

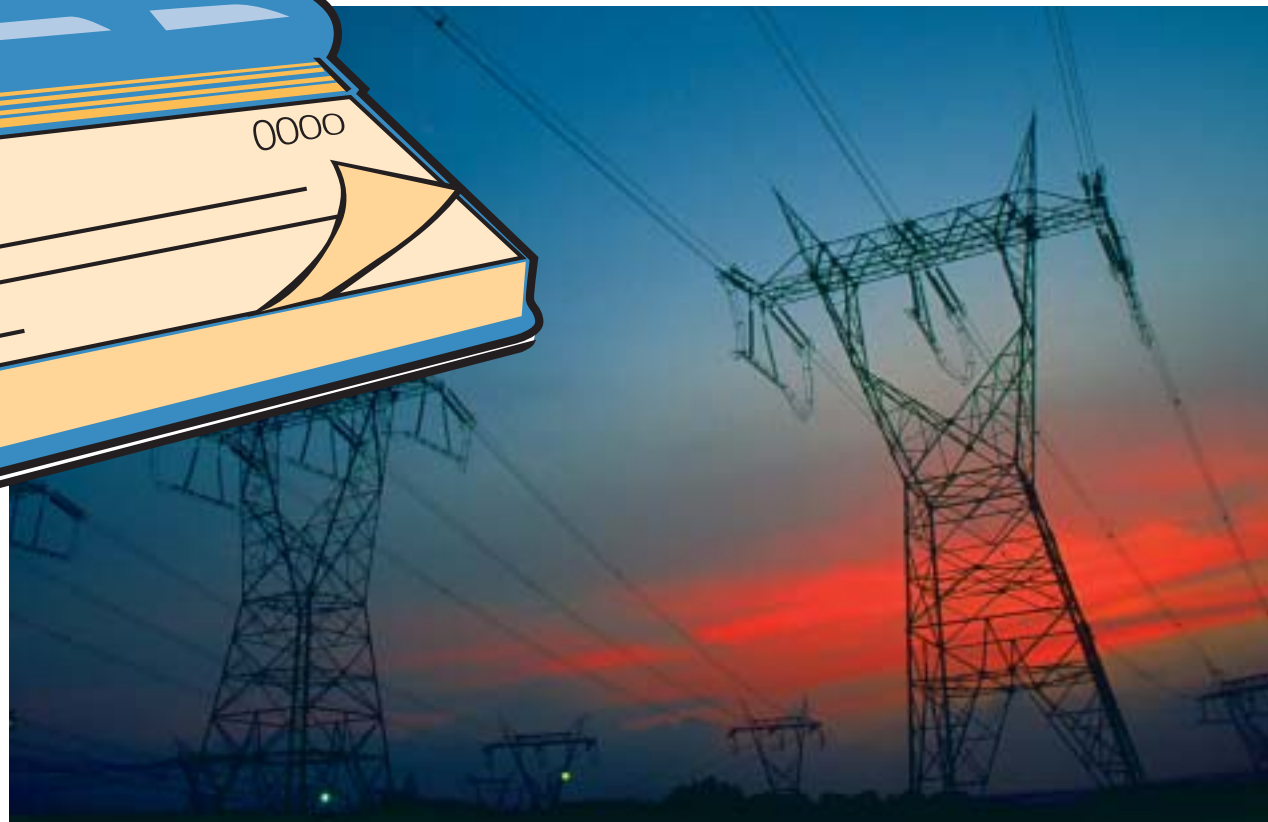
# Understanding How TVA Works



Part 2 in TVA's Business Education Series

## Balancing TVA's Checkbook

**What comes in... What goes out...  
Making sure we have the cash to pay our bills.**



**T**his is the second article in a series to help employees better understand how TVA works. Last month, we looked at the “Big Picture” of this huge corporation called TVA. This month, we are drilling down into the two areas “How does TVA generate cash?” and “What does TVA use this cash for?”

It is important for all of us who work at TVA to understand the importance of TVA's finances. By understanding how TVA works and how TVA manages its finances, we can better help TVA remain competitive in an ever-changing industry.

As a self-financed, wholly owned federal corporation and public-power entity, TVA is unique. TVA was created to enhance the quality of life in the Tennessee Valley by providing reliable, affordable electric power, acting as a steward of the region's natural resources and the Tennessee River system, and promoting sustainable economic development.

TVA's Leadership Standard is to “Achieve excellence in business performance and public service.” As such, TVA's success is measured by its effectiveness in meeting public needs while balancing all of the aspects of TVA's business. This special section of *Inside TVA* will give you an overview of some of the things that impact TVA's business and finances.

As we look at the two questions “How does TVA generate cash?” and “What does TVA use this cash for?” we see that they easily fall into three basic activities.

**Operating Activities ■ Financing Activities ■ Investing Activities**

This installment of the series “Understanding How TVA Works” will discuss how cash is generated (what comes in) or used (what goes out) in each of these areas.

Let's start with the

# Operating Activities.

TVA's Operating Activities can be viewed similarly to operating activities for any business - a product is sold to a customer who pays cash or promises to pay for the product. Cash is paid out for the expenses associated with operating the business. Any excess cash not required for operating the business can be used for investments or for reducing its financial obligations, such as debt.

This can also be looked at like a "checkbook." Just as each of us must balance our personal checkbook, the "TVA checkbook" also must balance. The money it collects for selling its product must cover the costs associated with operating and investing in the business.

In TVA's case, it sells its product to **Distributors** and **Directly Served Customers**. TVA also obtains additional revenue from **Other** sources.

*Let's look at each of these briefly...*

## How does TVA generate cash?

- **It sells power to 158 public power distributors.**

In 2002, TVA sold 128.6 billion kilowatt-hours of electricity (kwh) to 158 public power distributors for total sales revenue of \$5.9 billion.

TVA has long-term contracts with distributors, that sell power to 8.3 million residents and thousands of small businesses and industries in the Valley.

## What does TVA use this cash for?

The second aspect of Operating Activities is the money paid out to operate the business. In TVA's case, the major uses of cash in the day-to-day operations are as follows:

- **Fuel and other supplies and services related to operating and maintaining the facilities.**

TVA's costs for fuel and other supplies and services were more than \$2 billion in 2002.

To put this in perspective, in 2002 TVA used an average of 100,000 tons of coal per day. TVA also purchased natural gas and fuel oil for use in its combustion-turbine generating units.

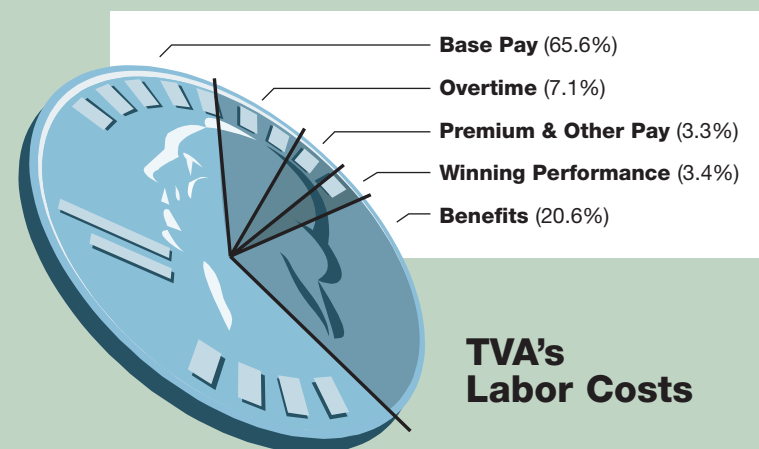
The cost of any material, supply, equipment or service to run the business is paid from the "TVA checkbook." Examples include everything from pencils, paper and computers to operating and maintenance activities for power and river-stewardship operations. Any contracted service also is included in this category.

- **Payroll and employee benefits for all TVA organizations.**

TVA has about 13,400 employees. The total employee labor expense for fiscal year 2002 was about \$1.3 billion.

Like other large employers, TVA must effectively manage its overall labor expense. It conducts benchmark studies of pay and benefits programs and costs in structuring its benefit offerings and determining expenditures in this area.

TVA uses this information in negotiating with its union partners to structure competitive pay and benefits for its represented employees that are comparable to the market. The same approach applies in structuring pay and benefits programs for managers and specialists, and excluded-schedule employees.



**TVA's Labor Costs**

Now, let's take a look at the

# Financing Activities.

If a company doesn't have enough cash to operate or invest in its business, it usually has a couple of options. Typically, the company receives cash from its owners, through the sale of stock or by borrowing additional funds.

TVA's owner is the federal government; however TVA receives no cash from the government.

*These Financing Activities are items that go into and out of the TVA checkbook.*

- **Repaying the government.**

TVA's power program has received no taxpayer funds from the U.S. government in more than 40 years (except for a small amount TVA received until the mid-1980's for its multipurpose dams). The resource-stewardship programs (that in other parts of the country are typically funded by the federal government) have not received federal funds since 1999.

TVA has, however, been steadily paying back the balance of the government's original investment in the power program that was unpaid at the time TVA was made self-financing. TVA pays back a portion of this original investment every single year, along with "interest." To date, TVA has made total principal and interest payments of \$3.4 billion on the government's original investment of \$1.4 billion.

■ **TVA sells power to 62 directly served industries and federal agencies.**

In 2002, TVA sold about 26.5 billion kwh to directly served industries. TVA's total sales revenue from industry sales totaled more than \$700 million.

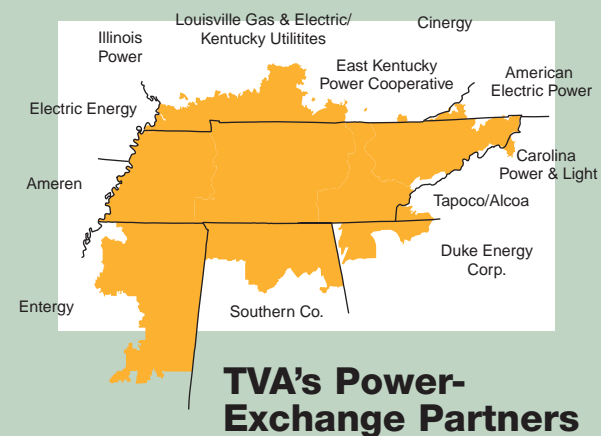
Most of TVA's directly served retail customers consume massive quantities of electricity – for some the cost of electricity is 60-75 percent of total production cost.

Examples of these directly served customers are Saturn, Alcoa and Ameristeel.

■ **Other sources of revenue.**

When TVA generates more power than its customers use, it may be able to sell that power to other power companies. In 1959, Congress restricted TVA from selling power outside the TVA service area except to power companies with which TVA had power-exchange agreements as of July 1, 1957. We now have power-exchange agreements with partners as shown on the map at right.

The sale of surplus power, along with income generated from other activities, such as providing electricity-transmission services for power passing through the TVA territory (wheeling), contracted services by various TVA organizations, and land rental, generated additional revenue for TVA.



■ **Payments to the states where TVA does business.**

TVA is not subject to federal income taxes or to taxation by states. However, the TVA Act requires TVA to make payments in lieu of taxes to states and counties in which TVA conducts power operations and in which TVA has acquired properties previously subject to state and local taxation. TVA pays about 5 percent of its revenue for these in lieu of tax payments. In 2002 alone, TVA paid \$328 million to the states and communities where it does business.

The states and communities benefit greatly from these payments. Most of them use this money to pay such things as operating costs, which includes salaries for state and local workers, including teachers and law-enforcement personnel.

■ **Interest expense on loans.**

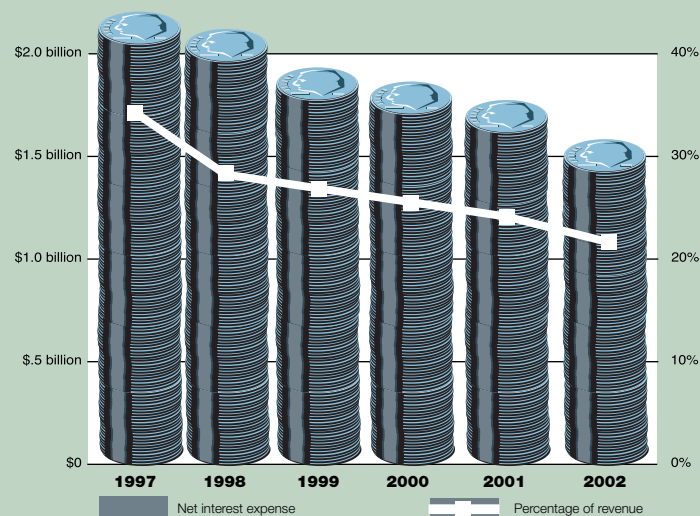
Just as when you borrow money from the bank, TVA pays interest on the money it has borrowed.

Sometimes, as market conditions change, TVA is able to reduce its interest costs by refinancing at lower interest rates. This is similar to refinancing your home mortgage at a lower interest rate.

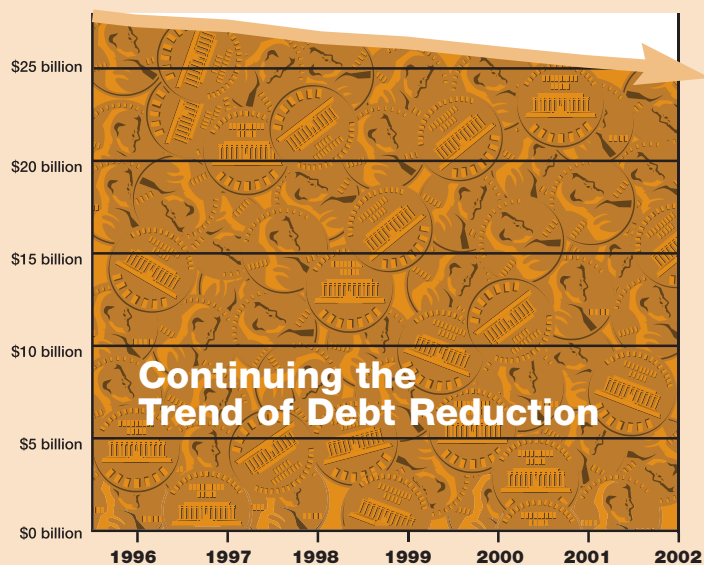
By refinancing, annual net-interest expenses were reduced by \$204 million in 2002. It is very smart for TVA to do this – by reducing its interest expense, it is able to pay even more against the principal (or outstanding loan balance) or use the money for other purposes.

From the chart at right, you can see that TVA's interest expense has been reduced significantly – in 2002, TVA was able to save \$600 million from 1997 expense levels.

**TVA's Declining Interest Expense as a percentage of revenue**



**TVA has a \$30-billion debt ceiling.**



■ **Borrowing funds.**

TVA's federal charter, the TVA Act, limits the ways TVA can raise money. This results in a financial structure that is very different from that of an investor-owned utility or another company or corporation.

A typical company raises capital through a mixture of common stock, preferred stock, short- and long-term debt, deferred taxes and investment tax credits. TVA is not authorized to issue stock, and it is obligated to charge rates as low as feasible, so it must meet the power needs of the Tennessee Valley primarily with electric revenues and through issuing bonds to raise money. The total amount of bonds and bank notes (or "discount" notes, as they are called) TVA has outstanding represents TVA's debt.

Like most people, TVA would like to pay its debt back as soon as it possibly can. While it generates a large amount of cash through its operating activities, TVA must balance use of this cash to continue to meet growing needs of the Valley while continuing to comply with environmental laws and regulations. Through efforts from every TVA employee over the past several years, TVA's operations have become more and more efficient, and TVA also has been able to steadily contribute to the trend of debt reduction.

Finally, let's look at the

# Investment Activities.

Sometimes cash is needed to grow a business. When demand increases and more product is needed, a business must be able to supply the product. When the demand for power increases, TVA must be able to supply that power. In addition, TVA must be able to supply enough power to avoid the type of power shortages that occurred in California a few years ago.

TVA's goal is to meet the needs of the Tennessee Valley over the long term. TVA has invested in building a diversified and robust power-production and delivery infrastructure to serve the growing needs of commercial and industrial consumers and the 8.3 million residents of the areas served by TVA.

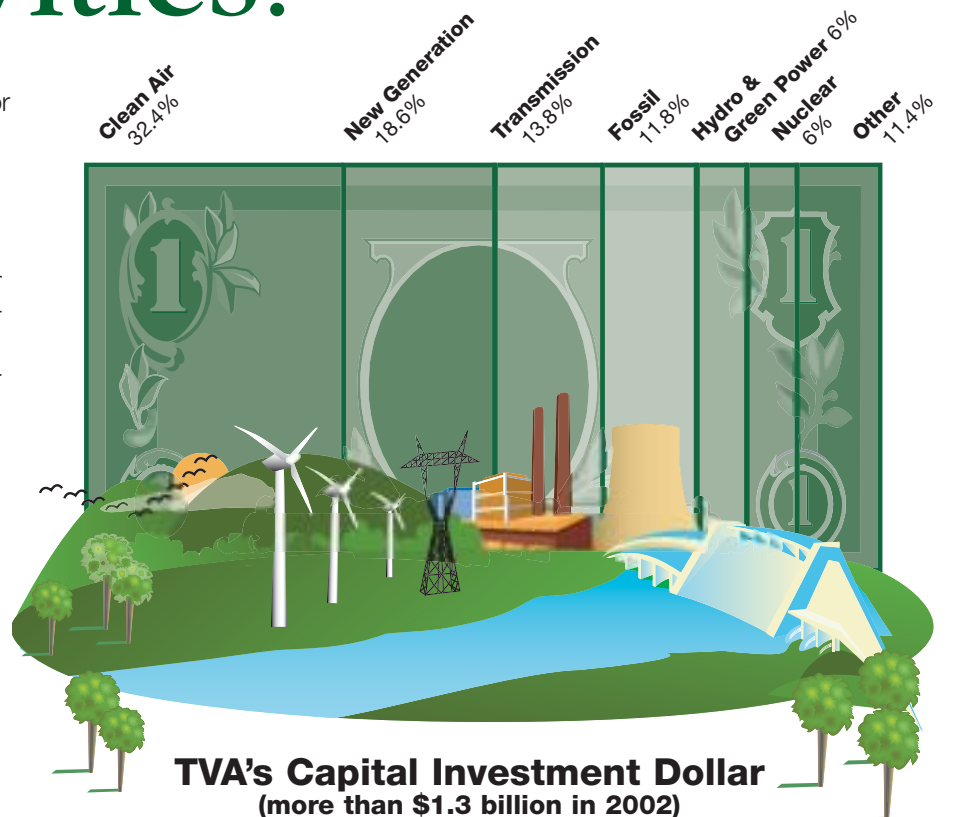
In 2002, TVA added almost 1,000 megawatts of additional capacity to its power system to help meet the needs of the Valley.

TVA also invests in the future of its business by strengthening the transmission system, as well as through hydro modernization efforts, nuclear-plant upgrades and by the use of other environmentally friendly power sources such as wind, solar and landfill gas facilities.

Another example of an "investment" is the return to service of Browns Ferry Nuclear Unit 1, which will add about 1,280 megawatts of generating capacity — enough to light 650,000 homes or a city the size of Nashville. While TVA has to spend cash now to restart this facility, this investment is expected to lower the average cost of TVA power and provide additional cash flow for accelerated debt reduction.

Here's a chart showing the types of investments TVA made in 2002. These investment activities are included in what employees typically see as the capital budget:

*These Investment Activities are items that come out of the TVA checkbook.*



## So what does all of this mean?



**I**t is important that all TVA employees understand how TVA works. Every employee has a stake in TVA's business. Understanding TVA finances is just one aspect of TVA's business — but a very important aspect.

*The financial health of TVA will drive its ability to achieve excellence in business performance.*

*In every area of its business, TVA is faced with challenges of balancing a variety of interests and objectives. The financial area is no different. If TVA had access to unlimited financial resources, many of its decisions would be different than they now are.*

*However, the sources of income for TVA are limited, but the demands for cash are not limited. This installment in the Business Education series has tried to provide an overview of the many demands for cash within TVA and from external sources. We must all work diligently to make wise business decisions and manage our business efficiently. We must all keep that clear line of sight between our individual work and the Winning Performance objectives.*

### What You Can Do

Every person in our company must be involved for TVA to be successful. Here are some of the things you can do to strengthen TVA's financial health.

- View TVA as a BUSINESS — not just a huge governmental agency.
- Know and understand TVA's business.
- Understand how TVA's finances impact TVA's scorecard — particularly Reducing Delivered Cost of Power and Continuing Debt Reduction.
- Ask questions if you don't understand or need more information.
- Keep the line of sight between your work and the Winning Performance objectives.
- Spend TVA's money as if it were your own.
- Make sure that TVA's suppliers and contractors meet our high performance standards.
- Take care of TVA's property.
- Be an advocate for TVA with your friends, neighbors and family.

You can view this special insert on TVA's internal Web site.

For more about TVA operations and facilities, go to [www.tva.com](http://www.tva.com).