# TVA in Tennessee

# **Energy Sales**

- In fiscal year 2008, TVA sold 96 billion kilowatt-hours of electricity to 62 municipal and 22 cooperatively owned power companies in Tennessee.
- Distributors of TVA power provided nearly 41 billion kilowatt-hours of electricity to more than 2.6 million Tennessee households in fiscal year 2008.
- Distributor sales to over 440,000 commercial and industrial customers totaled 5.05 billion kilowatt-hours. In addition, distributors in Tennessee sold over 1.1 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 2008.
- TVA power revenues in Tennessee in fiscal year 2008 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, six 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.

Combustion turbines: Allen, Brownsville, 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 255 substations and switchyards and nearly 9,282 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 Cocke 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.
- Methane gas, a source of renewable energy, from the city of Memphis' wastewater-treatment facility is provided to TVA's Allen Fossil Plant where it is burned with coal adding a generating capacity of 4 megawatts.
- As part of a strategy to meet the Valley's future power demand, TVA has a
  goal of reducing the growth of peak power by 1,400 megawatts by the end
  of 2012. TVA's Energy Efficiency and Demand Response group has partnered
  with distributors of TVA power to find sustainable opportunities to reduce
  peak power demand.

# 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/Wilbur dams to support whitewater sports and tailwater fishing in Tennessee.

#### **Personnel**

- There are 7,465 TVA employees based in Tennessee.
- Tennessee is home to nearly 13,600 TVA retirees and their families.

### **Tax-Equivalent Payments**

• TVA paid \$264,836,829 in lieu of taxes to the state of Tennessee in 2008 based on power sales and power-property values in the state.

# **Economic Development**

• Since 1995, TVA has invested nearly \$129 million in economic-development loans for new and expanding industries in Tennessee. These loans have helped create approximately 36,500 new jobs and leveraged more than \$1.7 billion in additional investments from private and public sources.

# **TVA Suppliers**

 TVA purchased about \$1.232 billion worth of fuel, materials, and services from Tennessee vendors in fiscal year 2008 — \$1.172 billion in materials and services, \$55.4 million in fossil fuel, and \$5 million in nuclear fuel.