

# TVA in Tennessee

## Energy Sales

- In fiscal year 2007, TVA sold 97.9 billion kilowatt-hours of electricity to 62 municipal and 22 cooperatively owned power companies in Tennessee.
- Distributors of TVA power provided approximately 42 billion kilowatt-hours of electricity to more than 2.6 million Tennessee households in fiscal year 2007.
- Distributor sales to over 439,000 commercial and industrial customers totaled 51.1 billion kilowatt-hours. In addition, distributors in Tennessee sold almost 1.2 billion kilowatt-hours to outdoor-lighting customers.
- TVA provided over 8.6 billion kilowatt-hours of electricity directly to 21 large industries and federally owned installations in Tennessee in 2007.
- TVA power revenues in Tennessee in fiscal year 2007 totaled nearly \$5.4 billion or about 69 percent of all TVA operating revenues.

## Service Area

- TVA serves virtually all of the 95 counties in the state of Tennessee.
- The TVA service area in Tennessee is over 42,000 square miles.

## Power Generation and Transmission

- TVA operates 19 hydroelectric dams, seven coal-fired power plants, two nuclear-power plants, five combustion-turbine sites and one pumped-storage plant in Tennessee, with a combined generating capacity of more than 19,655 megawatts.

Coal-fired plants: Allen, Bull Run, Cumberland, Gallatin, John Sevier, Johnsonville, and Kingston; with combustion turbines at Allen, Gallatin, Gleason, Johnsonville, and Lagoon Creek.

Nuclear plants: Sequoyah and Watts Bar.

Hydroelectric plants: Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Great Falls, Melton Hill, Nickajack, Norris, Ocoee 1, Ocoee 2, Ocoee 3, Pickwick Landing, South Holston, Tims Ford, Watauga, Watts Bar, and Wilbur.

Pumped-storage plant: Raccoon Mountain.

- TVA owns and/or maintains 264 substations and switchyards and 9,231 circuit miles of transmission lines in Tennessee.

- TVA operates the following 10 solar facilities in the state of Tennessee: a 27-kilowatt facility at the Adventure Science Center in Nashville; two 18-kilowatt facilities at Dollywood in Pigeon Forge; an 18-kilowatt facility at Gibson County High School in Dyer; a 15-kilowatt facility at Ijams Nature Center in Knoxville; a 9-kilowatt facility at Coker County High School in Newport; a 15-kilowatt facility at the American Museum of Science and Energy; a 7-kilowatt facility at the Oak Ridge National Laboratory in Oak Ridge; an 85-kilowatt facility at Finley Stadium in Chattanooga; and a 26-kilowatt facility at the Bridges Center in Memphis.
- TVA operates three wind turbines on Buffalo Mountain in Oliver Springs, with a generation capacity of 2 megawatts. TVA also purchases the output of 15 additional wind turbines on Buffalo Mountain, owned by Invenergy LLC, with a generation capacity of 27 megawatts.
- TVA generates methane gas from the city of Memphis' wastewater-treatment facility, which is then provided to TVA's Allen Fossil Plant as an additional source of renewable energy, with a generating capacity of 4 megawatts.

### **Land and Water Stewardship**

- TVA manages 32 reservoirs in Tennessee: Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Great Falls, Melton Hill, Nickajack, Nolichucky, Normandy, Norris, Ocoee 1, Ocoee 3, Raccoon Mountain, South Holston, Tellico, Tims Ford, Watauga, Watts Bar, and Wilbur, plus eight small reservoirs in the Beech River watershed in West Tennessee and portions of Kentucky, Pickwick, and Guntersville reservoirs. These reservoirs have a combined surface area of about 300,000 acres and about 7,000 miles of shoreline.
- TVA manages recreation, natural, and cultural resources on more than 170,000 acres of public land around these reservoirs and partners with local and regional stakeholders to improve water quality, shoreline conditions, and biodiversity.
- Tennessee residents enjoy camping, fishing, boating, swimming, and other recreational opportunities provided by these reservoirs, as well as economic benefits resulting from reservoir-based tourism.

### **River Management**

- TVA maintains the structural, seismic, and hydrologic integrity of 19 hydroelectric dams, 13 non-power dams, two small overflow detention dams at John Sevier Fossil Plant on the Holston River and Doakes Creek on Norris Reservoir, and one pumped-storage plant near Chattanooga.
- TVA manages seven locks in Tennessee (six main locks and one auxiliary lock), serving 112 Tennessee ports and terminals. Nearly 22 million tons of cargo move through these facilities annually.

- TVA dams and reservoirs in Tennessee are operated in conjunction with others in the TVA system to store flood waters for controlled release. Operation of this system helps avert an average of \$230 million in flood damage per year. At Chattanooga, which is prone to flooding because of its location just above where the Tennessee River flows through the narrow passes of the Cumberland Mountains, operation of TVA's flood-control system has helped to prevent about \$4.9 billion in flood damage since its construction.
- Some 101 municipalities, 34 industries, and five mining companies in Tennessee withdraw water from the Tennessee River system. Water also is withdrawn for power-plant cooling and for irrigation.
- TVA schedules releases from Apalachia, Norris, Ocoee 1, Ocoee 2, Ocoee 3, Tims Ford, and Watauga/Willbur dams to support whitewater sports and tailwater fishing in Tennessee.
- Fiscal year 2007 was the driest period in 118 years in the Valley. In fact, yearly rainfall amounts in the Valley have been below normal for the past four fiscal years, with the 2007 rainfall at 33 percent below normal. As a result, TVA's hydroelectric power generation has been significantly impacted. For fiscal year 2007, hydro generation was 31 percent below normal.

### **Personnel**

- There are about 8,100 TVA employees based in Tennessee.
- Tennessee is home to more than 13,100 TVA retirees and their families.

### **Tax-Equivalent Payments**

- TVA paid \$262,604,964 in lieu of taxes to the state of Tennessee in 2007 based on power sales and power-property values in the state.

### **Economic Development**

- Since 1995, TVA has invested \$125 million in economic-development loans for new and expanding industries in Tennessee. These loans have helped create approximately 36,800 new jobs and leveraged more than \$1.7 billion in additional investments from private and public sources.

### **TVA Suppliers**

- TVA purchased about \$1.140 billion worth of fuel, materials, and services from Tennessee vendors in fiscal year 2007 — \$1.076 billion in materials and services, \$57.4 million in fossil fuel, and \$6.4 million in nuclear fuel.