

Industrial Marketing & Services

2016 Highlights Report



TENNESSEE VALLEY AUTHORITY



Energy and Industry Create Synergy

Most people recognize that economic success is driven greatly by the availability of reliable, affordable energy. Throughout TVA's long history, we have delivered just that to our customers across the Valley region. In fact, for the past 16 years, we have been able to deliver electricity with an impressive 99.999 percent reliability rate.

But just as important as the electricity we provide is the energy of the many industries and businesses that have chosen to locate their facilities here. Today, we sell electricity directly to 58 large industrial and federal facilities, and our 154 local power company partners serve thousands of other businesses through their respective power systems.

Whether these businesses are manufacturing cars, paper, steel or developing the technologies that will shape our future, they are key drivers of our region's economy. The employment opportunities they provide and the contributions they make in their communities are major reasons why the Tennessee Valley is a great place to live and work.

On behalf of TVA, we would like to thank you – the industries and businesses vital to our region – for choosing the Valley as your home. We have worked hard the past few years to focus on our mission of service and better position TVA for the changing market. We have reduced O&M spending by \$800 million, lowered power rates and increased capital investments in our assets while continuing to reduce debt. The bottom line is we made a plan, we have worked that plan, and we are continuing on that path.

We hope you enjoy our first-ever Highlights Report, which features some of TVA's key accomplishments over the past year. Your business and support helped make them possible. We plan to make this an annual publication, so please provide your feedback to our Account Management team.

TVA INDUSTRIAL MARKETING & SERVICES



Operational Highlights



TVA Delivers New Nuclear for the 21st Century

In October, we delivered the nation's first new nuclear generation in 20 years when Watts Bar Unit 2 officially entered commercial operation. The unit is capable of generating enough clean electricity to power 4.5 million homes.

Located near Spring City, Tennessee, Watts Bar Unit 2 is TVA's seventh operating nuclear reactor and is a key part of TVA's commitment to produce cleaner energy without sacrificing reliability and low cost. The \$4.7 billion capital construction project was completed on budget.



Transmission Reliability Sustains Excellence

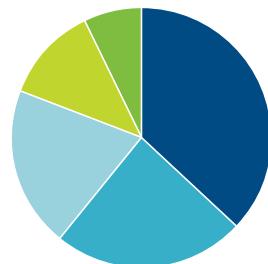
You may never give any thought to our extensive power transmission system. That's because we're doing our job. In 2016, we once again delivered 99.999 percent reliability, a level of performance we have achieved for 16 consecutive years.

TVA's 17,000 miles of line – enough to span the United States six times over – provide the critical link that connects power from our generating plants to our directly served customers and, through a network of 154 local power providers, to 9 million people in the Tennessee Valley across 80,000 square miles in seven states.

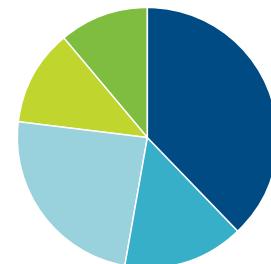
Diversified Energy Portfolio Gives TVA Operational Flexibility

Our diversified generation portfolio at TVA gives us operational flexibility, allowing us to choose the right energy source at the right time. This diversity in our fuel also keeps us from relying too much on any one source.

2017 Projected Energy Mix



2026 Projected Energy Mix



Capital Investments Contribute to Service and Reliability

While TVA is careful in managing its budget, it will never compromise on service and reliability. In fact, we will have invested almost \$20 billion in new capital projects from 2012 through 2019, even while reducing debt along the way.

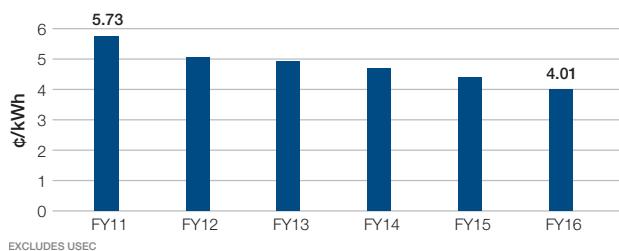
Additionally, we are investing almost twice as much maintenance capital in the power system today as we did in 2010. This ongoing investment in our system is a primary factor in TVA's ability to deliver power with 99.999 percent reliability.

Financial Highlights

Effective Rates for Customers Decline

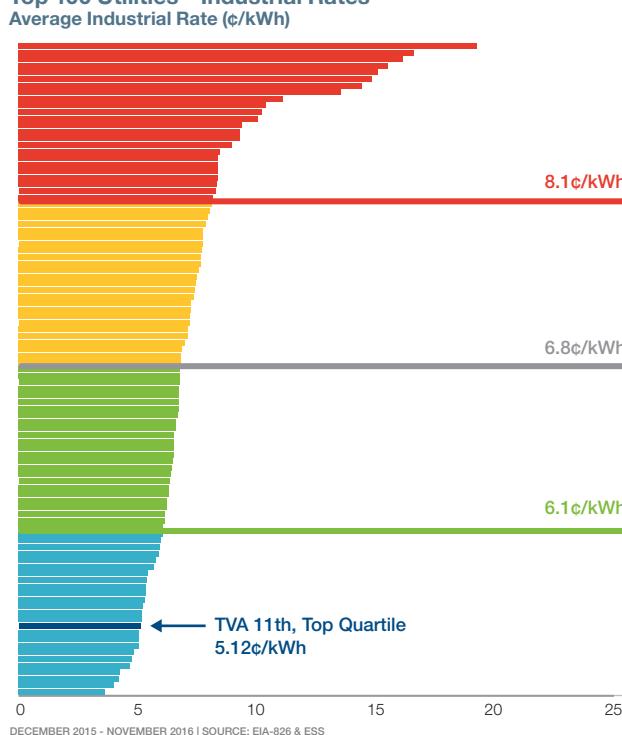
For the fifth consecutive year, TVA's average effective rate for directly served customers declined, reaching an overall average of 4.01 cents per kWh for fiscal year 2016. One has to go back to fiscal year 2008 to find average rates at this level.

Trend for Directly Served Customers



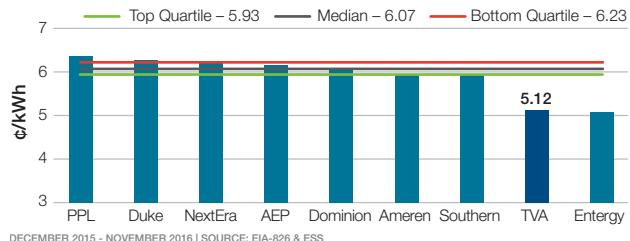
Furthermore, our average industrial rates across the Valley (including customers served by local power companies) are currently the second lowest among nine peer utilities in the Southeast, and are ranked 11th among the top 100 utilities in the United States. And, our electricity rates have outperformed inflation since 2008, making them a good value for those who live and work in the Valley.

Top 100 Utilities – Industrial Rates



TVA Compared to Surrounding Peer Utilities

Effective Industrial Rates 12-Month Rolling Average (¢/kWh)

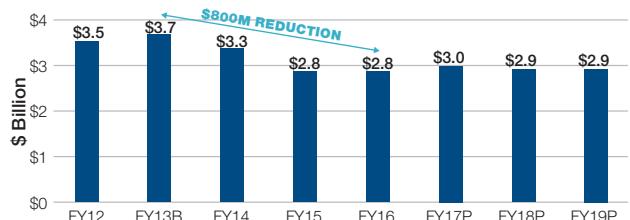


TVA Committed to Managing Costs

Keeping rates low is important to TVA's customers and is a key factor in driving economic prosperity in the Valley region. The best way we can do that at TVA is by managing our costs.

Since fiscal year 2013, we have reduced our nonfuel O&M costs by more than \$800 million, and our work is ongoing, with plans to offset inflation through additional operational efficiencies. It's also worth noting that TVA employees have reduced expenses by nearly \$1.8 billion in the past three years.

O&M Expense



A Diversified Energy Portfolio Helping TVA Lower Fuel Costs

In addition to providing operational flexibility, our diversified energy portfolio at TVA allows us to generate electricity efficiently and take advantage of lower fuel costs. In fact, our fuel costs are currently among the lowest in the nation.

Today, our fuel and purchased power costs are nearly a billion dollars less than in fiscal year 2013. This is primarily due to the flexibility we now get from our more diverse generating portfolio, which is relying more than ever on low-cost natural gas and improved operating performance.

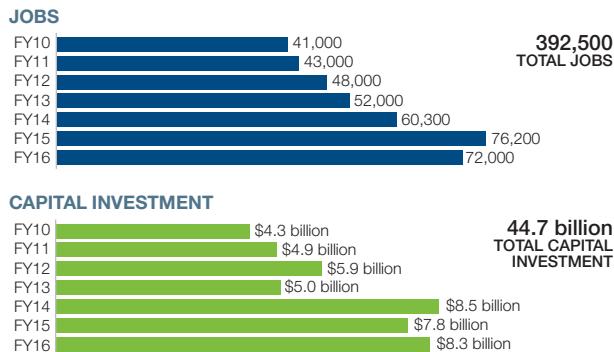
Stewardship Highlights

Magazine Recognizes TVA Economic Development...Again

For the 11th time, Site Selection magazine selected TVA Economic Development as one of the top 10 utilities for economic development. Last year, TVA Economic Development racked up an incredible \$7.8 billion in investment from 224 companies, and created 76,200 jobs across its seven-state, 80,000 square-mile service region.

Citing “service” and “savvy” among the soft criteria, the magazine also crunched some hard numbers in creating its list, including corporate facility project jobs and capex numbers from the previous year; straight totals and per-capita calculations; website tools and data; innovative programs and incentives for business; and the utility’s own job-creating infrastructure and facility investment trends.

TVA Region Performance Highlights



The Valley's Air Continues to Get Cleaner

Cleaning up the air in the Valley has been a long road, and TVA is doing its part. In fact, we have reduced carbon dioxide (CO₂) emissions 32 percent from 2005 levels, and we’re on track to reduce emissions by 40 percent below 2005 levels by 2020. Also, as a service, we provide our customers with as-delivered CO₂ emission rates in a manner consistent with generally accepted carbon accounting standards.

TVA recognizes that carbon footprint performance can be a critical factor in our customers’ decisions. For this reason, we provide them with carbon data that may allow further reduction of their carbon footprint.



Norris Dam Celebrates Milestone

On July 7, 2016, U.S. Sen. Lamar Alexander and U.S. Rep. John Duncan Jr. introduced a resolution praising TVA for its successful construction and management of the “Unified Plan of the Development of the Tennessee River,” which began with the completion of Norris Dam in 1936. The resolution came just a few weeks before TVA and the residents of the Valley celebrated the 80th Anniversary of Norris Dam.

Today, TVA has a sophisticated system of dams to control flooding along the Tennessee River watershed, and each year it prevents about \$240 million in flood damage in the TVA region. Norris Dam was TVA’s first dam.

Safety Is a Core Value

Safety will always be a top priority for TVA. To improve our safety in 2016, we concentrated our focus on barriers, safe behaviors and accountability; positive employee recognition; and a revised discipline policy enacted by Human Resources in September that is better aligned with safety and other corporate programs.

Also in 2016, we recognized one of our customers with a safety award for the first time. In 2017, plans are to further enhance our safety recognition for customers and identify opportunities to conduct joint safety meetings and training.

