$208	\$1,155	\$377	\$1,974			\$1,459	\$6,941
Loan write-offs	982	1,049							982	1,049
Benefits	1	3	16	82	21	110	\$1	\$4	39	199
Construction			30	138		1			30	139
Other	21	112	(69)	157					(48)	269
Total	\$1,878	\$4,976	\$185	\$1,532	\$398	\$2,085	\$1	\$4	\$2,462	\$8,597

GAO Federal Financial Involvement

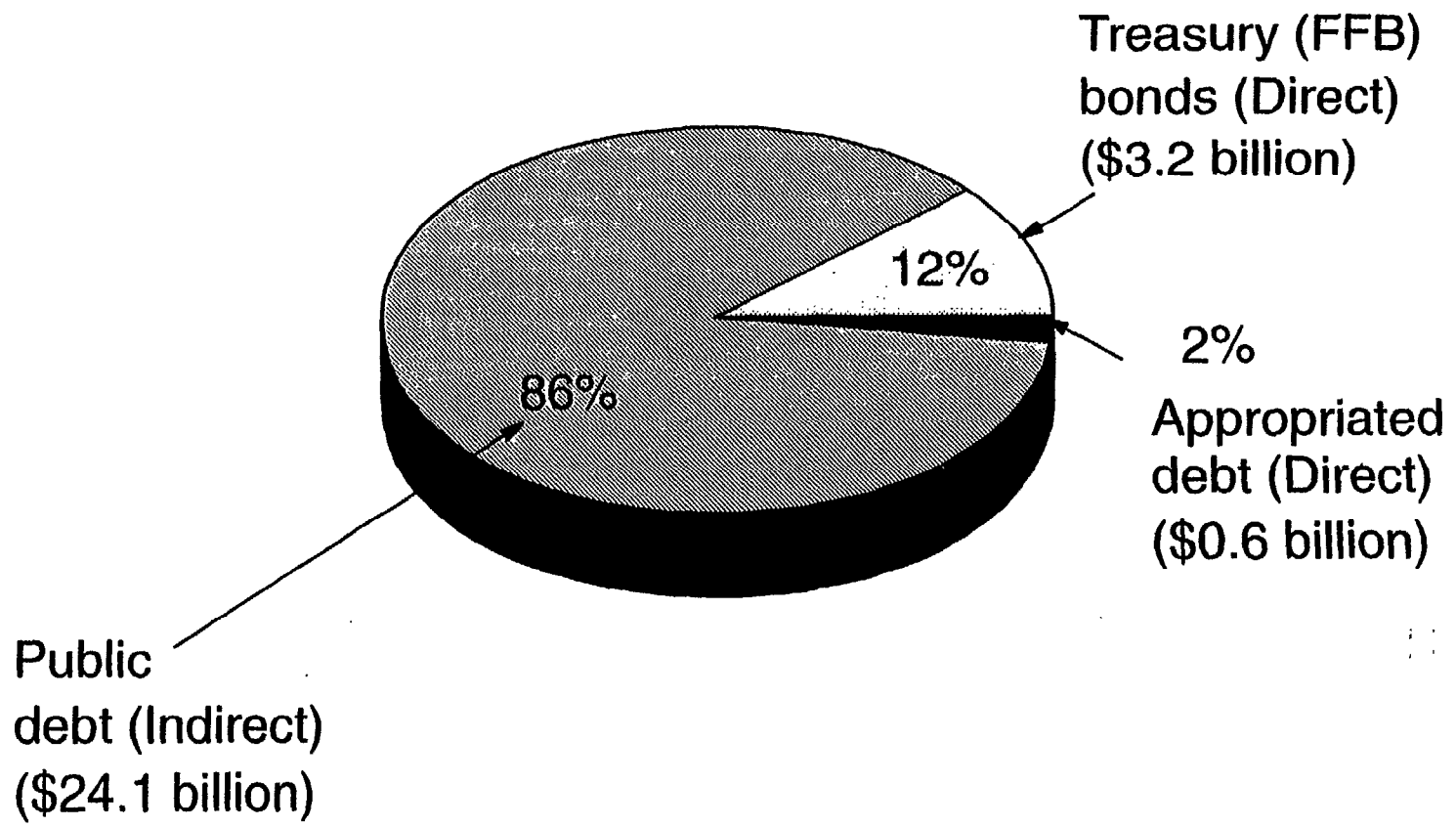
Dollars in billions

Entity	Direct	Indirect	Total
RUS	\$32.3		\$32.3
Three PMAs	7.0	\$0.2	7.2
BPA	10.1	7.1	17.2
TVA	3.8	24.1	27.9
Total	\$53.2	\$31.4	\$84.6

GAO Federal Financial Involvement

- The federal government would incur a future loss:
 - Direct involvement - to the extent the RUS borrowers, the PMAs, or TVA fail to make payments on federal debt
 - Indirect involvement - to the extent it incurs unreimbursed costs as a result of actions it took to prevent default or breach of contract on nonfederal debt
-

GAO Federal Financial Involvement --TVA



GAO Risk of Loss

- Criteria for assessing risk
 - Statement of Federal Financial Accounting Standards (SFFAS) No. 5, Accounting for Liabilities of the Federal Government
 - Probable, reasonably possible, or remote
 - Consistent with criteria used by bond rating services to assess credit risk for nonfederal utilities

GAO Risk of Loss

- For RUS, we reviewed the loan portfolio, assessed the production costs of key borrowers relative to their respective markets, and considered state regulatory actions
- For the PMAs and TVA, we considered the cost of electricity production and rates, key financial ratios, generating mix, competitive environment, management actions, and legislative and other factors

GAO Risk of Loss - RUS

- \$10.5 billion owed by 13 financially stressed G&Ts
- 4 borrowers owing \$7 billion are in bankruptcy
- 9 borrowers have invested in uneconomical plants and/or have formally requested debt forgiveness from RUS

GAO Risk of Loss - RUS

- Some currently viable borrowers are likely to face future financial difficulty due to
- High production costs (27 of 33 G&Ts had average revenues per kilowatt hour higher than neighboring IOUs)
- Competitive and/or regulatory pressures

GAO Risk of Loss -- RUS

- Despite certain mitigating factors, it is probable that
 - the federal government will continue to incur losses on loans to financially stressed borrowers
 - additional losses will be incurred on borrowers that are not currently troubled, but will likely become troubled in the future
-

GAO Risk of Loss - Three PMAs

- Three PMAs competitively sound overall
 - Production costs average more than 40 percent below IOUs and POGs in the primary NERC regions in which they operate
- If required to recover all power-related costs, ability to remain competitive might be impaired

GAO Risk of Loss - Three PMAs

- All three PMAs have at least one project or rate-setting system with problems that, taken as a whole, make risk of some loss to the federal government probable
- In aggregate, these problem projects or rate-setting systems represent 19 percent (about \$1.4 billion) of the federal government's involvement in the three PMAs

GAO Risk of Loss - BPA

- Risk of loss through fiscal year 2001 is remote
- Contracts through FY2001 with preference and industrial customers provide for stable revenues
- Fish cost funding responsibility capped through FY2001
- Current substantial financial reserve balance provides flexibility

Risk of Loss - BPA

- Risk of loss after fiscal year 2001 is reasonably possible
 - Expiration of customer contracts
 - Risks from market uncertainties
 - High fixed costs
 - Substantial upward pressure on operating expenses

GAO Risk of Loss - TVA

- GAO report issued in 1995 concluded that
 - TVA has far more financing costs and deferred assets than its likely competitors which limits its flexibility to meet competitive challenges
 - To the extent that TVA cannot compete effectively and improve its financial condition, the federal government is at risk for some portion of TVA's debt.
-

GAO Risk of Loss -- TVA

- Under current monopoly-type structure, risk of loss to the federal government from its involvement in TVA is remote
 - Long-term contracts provide stability and ensured cash flow
 - Exemption from the "wheeling" provisions of the Energy Policy Act of 1992 protects against outside competition
 - TVA can set rates with minimum oversight
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GAO Risk of Loss -- TVA

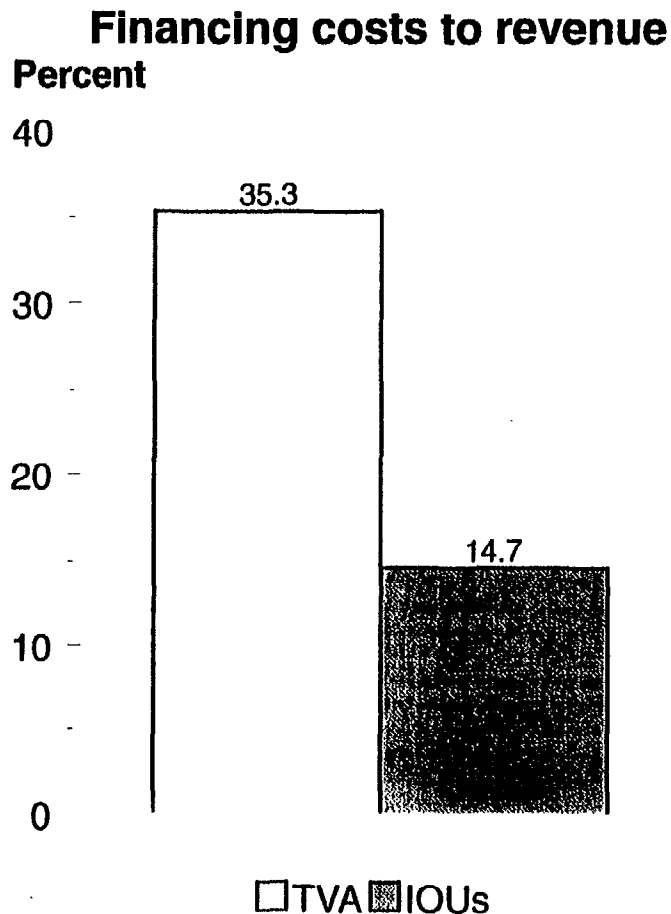
- Risk of loss is reasonably possible absent protection from competition
 - TVA has chosen to defer costs related to its substantial nuclear investment to future years rather than including them in current or prior year costs being recovered from ratepayers
 - This cost deferral has resulted in a high level of fixed costs and deferred assets which leaves TVA vulnerable to future competition
-

GAO Risk of Loss -- TVA

- To assess TVA's financial condition relative to its likely competitors, we compared the following ratios for TVA and 11 neighboring investor-owned utilities:
 - Financing costs to revenue
 - Fixed financing costs to revenue
 - Accumulated depreciation to gross PP&E
 - Deferred assets to gross PP&E

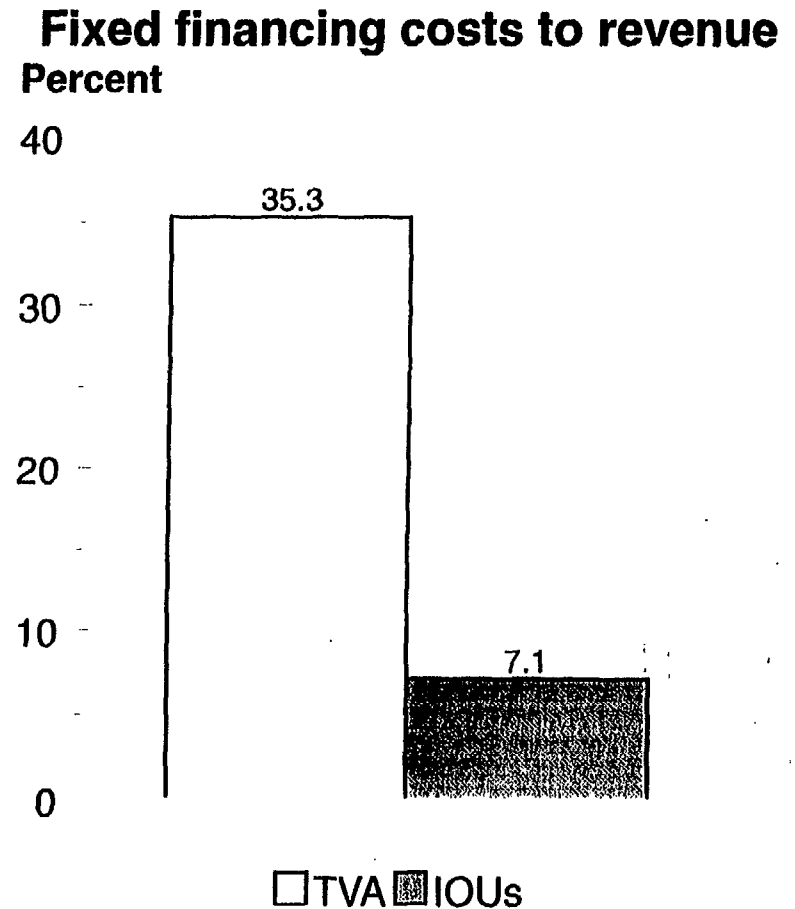
GAO Risk of Loss -- TVA

The financing costs to revenue ratio indicates the percentage of operating revenues needed to cover the financing costs of the entity



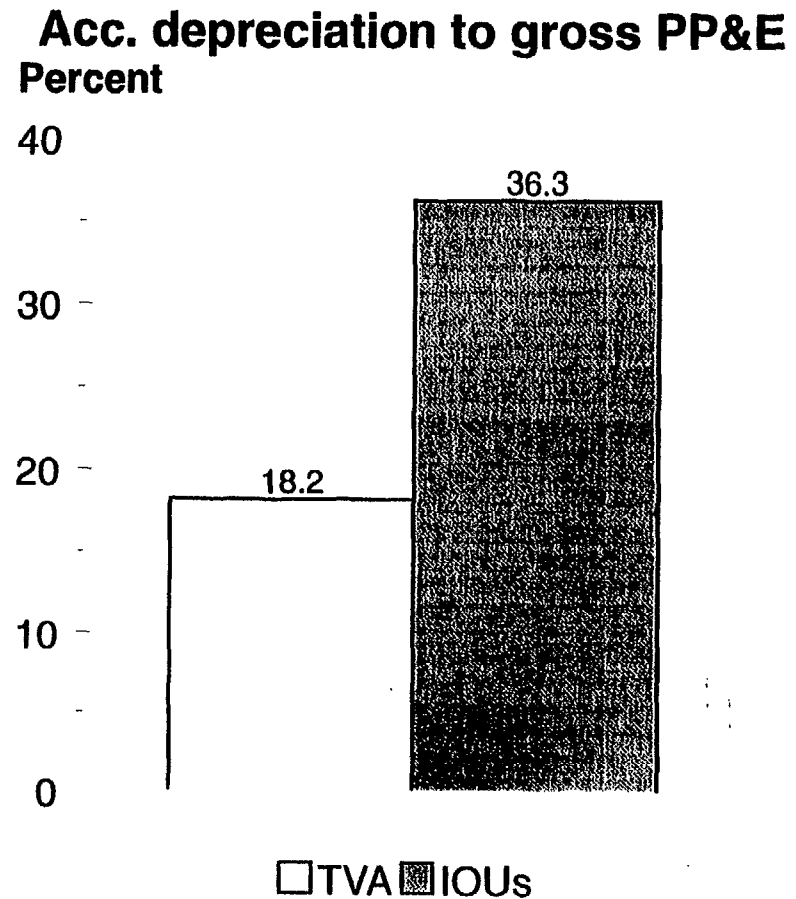
GAO Risk of Loss -- TVA

The fixed financing costs to revenue ratio indicates the percentage of operating revenues needed to cover the fixed portion of the financing costs



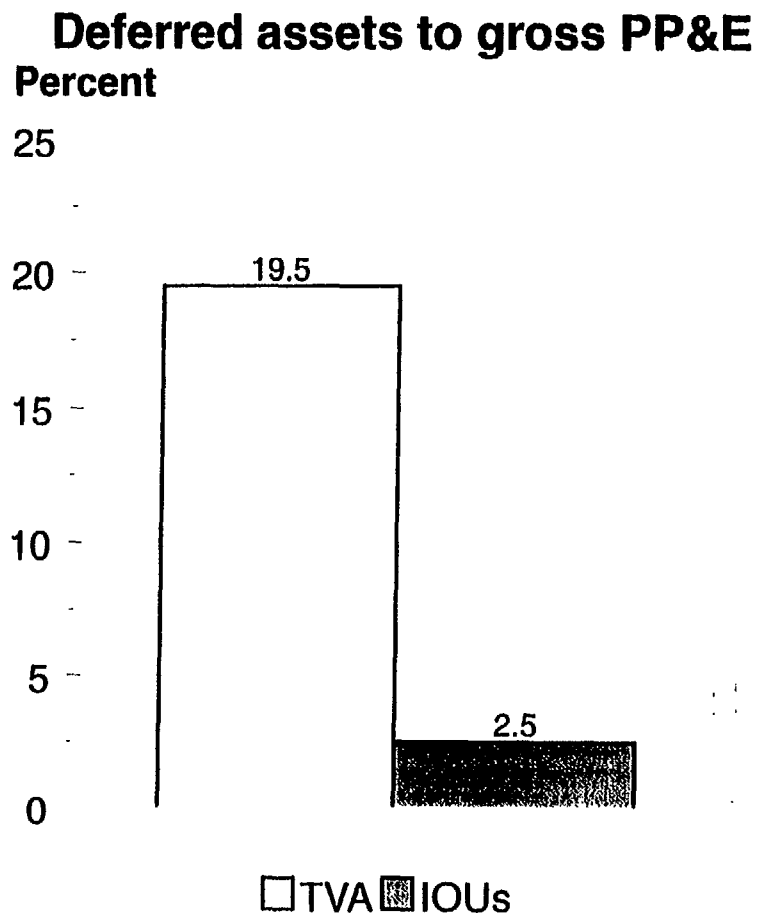
GAO Risk of Loss -- TVA

Accumulated depreciation to gross PP&E ratio shows how much PP&E had been recovered through rates at September 30, 1996



GAO Risk of Loss -- TVA

Deferred assets to gross PP&E ratio shows how much of total PP&E has not yet begun to be depreciated and taken into rates



GAO Risk of Loss -- TVA

- Other factors could negatively affect TVA
 - Five municipal distributors that account for over 34 percent of TVA's total sales to distributors want to renegotiate their contracts with TVA to obtain more favorable terms
 - Twelve of TVA's distributors are interconnected with other utilities

GAO Risk of Loss -- TVA

- TVA's vulnerability to wholesale competition without protections was recently demonstrated when the Bristol Virginia Utilities Board announced that it is going to leave the TVA system for Cinergy, Inc
- Cinergy offered firm wholesale power at 2.59 cents per kWh for 7 years, 40 percent lower than TVA's comparable wholesale rate of 4.3 cents per kWh

GAO Mitigating Factors -- TVA

- Mitigating factors reduce risk of loss
 - Inherent cost advantages
 - Management actions to increase revenues, cut operating expenses, and reduce debt
 - Extensive transmission system

- TVA recently released a 10-year business plan that calls for:
 - Increasing power rates enough to increase annual revenues by about 5.5 percent (\$325 million)
 - Limiting annual capital expenditures to \$595 million
 - Reducing debt by about 50 percent from \$27.9 billion as of 9/30/96, to \$13.8 billion by FY 2007
 - Reducing its total cost of power by about 16 percent by FY 2007
-

GAO Mitigating Factors - TVA

While the mitigating factors reduce the risk of loss, we believe the risk of loss is still reasonably possible.

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