Tennessee Valley Authority
Annual Report on Energy Management
FY 2002

(Including Department of Energy
Reporting Guidance and Outline)

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OUTLINE AND INSTRUCTIONS FOR THE ANNUAL REPORT

I. Management and Administration. This section will describe (1) the agency's establishment of an energy management infrastructure and (2) the agency's use of management tools to implement Executive Order 13123.

A. Energy Management Infrastructure

1. Senior Agency Official. Identify the agency's senior energy official and describe the official's role and responsibilities.

LeAnne Stribley is the designated senior energy official and Executive Vice President of Administration.

Stephen L. Brothers is the manager of the TVA Internal Energy Management Program (IEMP).

2. Agency Energy Team. Identify the members of the team and describe the team's responsibilities.

TVA formed the Agency Energy Management Committee (AEMC) to facilitate compliance with federal statutes, Executive Orders, federal regulations, TVA energy and related environmental management objectives, and obligations under the Environmental Protection Agency's (EPA) Green Lights Program (GL), EPA's Energy Star Buildings Program (ESB) and EPA's Energy Star Program (ESP). The AEMC serves as the agency energy team. This committee is comprised of representatives from each TVA organization responsible for energy management and associated environmental considerations in facility and general operations inside the agency. The AEMC provides an avenue for sharing lessons learned and replicating success. The members are:

- **Stephen L. Brothers, chairperson for the AEMC and manager of TVA's IEMP;**
- **William H. Lehman, Fleet Management;**
- **David R. Zimmerman, Sustainable Design;**
- **David W. Stewart, Fossil;**
- **J. Darlene Keller, Facilities Management Environmental;**
- **William R. McNabb, Facilities Management O&M;**
- **Jay T. Grafton, Nuclear;**
- **Boyd R. Edging, Nuclear alternate;**
- **Teresa S. Wampler, River System Operations and Environment;**
- **David R. Dinse, Public Power Institute;**
- **Tommy K. McEntyre, River Operations;**
- **Bryan H. Jones, Information Services;**
- **Carolyn B. Marvel, Fossil alternate;**

- **David A. Gordon, Heavy Equipment;**
- **Thomas M. Alford, Chief Financial Officer representative;**
- **Barry M. Gore, Transmission and Power Supply;**
- **V. Edward Hudson, Demand Side Management Program;**
- **David R. Chamberlain, Customer Service and Marketing;**
- **Tina I. Broyles, Transmission and Power Supply alternate;**
- **Mary H. Moore, General Counsel; and**
- **Sherri R. Collins, General Counsel.**

B. Management Tools

1. **Awards (Employee Incentive Programs).** Describe the agency's use of employee incentive programs to reward exceptional performance in implementing Executive Order 13123.

   TVA utilizes pay for performance as one method to reward employees' efforts toward meeting agency goals. One of the benefits to TVA's agency goals is savings attributed to the implementation of cost effective energy and related environmental projects.

2. **Performance Evaluations.** Describe agency efforts to include successful implementation of provisions of Executive Order 13123 in the position descriptions and performance evaluations of senior energy officials, members of the agency energy team, heads of field offices, and facility/energy managers.

   To the extent to which employees are responsible for activities that are related to the objectives of Executive Order 13123 (E.O. 13123), their job descriptions contain reflective line items and their performance is evaluated in terms of the extent to which they accomplish such goals.

3. **Training and Education.** Describe activities undertaken to ensure that all appropriate personnel receive training for energy management requirements. (Note: The number of employees trained will be reported on the agency's Data Report and Energy Scorecard. Expenditures on training will also be reported on the Data Report). Describe agency outreach programs that include education, training, and promotion of ENERGY STAR® and other energy efficient products for Federal purchase card users.

   TVA uses various training methods to accomplish objectives of the IEMP. Information updates are provided on current federal requirements and regulations to employees, managers, and TVA customers upon request. Energy management and associated environmental training is provided to managers and employees as needed. Employee awareness activities are used to educate employees on how they impact energy consumption and the environment through their daily activities at work and home. TVA also educates staff on energy and environmental related topics through the TVA University.

4. **Showcase Facilities.** Highlight exemplary new or existing facilities that the agency has designated Showcase Facilities in FY 2002. Describe why the facilities are considered Showcase Facilities (i.e., discuss the facility design, the improvements made in energy or water efficiency, the use of renewable energy, etc.).

The TVA Chattanooga Office Complex (COC) continues to be TVA's designated Showcase Facility. The COC was completed in 1986 and encloses approximately 1.2 million square feet of floor area, and is made up of five interconnected buildings (Signal Place, Lookout Place, Blue Ridge, Missionary Ridge, and Monteagle Place). It integrates the use of passive energy strategies, energy management practices, and environmental programs and activities. Occupants' daily activities have been recognized as a major component in facility performance. Energy and environmental awareness programs have been established to inform the occupants of the impacts their actions have on this performance. The combinations of original design elements, energy and environmental activities, and aggressive energy reduction operation and maintenance efforts have resulted in the COC becoming a model facility.

ENERGY MANAGEMENT AND ASSOCIATED ENVIRONMENTAL EFFORTS

Energy consumption in the COC exceeds TVA's target for facility design and the FY 2010 building energy reduction goal established in E.O. 13123. This low energy consumption rate supports the reduction of CO_2 and other environmental impacts at the source.

Since initial construction, additional energy and environmental improvements have been implemented in the COC. One of these improvements was the design and installation of a chilled and hot water storage system for the COC and Monteagle Place (MP) buildings. The system allows the two buildings, through a symbiotic relationship, to better use site energy and reduce the need for source energy.

COC Original Design Features

- **VAV air handlers with full economizer capabilities.**
- **Energy Management and Control System (HVAC, Lighting, Fire).**
- **Heat recovery from MP chillers.**
- **Approximately 30 footcandles of ambient lighting supplemented with task lighting.**
- **Renewable energy attributes such as daylighting.**
- **Thermal storage through structural and fluid mass.**

Additional Improvements

- **Chilled water crossover piping allows the COC and adjacent facility to share chilled water and run the most efficient mix of chillers.**
- **Water fountains are heated and cooled through heat exchangers to better manage temperature and humidity in the building.**
- **Motion sensors and timers have been installed in the COC (i.e., conference rooms, restrooms, enclosed offices, closets, etc.).**
- **LED exit lights have been installed.**
- **Energy efficient lighting has been added.**
- **COC storage tanks are used for chilled and hot water storage (3 x 19,000 gallons).**
- **Heat exchangers and chilled water were used to cool the secondary water loop allowing the abandonment of rooftop evaporative coolers and associated fans, motors, and sump heaters.**
- **Equipment (i.e., fixtures, motors, ballasts, etc.) was upgraded to energy efficient models as failures occurred.**
- **VFDs and energy efficient motors have been installed on all large air-handling units.**
- **The energy management system has been upgraded to be more user friendly.**
- **Chiller efficiencies have been evaluated so the most energy efficient mix of chillers can be run for operating conditions.**
- **Upgrading to more energy efficient equipment is evaluated during modifications (fixtures with T-8 lamps and electronic ballasts, etc.).**
- **Energy efficient motors are installed where applicable.**
- **During purchase of replacement parts, energy efficient and environmentally friendly materials were ordered and stocked.**
- **Chillers have been retrofitted to accept non-CFC refrigerant.**
- **Energy Star equipment was installed where applicable.**
- **Building entry air locks with automated doors have been installed to reduce the infiltration of outside air.**

ENVIRONMENTAL PROGRAMS AND ACTIVITIES

TVA demonstrates a commitment to environmental stewardship through the implementation of its environmental programs and activities at the COC. Examples of these efforts include, but are not limited to, toxic reduction, affirmative procurement, waste minimization, and recycling.

Toxic Reduction

TVA continues its efforts to reduce the amount of toxic chemicals used in its operation and maintenance activities for the building. The volume of toxic chemicals purchased in corporate office buildings has been reduced by over ninety percent since 1994. The COC is the largest single contributor to this effort.

Affirmative Procurement

TVA reduces environmental impacts at the COC and other facilities through affirmative procurement of materials with recycled content. During FY 2002 TVA purchased $2.7 million of materials meeting guidelines established under the Resource Conservation and Recovery Act (RCRA) and $61.2 million of other recycled content materials. This is a substantial increase over last year's purchases.

Waste Minimization and Recycling Programs

TVA is a Federal Charter Partner in the EPA "WasteWise Program." Through this program, TVA has made a commitment to achieve results in three areas:

1) **Waste prevention;**
2) **Collection of recyclables; and**
3) **Use of recycled materials.**

This aligns with TVA's mission of stimulating economic growth by protecting the Tennessee Valley's natural resources and building partnerships for the public good. TVA has established the Solid Waste Leverage Team and a Solid & Hazardous Waste Regulatory Policy Team to support the "WasteWise Program."

During FY 2002 TVA generated 12,399 tons of solid waste which includes corporate facilities such as the COC. TVA partners with a nonprofit organization which trains and develops work skills in mentally and physically challenged clients. These clients, in conjunction with their respective organizations, collect, sort, and market the recycled material in the COC. In addition to the typical office waste recycling, TVA continues its efforts in recycling used batteries, fluorescent light tubes, oil, scrap metals, building materials, wood waste, and ballasts. TVA also utilizes a redeployment program which collects and redeploys used equipment and materials. During FY 2002 TVA donated or sold 550 tons of materials.

Sustainable carpet is used throughout the COC. This carpet contains and uses high performance backing made from one hundred percent recycled content. TVA has an agreement with the carpet manufacturer to recycle carpet removed from the COC which has kept used TVA facility carpet out of the landfill while saving an equivalent amount in raw materials.

5. **Other Energy and Related Environmental Initiatives.** Highlight new or existing energy and related environmental initiatives that the agency has accomplished in FY 2002. Provide a brief description of these initiatives.

INDUSTRIAL INITIATIVES

TVA provides an initiative for its direct-served and distributor-served industrial customers, which focuses on providing solutions to energy-related problems in the manufacturing environment. TVA works with clients to help them identify and solve problems related to their use of energy such as manufacturing processes, environmental issues, and plant operations. The targeted segments, such as the textile and food processing industries, are selected because of the large presence of such industries in the TVA service area, high energy usage, or the availability of solutions for their existing problems. The TVA industrial marketing managers mainly rely on in-house expertise, but sometimes bring in consultants to assist these industrial clients.

As a prime example of TVA energy assistance to a major industrial customer, TVA representatives developed and co-chaired an in-house energy conservation team to identify and implement energy cost savings opportunities at the Saturn Spring Hill automobile assembly plant. The team achieved savings in excess of $1 million in 2002 and about $3 million since the beginning of the initiative three years ago. Using a similar approach, TVA has identified energy savings of over $2.5 million at the Athens, Alabama, Delphi plant. During FY 2002, TVA's Energy Services group completed a lighting and steam upgrade project which will result in utility savings in excess of $1 million per year.

COMMERCIAL INITIATIVES

TVA works with Tennessee Valley commercial and institutional customers to provide solutions to their energy-related problems and to encourage the selection of energy efficient equipment. For example, TVA is working with schools, governments, offices, retail, healthcare, and other commercial segments to provide information on the various energy options available to them. As part of that effort, TVA provides feasibility studies conducted by independent private sector professional engineers, to compare different types of systems on a life-cycle-cost basis. Also, if the customer is interested in closed loop geothermal heat pumps, TVA will provide test bores and thermal conductivity tests at the proposed project site to assist with the design of the ground heat exchanger. Furthermore, TVA sponsors continuing education for Tennessee Valley architects and engineers on the proper design and application of geothermal heat pumps. In the TVA service area, there are approximately 154 geothermal systems installed or in design as the result of TVA's promotion of this energy efficient technology. Demand for TVA assistance to commercial customers on energy-related problems continues to grow.

RESIDENTIAL INITIATIVES

TVA and power distributors have a long history of residential energy-efficiency programs for the Valley. These programs are marketed under the brand name *energy right*®. In order to make *energy right*® more effective, TVA and the power distributors redesigned the program in 2002. Changes were implemented June 1 and included reduced costs, streamlined processes, and greater local flexibility for the power distributors. The program was also expanded to include small businesses which use unitary heat pumps and residential-size water heaters.

About 150 distributors participate in the various initiatives from the *energy right*® Program. These initiatives are described below:

New Homes Plan **promotes all-electric, energy-efficient new homes. All homes built *energy right*® must meet a minimum rating in overall energy efficiency. Homes built at least fifteen percent better than the minimum rating, qualify as *energy right*® Gold, and those built thirty percent better qualify as *energy right*® Platinum.**

Heat Pump Plan **promotes the installation of high efficiency heat pumps in homes and small businesses. Installation, performance, and weatherization standards have been established to ensure the comfort of the customer and the proper operation of the system. A Quality Contractor Network has been established for maintaining high installation standards. Through a third-party lender, TVA provides ten year financing for residential heat pumps with repayment through the consumer's electric bill.**

Water Heater Plan **promotes the installation of energy-efficient electric water heaters in homes and small businesses.**

New Manufactured Homes Plan **promotes the installation of electric heat pumps in new manufactured homes.**

In Concert With The Environment **(in partnership with Nexus Energyguide) is a comprehensive environmental and energy education program directed to middle school and junior high school students. Student participants receive an energy survey to complete for their households. The results from the survey, indicate the home's estimated annual and monthly energy usage by appliance and gives a number of energy, environmental and water recommendations for the student and their family to implement.**

energy right Home e-valuation® **(in partnership with Nexus Energyguide) allows residential customers to play an active role in saving energy in their homes. After completing an energy survey, customers receive a personalized report that breaks down the home's annual and monthly energy usage by appliance, and gives a number of energy recommendations as well as**

information about distributor products and services.

More information is available at the *energy right*® website (www.energyright.com)

DEMAND SIDE MANAGEMENT

TVA and fourteen of its power distributors are involved in a Direct Load Control program. This program involves power distributors installing radio controlled switches on their customer's air-conditioners and waters heaters. During peak demand periods TVA is allowed to curtail the power to this equipment. The power distributors receive a bill credit for each operable switch. The participating power distributors are allowed to determine the type of incentive given to their customers. Currently TVA can curtail approximately 50 MW of load upon demand.

PUBLIC POWER INSTITUTE

As a national leader in demonstrating the value of public power, TVA created the Public Power Institute (PPI) to develop and implement solutions for energy, environmental and economic issues through 21st century technologies.

The technology focus areas for PPI are: Biomass and Renewables; Clean and Advanced Energy; Environmental Impacts and Reduction; and Energy Use and Industrial Ecology.

TVA's PPI promotes the value of public power in a competitive marketplace by:

- **Using TVA facilities as a living laboratory to test new energy technologies;**
- **Showcasing technologies that benefit the public; and**
- **Providing scientific input on regulatory and public policy issues.**

The institute serves both as a research laboratory seeking new ways to achieve sustainable power production and as a public policy clearinghouse for energy and environmental issues. PPI represents the vision and ultimate mission of public power: to put the public good first and to emphasize long-term benefits over short-term gains.

PARTNERSHIPS

Recognizing that the PPI's ability to accomplish its mission is largely dependent upon partners, PPI collaborates with others, including federal, state, local, private, not-for-profit, and educational entities. These

collaborative efforts allow for the development of technologies for power production, power delivery, and power use. The following are the major partnerships that leverage external expertise and promote cooperation between the public and private sectors.

Utility-Related Organizations:

- **Large Public Power Council**
- **East Kentucky Power Cooperative**
- **Tennessee Valley Public Power Association (TVPPA)**
- **American Public Power Association (APPA)**
- **National Rural Electric Cooperative Association (NRECA)**

Research Organizations and Partnerships:

- **National Farmers Union**
- **Alabama Farm Bureau**
- **Alliance to Save Energy**
- **BP Amoco**
- **Consumer Energy Council of America**
- **Corporate Executive Board**
- **Solar Electric Power Association**
- **Coal Utilization Research Council**
- **Electricity Storage Association**
- **Environmental and Energy Study Institute**
- **Electric Power Research Institute (EPRI)**
- **Environmental Technology Evaluation Center (EvTEC)**
- **Oak Ridge National Laboratory (ORNL)**
- **U.S. Department of Energy(DOE)**
- **U.S. Department of Agriculture**
- **U.S. Department of Defense**
- **Geothermal Heat Pump Consortium**
- **Southern Coalition for Advanced Transportation**
- **Electric Vehicles Association of America**
- **U.S. Department of Transportation**
- **American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)**

Universities:

- **UT Space Institute**
- **Mississippi State University**
- **Tennessee Technological University**
- **Tuskegee University**
- **University of Alabama**
- **University of Kentucky**
- **University of Tennessee at Chattanooga**
- **University of Tennessee at Knoxville**
- **Vanderbilt University**

PPI helps TVA fulfill its commitment to provide competitively-priced and reliable power while promoting environmental stewardship and economic development. The PPI is positioned today to help develop, demonstrate, and deploy new energy-related technologies for a better tomorrow.

PPI RECENT HIGHLIGHTS/ACCOMPLISHMENTS

New Technologies Demonstrated – PPI's Technologies Demonstrated Indicator is a measure of the number of research and development technologies which are demonstrated for the first time at TVA facilities, at customer sites (distributor, directly served, and consumer), and through partnerships and collaborations.

1. **Soybean-Based Electric Distribution Transformer Oil – BioTrans - BioTrans was developed and patented by Waverly Iowa Light & Power as a soybean electric distribution transformer oil with assistance from the American Public Power Association. Nashville Electric Service (NES) is presently implementing a 24-month demonstration project of transformers filled with BioTrans. Three additional distributors of TVA Power, Appalachian Electric Coop., Athens, Tennessee, Utility Board, and Gibson EMC, have started parallel demonstrations.**

2. **Mini SODAR Technology for Augmenting Wind Tower Measurements – This project involves using a technology originally developed to measure winds with helicopters hovering nearby. The system utilizes a high frequency acoustic signal to track the winds and was adapted to provide detailed information for wind energy systems.**

3. **Thermal Conductivity Mapping for Geothermal Heat Pumps – A CD-ROM was developed that contains thermal conductivity test data for 89 sites in the Tennessee Valley overlaid on a geology map. This data will assist the private sector professionals in designing large commercial geothermal heat pump systems.**

4. **Hydrogen Power (H Power) Fuel Cell - A 500 watt Polymer Electrolyte Membrane Fuel Cell system manufactured by HPOWER Corporation was operated on a hydrogen fuel source and demonstrated on site at the University of Tennessee and at a TVA distributor's facilities in Shelbyville, Tennessee.**

5. **Kleenwell Process to Clean Landfill Wells – This project demonstrated a technology to increase the production of methane from existing landfill gas (LFG) wells. TVA uses LFG wells as part of the Green Power Switch program.**

6. **Roofing Integrated Photovoltaics with Net-metering Alternative – In a joint partnership with ORNL, DOE, and Habitat for Humanity, the first of a series of state-of-the-art energy-efficient Habitat homes was completed in Loudon County, Tennessee. This initial home introduces the Zero Energy Building (ZEB) concept by featuring the first utility-interactive PV system that could qualify for TVA's proposed Green Power Switch® Generation Partners demonstration. Total estimated capacity of the home generation system is 2 kW.**

TVA-Wide New Technologies Implemented - The TVA–Wide Technology Implementation Indicator is a measure of the number of new technologies which TVA organizations have implemented or applied for the first time (as part of normal operations).

1. **UVGI technology – The Ultraviolet Germicidal Irradiation (UVGI) technology to kill air-borne tuberculosis (TB) and other bacteria was installed in a TVA-served distributor's office resulting from a demonstration at the Memphis/Shelby County Jail.**

2. **eScan – eScan diagnostic technology was developed and implemented to pinpoint ductwork problems and problems in the operation of heating, ventilation and air conditioning systems.**

3. **Selective Catalytic Reduction (SCR) Technology – The SCR technology achieves high reductions in nitrogen oxidethen (NOx) emissions from high temperature combustion operations, including power plants. In the SCR system, gaseous ammonia is injected into the flue gas and the resulting mixture passes through several layers of catalyst. In the presence of the catalyst, the ammonia reacts with the NOx to form nitrogen and water, which then pass out the stack. The relentless ratcheting down of the allowable NOx emission rate from power plants, particularly during ozone season, has mandated the installation of these SCR systems on most coal-fired boilers in the Eastern US.**

Other Current Activities

- **Development and commercialization by TVA and ORNL of the frostless heat pump.**
- **Partnered with ORNL, DOE and others to develop a revolutionary hybrid lighting concept that integrates light from both solar and electric sources.**
- **Developed TVA's Draft Renewable Energy Policy in consideration of TVA renewable energy activities.**
- **Demonstrating passive treatment of high-acidity and high-iron coal ash leachate at a TVA fossil plant.**
- **Involved in multi-organizational public and private partnerships to demonstrate and evaluate alternative fueled vehicle (AVF) options**

within the Great Smoky Mountain National Park and other national parks.

- **Leading a partnership with NPS/DOE/EPRI to study fine particulate loadings in the Great Smoky Mountains National Park.**
- **Participating in flue gas mercury speciation tests as part of the joint EPRI/DOE/EPA test program to determine if SCRs change the state of the mercury to a form that can be removed by wet limestone scrubbers.**
- **Completing a 16-year performance evaluation and a survey of passive TVA constructed wetlands technologies for acid drainage treatment.**
- **Characterizing fate and form of ammonia in ash sluice water derived from Selective Catalytic Reduction systems at a fossil plant.**
- **Continued microturbine testing/demonstration program (30 kW Capstone and 60 kW Capstone).**
- **Completed computer simulation phase of novel, low temperature power cycle technology development, then submitted the patent and began engineering design of demonstration pilot plant.**
- **Began construction of the United States' first large scale (12 mW) energy storage facility using Regenesys Technology.**
- **Cooperated with Voith Hydro, Inc. in establishing and operating Hydro Resource Solutions, LLC, a Tennessee limited liability company which develops and markets energy efficiency enhancing hardware and software for the hydro power industry.**
- **Initiated a joint DOE, EPRI, and TVA project, the Carbon Capture and Water Emissions Treatment System (CCWESTRS), which will demonstrate integration of fossil power plant operations with terrestrial carbon sequestration technologies.**
- **Evaluating and demonstrating Demand Side Management (DSM) initiatives to prepare for future changes in the energy and market place. Demonstrations underway include:**
    - **Uptown Memphis Green Buildings;**
    - **Net Zero Energy Building Demonstration;**
    - **Price Response Load Management demonstration/evaluation;**
    - **"Energy Efficiency Education" market transformation initiative**
    - **with the State of Tennessee; and**
    - **Efficient technology demonstration for wastewater treatment.**
- **Increased nuclear electrical generation by 11.6 MW by installing more accurate feed water flow instrumentation.**

II. Energy Efficiency Performance. This section will highlight data calculated for reporting on the Data Report and the Energy Scorecard. The purpose of the section is to provide narrative information in support of these data. For units and conversion factors see Attachment 7.

A. Energy Reduction Performance

Site-Delivered vs. Source Energy—The factors used for converting the reporting units to Btu have a significant impact on how performance toward the energy efficiency goals and other goals of E.O. 13123 are measured. "Energy use" is defined as the energy that is used at a building or facility and measured in terms of energy delivered to the building or facility. Recognizing this, OMB and DOE will use Btu based on the site conversion factors for both electricity and steam as the primary measure of performance. However, because carbon emissions are generally proportional to source energy use, reductions in source Btu will also be considered more seriously than in the past.
The conversion factor for electricity of 3,412 Btu per kilowatt hour, the rate of consumption by the end-user on site, will be used for measuring performance. The difference between the site conversion rate and the estimated source conversion rate of 10,346 Btu per kilowatt hour is attributable to transmission and conversion losses associated with electric generation. The site conversion factor for purchased steam is 1,000 Btu per pound. Generation inefficiencies and distribution losses are included in the source conversion factor of 1,390 Btu per pound. Separate tables showing agency consumption using the source conversion factors for electricity and steam, along with estimated carbon emissions, will be included in DOE's Annual Report to Congress.

TVA's facility inventory and the type of activities these facilities are used for continues to evolve as the agency faces new challenges. This facility information is updated through the AEMC. The AEMC remains the focal point for disseminating energy and related environmental information to TVA organizations and employees and implementing TVA's Energy Plan (see Attachment 8). The AEMC is also responsible for the development of TVA's Implementation Plan (see Attachment 6). To benchmark success the AEMC utilizes many tools including the Energy Scorecard (see Attachment 2). The AEMC allows representatives to voice problems in meeting regulations and goals and share success stories which can then be applied throughout TVA. To benchmark success the AEMC uses many tools including the

TVA NEW BUILDING DESIGN

TVA is designing new buildings to not only meet energy efficiency standards but also sustainable standards. Technologies such as daylighting, passive solar heating, geothermal heat pumps, advanced controls and non-toxic, recycle-content building materials are being incorporated into new building designs. Following are new and proposed buildings:

Location	Project Name	Cost (000's)
Sequoyah	Constructed 15k square feet of multipurpose shop and office space and replaced 20k sq ft of temporary space	650
Browns Ferry	Constructing new 80k sq ft Administration building, eliminates 90k sq ft of inefficient space and replaces with efficient structures	10,000
Watts Bar	Complete remodel of Engineering Quality Building, utilizing all energy efficient lighting and HVAC	2,300
Johnson City, TN	Complete design on Johnson City Customer Service Center	3,500

TVA FACILITY IMPROVEMENTS

TVA implements various energy efficiency improvements in its facilities. Some examples of typical energy reduction improvements are as follows:

- **Laboratory exhaust hoods have been equipped with Variable Speed Drives to reduce exhaust requirements when hoods are not being used;**
- **Air handlers have been equipped with variable speed drives to reduce makeup air to laboratory space when the exhaust hoods airflow is at a reduced level;**
- **Heating, ventilating, air conditioning, and exhaust hood systems have been added to TVA's Energy Management and Control System;**
- **Energy Management Control Systems have been added to control heat pump heating and cooling systems;**
- **Variable Frequency Drives have been added to building heating, ventilating, and air conditioning units;**
- **New lighting systems using T-8 lamps, electronic ballasts and motion sensors have been installed in many existing buildings;**
- **New high efficiency heat pump systems have been installed in many buildings; and**
- **Existing air handlers have been rebuilt to improve efficiency.**

OPERATION AND MAINTENANCE ACTIVITIES FOR BUILDINGS

TVA continues to improve its energy efficiency and environmental stewardship through operation and maintenance activities. The following is a list of operation and maintenance practices and activities for FY 2002:

- **Recycle scrap metals, used oil, substation and communication station service batteries, and storm damaged or deteriorating steel structures;**
- **Recycle expired fluorescent lamps;**
- **Recycle or reuse waste material when feasible;**
- **Educate employees on energy efficiency;**
- **Encourage employees to implement energy efficient ideas and practices;**
- **Turn off equipment when not needed;**
- **Have custodians turn off building equipment after cleaning;**
- **Clean lamps, fixtures, and diffusers;**
- **Use the most efficient lamps available (i.e., screw-in fluorescent, screw-in halogen, screw-in high pressure sodium, energy efficient fluorescent lamps, etc.);**
- **Reduce lighting levels where light output exceeds requirements for the space;**
- **Install motion sensors to control lighting in rooms where economical (offices, restrooms, conference rooms, etc.);**
- **Install light switches or motion sensors in areas not currently controlled;**
- **Disconnect unnecessary lamps and ballasts;**
- **Disconnect unnecessary transformers;**
- **Install energy efficient electronic ballasts;**
- **Perform group relamping;**
- **Install photocell control on outdoor lighting;**
- **Rewire lamps to permit shutoff of unneeded lights;**
- **Minimize the number of ballasts installed (use a four-lamp ballast for two adjacent two-lamp fixtures);**
- **Revise building operating procedures for efficiency and cost;**
- **Install programmable thermostats and use the night and weekend setback features to reduce energy use during unoccupied periods;**
- **Set thermostats in mechanical rooms and unoccupied areas so the least amount of energy will be used without causing the equipment to deteriorate;**
- **Verify and calibrate all controls periodically, including time clocks;**
- **Keep all outside doors and windows closed when heating or cooling, using vestibules properly;**
- **Keep garage and warehouse doors closed as much as possible while heating or cooling;**
- **Replace broken windows;**
- **Replace missing insulation;**
- **Add caulking where necessary;**
- **Replace worn weather-stripping on windows and doors;**
- **Reduce the amount of infiltration air where possible but always meet fresh air requirements;**
- **Eliminate ventilation during unoccupied hours;**
- **Operate exhaust fans only when required;**
- **Verify that all outside air dampers are operating properly;**
- **Operate HVAC in economizer mode when conditions are favorable;**
- **Eliminate ductwork leaks;**
- **Reduce ductwork and piping resistance where possible;**
- **Avoid heating and cooling at the same time;**

- **Change filters as recommended;**
- **Clean HVAC coils;**
- **Test and balance HVAC systems;**
- **Optimize chiller operation;**
- **Recycle waste heat when feasible;**
- **Lower domestic hot water temperature;**
- **Repair hot, chilled, or domestic water leaks;**
- **Cut off nonessential gas to buildings during the summer;**
- **When replacing motors, use properly sized energy efficient motors;**
- **Balance three-phase loads;**
- **Use cog-type belts for higher efficiency;**
- **Eliminate steam trap leaks; and**
- **Properly insulate hot water and steam lines to reduce energy loss.**

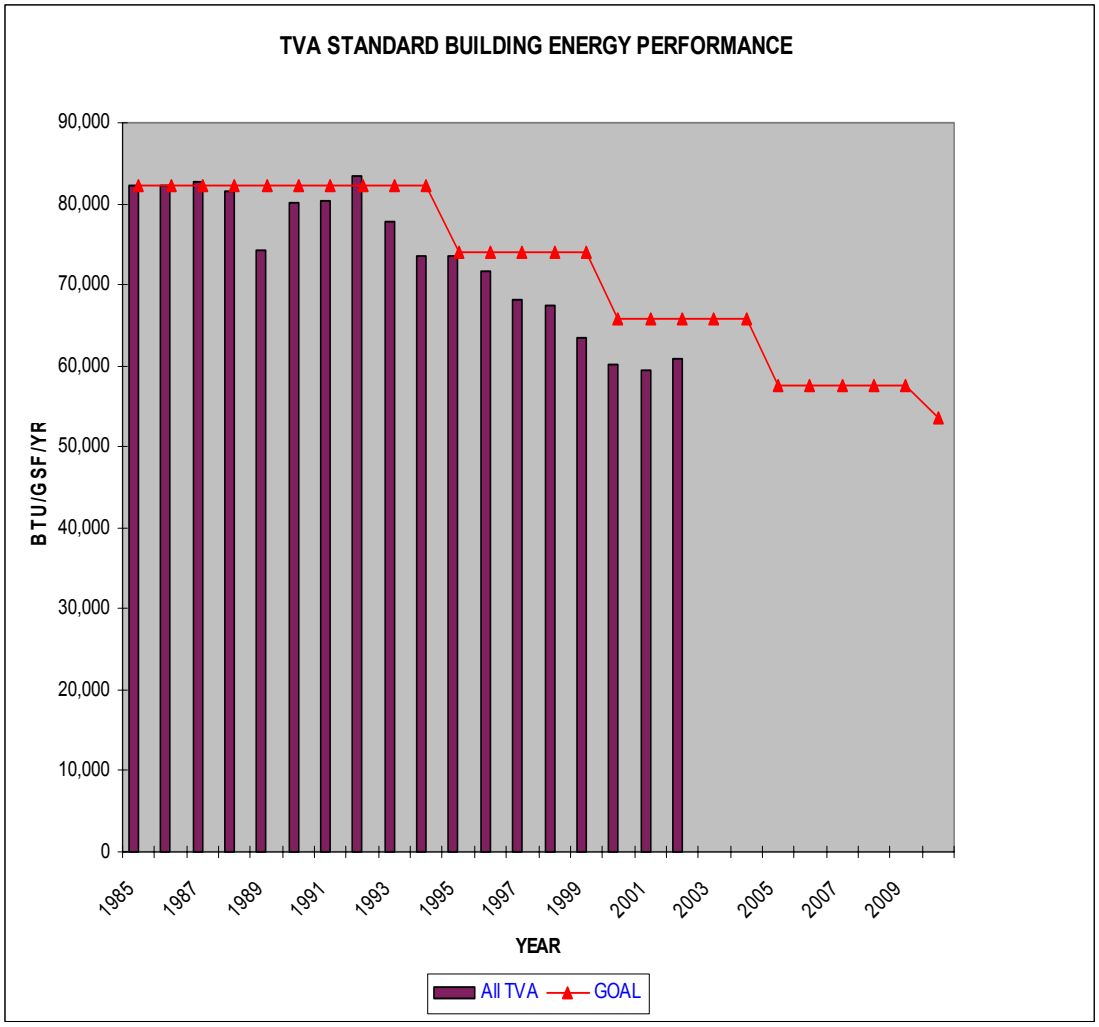
1. **Standard Buildings.** Report energy use for standard buildings in units of Btu-per-gross-square-foot (Btu/GSF) for FY 1985 (the base year) and FY 2002. Report the percent change from FY 1985 and from the FY 2001. (Note: This information will be reported on the agency's Energy Scorecard). Discuss any extenuating factors that may be skewing the accuracy of this performance measure.

Leased Spaced—Each agency that controls its Federally-owned building space or directly pays the utilities in its leased space will report to DOE the agency's aggregate energy consumption for various fuel types (see Data Report instructions). Reporting on leased buildings may pose some difficulty depending on the nature of the lease (partially serviced, fully serviced). In cases where an agency is responsible for paying utility bills for space that is leased, the agency is expected to report energy consumption for the leased space to DOE. If an agency is leasing from the General Services Administration, GSA is responsible for reporting.

Delegated Space—Agencies that have been delegated responsibility by GSA for operation and maintenance of buildings they occupy are required to report, to DOE, energy consumption for these buildings during the years the buildings are under their control. An agency should *not* adjust the FY 1985 baseline to reflect the addition of buildings delegated by GSA if those buildings were not under the agency's control during the base year period. The FY 1985 consumption and square footage of any building delegated after FY 1985 is included in GSA's FY 1985 baseline. To also include this square footage and consumption in the agency's baseline would result in double reporting. The impact of delegation activity on the Btu/GSF rates of most agencies should be minimal. In cases where building delegations account for a large increase in the percentage of an agency's building inventory and its Btu/GSF is greatly impacted, this situation will be documented in the text of DOE's Annual Report to Congress.

Lack of Base Year Data—Comparisons to a FY 1985 base year will not be possible for agencies that had no buildings under their control during the base year. Where comparisons to the FY 1985 base year are not possible, that specific item in the data table will be footnoted as "not applicable" in the report. In order to maintain accurate data and comply with the legislation, FEMP will work with relevant agencies to determine alternative approaches that would minimize double counting, but provide comparative information on Btu/GSF consumption.

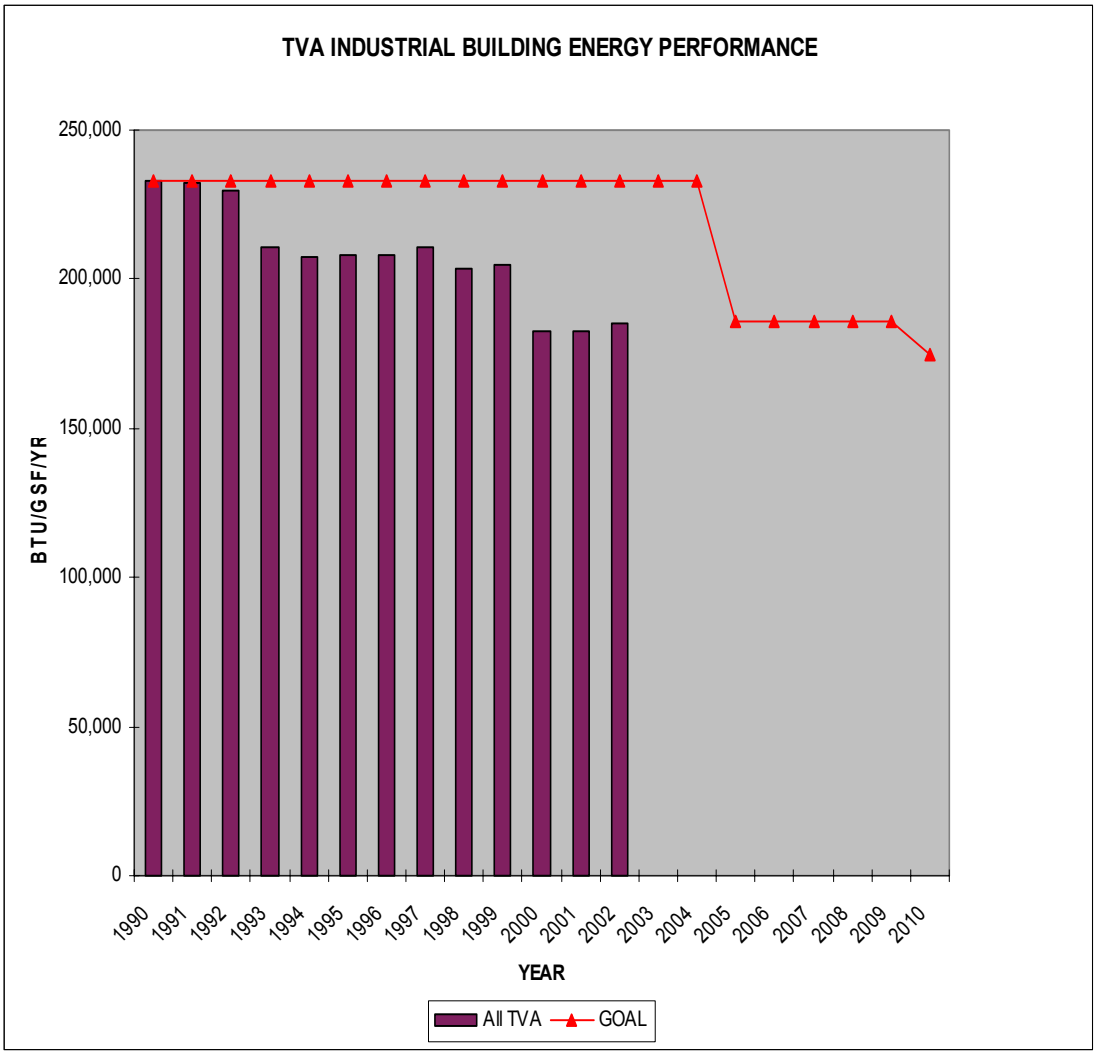
TVA continues to reduce energy use in its facilities through the coordination of energy management efforts. TVA has ended FY 2002 with a Btu/GSF of 60,776 which is a twenty-six percent reduction from FY 1985. TVA is on track for meeting the thirty percent reduction goal of E.O. 13123 for FY 2005.



2. **Industrial and Laboratory Facilities.** Identify the facility inventory subject to this goal, referencing Section IV, Part D that lists the buildings included. Describe the performance measure(s) used (Btu/square foot, Btu/production unit, etc.). (Refer to FEMP web site for the guidance document *Section 203 Performance Goals for Industrial, Laboratory, Research, and Other Energy-Intensive Facilities* www.eren.doe.gov/femp/resources/indust.html).

   Report energy use (in the designated performance measure) for industrial and laboratory facilities for FY 1990 (the base year) and FY 2002. Report the percent change from FY 1990 and from the FY 2002. (Note: This information will be reported on the agency's Energy Scorecard). Discuss any extenuating factors that may be skewing the accuracy of this performance measure.

   TVA has ended FY 2002 with a Btu/GSF of 185,536 which is a twenty percent reduction from FY 1990.



3. **Exempt Facilities**. Refer to Section IV E—a list of exempt facilities and an explanation of why they were exempted. (Refer to DOE's *Criteria for Exempting Facilities from the Goals of Executive Order 13123 and Guidance for Reporting Exemptions* www.eren.doe.gov/femp/resources/criteria.html).

Although buildings found exempt according to the criteria are not subject to the requirements of Sections 202 and 203 of Executive Order 13123, DOE will continue to collect energy consumption data for these buildings under the new reporting category of "Exempt Buildings." This ensures that accurate reporting on overall Federal energy consumption is maintained.

TVA has a long history of demonstrating stewardship toward energy reduction and will continue to work toward reducing energy use in its generation, transmission and related energy intensive buildings. Energy reduction in these buildings has become increasingly more difficult given the majority of the energy consumption in these buildings is largely attributed to process energy (generation and transmission of electricity). In recognition of the above and the fact that only so much can be done to make these buildings more efficient in a cost effective manner, TVA, in discussion with DOE has decided to exempt these buildings. Attachment 5 contains a list of TVA's exempt facilities.

The following is a list of projects implemented in FY 2002 or planned for future implementation related to energy/water efficiency and sustainability in these exempt facilities.

TRANSMISSION POWER SUPPLY EFFICIENCY

TVA's Transmission Power Supply staff considers energy efficiency and environmental impacts for each project and activity. Following is a list of activities which have been completed in FY 2002:

- **Installed new capacitor banks in Centre, East Centre, Arab Primary and Albertville reducing the amount of reactive power.**
- **Removed capacitor banks and reactive power at twelve substations to increase efficiency.**
- **Replaced switchgear with more efficient equipment at the Alcoa Switching Station.**
- **Retired a 161/69 transformer at Pineville to improve efficiency.**
- **Removed transformers, breakers and capacitor banks at 20 substations and recycled more than 253,000 gallons of oil.**
- **Installed new metering systems which use only one support board instead of two boards.**
- **Have been installing steel poles instead of wood reducing the number of trees cut. Have also replaced 1,676 existing wood poles with steel poles.**
- **Installed over 3000 steel cross arms for failing wooden cross arms.**
- **Installed automatic controls to cycle fans at the Madison substation.**
- **Installed heat pumps in most substations.**
- **Smaller modular switchouses which are more energy efficient are now being installed instead of the old block switchouses of the past.**

HYDRO EFFICIENCY

TVA's River Operations staff considers energy efficiency and environmental impacts for each project and activity. TVA has cooperated with Voith Siemens, in establishing and operating Hydro Resource Solutions, LLC, a Tennessee limited liability company, which develops and markets energy efficiency enhancing hardware and software for the hydro power industry. The majority of projects completed at TVA hydro plants in FY 2002 pertain to energy management; however, the environmental impact and associated cost estimates are included as part of the project development process. Benefits from these projects include maintaining plant availability, reducing energy consumption, lowering maintenance costs, increasing megawatt capacity for units, improving security, increasing overall efficiency, and supporting environmental stewardship. The following table contains a list of projects for FY 2002:

Plant Name	Project Name	Cost (000's)
Chickamauga	Power House Roof Replacement	680
Guntersville	Replace 480V Main Boards	130
Guntersville	Lock Electrical Service System Upgrade	198
Hydro System	Configuration Control Program	572
Hydro System	Crane Modernization Program	810
Hydro System	Hydraulic Turbine Bushing Replacement	3763
Hydro System	Hydro Efficiency Monitoring System	176
Hydro System	Gate, Guides, Seals & Trash Racks	2845
Hydro System	Remoting and Automation	11,573
Hydro System	Unwatering Pump Program	146
Hydro System	Modernization Program	34,043
Hydro System	Standardized Maintenance Program	136
Hydro System	Switchyard Oil Containment	99
Hydro System	480V Breaker Rehab	156
Melton Hill	Unit 2: Replace Stator Winding	513

Melton Hill	**Unit 2: Replace Generator Leads**	**195**
Melton Hill	**Unit 1: Replace Stator Winding**	**393**
Ocoee	**Unit 3: Replace Stator Winding**	**457**
Pickwick	**Unit 3 & 4 Shaft Replacement**	**767**
Raccoon Mountain	**Units 1-4: Capacity Upgrade**	**16,072**
Wheeler	**Bank 2 Transformer Replacement**	**2354**
Wilson	**Unit 19: Purchase & Install Stator Winding**	**701**
Wilson	**Repair/Rewind Bank 11 Transformer**	**248**
Upgrade Hydro Plant	**Battery Systems**	**349**
	Total All Projects	**77,376**

NUCLEAR EFFICIENCY

TVA Nuclear considers energy efficiency and environmental impacts for each project and activity. Many projects were initiated or completed in FY 2002 to maintain plant availability and increase electrical generation. The following is a list of energy management and related environmental projects at TVA Nuclear plants in FY 2002.

NUCLEAR ENERGY PROJECTS COMPLETED IN FY 2002

Plant Name	Project Name	Cost (000's)
Watts Bar	**Improve Unit 1 heat rate by replacing moisture separator reheater high pressure operating vent line.**	**2,126**
Watts Bar	**Improve Unit 1 heat rate by improving steam generator blowdown flow control.**	**279**
Sequoyah	**Installation of more Accurate Feedwater Flow Instrumentation (2 Units) (11.6 MWe)**	**5,072**
Sequoyah	**Main Generator Rotor Rewind**	**2,929**
	Total All Projects	**10,406**

NUCLEAR ENERGY PROJECTS IN PROGRESS IN FY 2002

Plant Name	Project Name	Cost (000's)
Browns Ferry	Reduce Unit 2 energy use 4 MW by installing reactor recirculation pump variable speed drives	5,871
Browns Ferry	Reduce Unit 3 energy use 4 MW by installing reactor recirculation pump variable speed drives	5,206
Browns Ferry	Increase Unit 2 and 3 electrical output by 110 MW/Unit.	97,615
Sequoyah	Improve Unit 1 heat rate by replacing the steam generators	155,159
Watts Bar	Improve Unit 1 heat rate by replacing the steam generators	195,405
Sequoyah	Increase Unit 1 and 2 electrical generation by replacing the high pressure turbines (13MW/Unit)	17,082
Sequoyah	Replace low pressure turbine rotors	6,596
Browns Ferry	Restart of Unit 1, 1280 MWe	1,733,400
	Total All Projects	2,216,334

FOSSIL EFFICIENCY

Many energy management and related environmental projects were completed at TVA Fossil plants during FY 2001. We support these projects which include heat rate improvements, maintaining plant availability, reducing energy consumption, lowering maintenance costs, environmental stewardship, and increasing overall efficiency. The following is a list of projects for FY 2001:

Plant	Description	Total Cost
Allen	ALF--U1-2 Control Room Air Conditioner Replace	390
Allen	ALF--U1-3 BIO-Gas Fuel Supplement	4,746
Allen	ALF--U3 IP Turbine Rotor Upgrade	1,520
Allen	ALF--Replace IK Soot Blowers & Add Electric Drives Units 1-3	3,172
Allen	ALF--Replace PCB Containing Transformers	759
Allen	ALF--U3 Replace Control Room Air Conditioner	234
Allen	ALF--Upgrade Utility #3 Elevator	250
Bull Run	BRF--Upgrade Startup Valves	928
Bull Run	BRF--Air Compressor Upgrade	176
Colbert	COF--U-5 Replace IP Turbine Impulse Blades	898
Colbert	COF--U1 Damper Drive Replacement	520
Colbert	COF--U5 Combustion Improvement Project	12,871
Colbert	COF--U5 Install Elect Governor on Turbine	850
Colbert	COF--U5 Replace Secondary Air Monitors	204
Cumberland	CUF--U2 Upgrade Damper Drives/Controls	466
Cumberland	CUF--Computer & Control Room HVAC	1,146
Cumberland	CUF--Replace PCB Containing Transformers	1,743
Gallatin	GAF--U1 HPT Control Stage Upgrade, Nozzle, Blading Replacement	760

Gallatin	**GAF--Replace PCB Containing Transformers**	**1,654**
Johnsonville	**JOF--U3 Economizer Replacement**	**1690**
Johnsonville	**JOF--U10 Economizer Replacement**	**1,226**
Johnsonville	**JOF--U6 Economizer Replacement**	**1,674**
Johnsonville	**JOF--U9 Combustion Controls**	**1,545**
Johnsonville	**JOF--Replace PCB Containing Transformers**	**4,050**
Johnsonville	**JOF--Office Building-Roof Replacement**	**317**
John Sevier	**JSF--U4 Combustion Optimization**	**300**
John Sevier	**JSF--Replace PCB Containing Transformers**	**1,687**
Kingston	**KIF--U1-9 Replace Control Room HVAC System**	**400**
Kingston	**KIF--U5 Upgrade HP Rotor**	**400**
Kingston	**KIF--U7 HP Rotor Upgrade**	**430**
Kingston	**KIF--U3 Upgrade IP Rotor**	**1,348**
Kingston	**KIF--U4 Upgrade IP Rotor**	**1,227**
Kingston	**KIF--U4 Upgrade DFLP Rotor**	**900**
Kingston	**KIF--U6 Upgrade Turbine Controls**	**400**
Paradise	**PAF--U1 HP Capacity Increase**	**6,361**
Paradise	**PAF--U2 Upgrade Stator Winding**	**3,967**
Paradise	**PAF--U1 Upgrade Stator Winding**	**6,069**
Paradise	**PAF--U2 Cyclone Fuel/Air Supply Sys Upgrade**	**3,678**
Paradise	**PAF--Replace PCB Containing Transformers**	**2,308**
Paradise	**PAF--U1 Replace Generator Current Transformers**	**174**

Paradise	**PAF--U2 Replace Generator Current**	**151**
Paradise	**PAF--U3 Replace Generator 3B Current Transformers**	**184**
Shawnee	**SHF--U5 Upgrade HP Rotor**	**845**
Shawnee	**SHF--U5 Upgrade IP Rotor**	**1,011**
Shawnee	**SHF--U5 Upgrade LP Rotor**	**1,124**
Shawnee	**SHF--U7 Upgrade LP Rotor**	**1,147**
Shawnee	**SHF--U9 U Upgrade HP Rotor**	**747**
Shawnee	**SHF--U9 Upgrade IP Rotor**	**1,099**
Shawnee	**SHF--U9 Refurbish LP Rotor**	**899**
Shawnee	**SHF--U9 Refurbish LP Rotor**	**1,099**
Shawnee	**SHF--U2 Upgrade LP Rotor**	**899**
Widow's Creek	**WCF--Replace PCB Containing Transformers- B Plant**	**1,258**
Widow's Creek	**WCF--U3 HP Rotor Refurbishment**	**342**
Widow's Creek	**WCF-- U2 X788 HP Rotor Refurbishment**	**491**
Widow's Creek	**WCF--U8 Boiler Circulator Water Pump Upgrade/Modification**	**1,133**
Widow's Creek	**WCF--U4 Replace Economizer Elements**	**1,787**
Widow's Creek	**WCF--U4 Boiler Optimization**	**568**
Widow's Creek	**WCF--U2 Boiler Optimization**	**699**
Widow's Creek	**WCF--U3 Boiler Optimization**	**797**
Widow's Creek	**WCF--U6 Boiler Optimization**	**656**
Approved changes in 09/11/2002 PRC meeting		

Colbert	**COF--Replace PCB Containing Transformers**	**3,620**
Johnsonville	**JOF--U7-10 HP Rotational Rotor Refurbishment**	**865**
Johnsonville	**JSF—Relocate/Upgrade Conveyor Electrical System**	**200**
John Sevier	**JSF--U1 Combustion Optimization**	**300**
John Sevier	**JSF--U2 Combustion Optimization**	**300**
John Sevier	**JSF--U3 Combustion Optimization**	**300**
Kingston	**KIF--Replace PCB Containing Transformers**	**6,346**
Paradise	**PAF--U3 HP Capacity Increase**	**9,962**
Paradise	**PAF--Replace Reclaim 1-4 Feeder Drives**	**200**
Widow's Creek	**WCF--Replace PCB Containing Transformers- A Plant**	**3,018**
Widow's Creek	**U2 HP Rotor Refurbishment (for U1 X918)**	**491**
Widow's Creek	**WCF--U7 Replace 7H, Rewind 7L Gen Rotors, & Replace Excitation System**	**10,477**
Widow's Creek	**WCF--U1 Boiler Optimization Retrofit**	**638**
	Total All Projects	**36,717**

4. **Tactical Vehicle and Equipment Fuel Use**. Refer to the Data Report to identify the fuel use for tactical vehicles and other equipment. Discuss trends in the use of each type of fuel and methods employed to reduce fuel use.

Vehicle Fleet Consumption—To relieve reporting burdens on Federal agencies, GSA's Agency Report of Motor Vehicle Data (Form SF-82) was revised for collecting acquisition, fuel consumption, and fuel cost data for motor vehicles directly from vehicle fleet managers. The use of the SF-82 eliminated the need to report fuel consumption data for non-tactical motor vehicles to DOE. GSA now collects this data, including alternative fuel consumption data reported under Sections 303 and 308 of EPACT, and forwards this information to DOE for inclusion in the Annual Report to Congress. For more information on the SF-82, please contact Ms. Lois Mandell of GSA's Federal Vehicle Policy Division at (202) 501-2824.

FLEET FUEL EFFICIENCY

TVA's fleet strategy is to examine current vehicle use and where possible, when vehicles need replacement, choose those that are more efficient. TVA, as a major provider of electricity will continue to make use of alternative fueled vehicles (AFVs) that use electric power and acquire additional vehicles to meet requirements under EPAct92. TVA has also recognized the value of hybrid electric vehicle technology in reducing fuel consumption, increasing versatility, and promoting electric propulsion. TVA created a hybrid-fleet program in FY 2002 which is a partnership effort between TVA's Energy Management and Fleet Management organizations. TVA added two hybrid gas/electric vehicles to its fleet in FY 2002 and has made arrangements to purchase ten more in FY 2003.

During FY 2002 TVA reduced gasoline fuel use by five percent and diesel fuel use by twenty-one percent compared to FY 2001.

VEHICLE FUEL EFFICIENCY OUTREACH PROGRAMS

TVA encourages employees to use mass transit systems, vans for group travel, and car pools, when available and feasible. The use of coordinated TVA and vendor delivery, pickup routing schedules, and just-in-time delivery has been expanded throughout TVA. This coordinated effort avoids double handling and, multiple trips to the same sites, and reduces deadheading.

TVA encourages employees to consider alternative travel to complete work tasks. These include the following telecommunications and computer technologies:

- **MeetingPlace – is an automated dialup system to arrange for people at multiple locations to meet over the phone. On average over 1,500 such meetings are held each month using this system.**
- **Conference calls – There are approximately 120 conference calls set up monthly by TVA operators.**
- **Work from home – There are approximately 4,732 employees who have dial-up access capability, meaning that these employees have the ability to conduct TVA business from their computer at home or elsewhere.**
- **Video conference rooms – TVA has 46 video conference rooms throughout the Tennessee Valley. During FY 2002, more than 25 video conferences took place in these facilities weekly.**
- **Real time document collaboration – Throughout FY 2002 TVA continued its transition to the Microsoft Windows XP operating system which provide employees the capability to collaborate in real time on a document from multiple locations.**

HEAVY EQUIPMENT

Utilization of the Total Base Number (TBN - measure of oil's alkaline) value as an oil indicator has resulted in a reduction in TVA's oil consumption due to extended oil drain intervals. Accordingly, the oil change interval in some of the smaller diesel engine has changed to 320 hours or 10,000 miles to protect TVA's equipment. Turbo pre-cleaners are being used on Tractor Scrapers and Dozers to lengthen air filter life and extent oil change interval. Air Filter Indicators used on TVA's equipment have cut down on filter changes (especially oil bath type), and additional engine protection.

TVA has expanded the Fuel Mag to small compressors to kill bacteria and spores that grow in fuel that is stored for long periods of time. It should decrease the amount of contaminated fuel that has to be disposed. These units can also eliminate down time due to filter and fuel injector plugging.

TVA's maintenance shops are using filter crushers to get all possible oil out of filters before disposal. The three maintenance facilities are using oil burners to heat their facilities using TVA's generated used oil.

These projects provide TVA with the benefits of reduced potential of adverse environmental impacts from spillage of waste oil and fuel, increased operational efficiency, increased availability of units, and decreased cost due to reduction in oil consumption.

In FY 2002 TVA began to incorporate EPA emission standards in specifications for both on-road and off-road trucks. TVA began discussion with construction equipment providers on their emission standards.

FEDERAL VEHICLE FUEL EFFICIENCY

The following tables show a comparison of TVA's annual mileage and miles per gallon (mpg) performance for sedans and light trucks from FY 1975 through FY 2002.

ANNUAL MILEAGE

FY	Miles Driven		Percent Increase/(Decrease)	
	Sedans	Trucks*	Sedans Base Yr. 75	Trucks* Base Yr.79
75	12,222,850	N/A	0	N/A
76	14,698,600	N/A	20	N/A
77	14,331,650	N/A	17	N/A
78	14,101,300	N/A	15	N/A
79	13,779,900	25,947,000	13	0.0
80	14,788,300	25,989,000	21	0.2
81	14,922,450	27,655,000	22	7
82	24,714,480	24,878,000	4	(4)
83	12,125,848	25,122,699	(1)	(3)
84	11,760,288	24,947,558	(4)	(4)
85	11,958,251	21,237,202	(2)	(18)
86	12,359,000	24,954,488	1	(4)
87	12,905,706	24,064,000	6	(7)
88	12,650,124	24,008,436	3	(7)
89	11,312,417	22,599,061	(7)	(13)
90	15,665,480	23,516,512	28	(9)
91	19,175,027	24,120,233	57	(7)
92	23,264,550	24,318,622	91	(6)
93	25,557,833	25,702,300	109	(1)
94	29,766,173	23,947,797	144	(8)
95	30,096,968	23,996,720	146	(8)
96	28,388,572	24,998,289	132	(4)
97	20,298,902	24,343,292	66	(6)
98	7,124,589	26,623,769	(42)	3
99	7,939,345	21,335,796	(35)	(18)
00	9,723,679	27,701,582	(20)	5
01	9,290,949	25,242,686	(24)	(3)
02	10,793,620	23,520,150	(12)	(9)

*Figures for Trucks include both light duty (<8500 lbs GVWR) & medium duty (8501 - 16000 lbs GVWR).

MPG PERFORMANCE

FY	Annual MPG			Percent Increase/(Decrease)		
	Sedans Base Yr. 75	Trucks* Base Yr. 79		Sedans Base Yr. 75	Trucks* Base Yr. 79	
		4 x 2	4 x 4		4 x 2	4 x 4
75	15.1	N/A	N/A	0	N/A	N/A
76	15.0	N/A	N/A	(1)	N/A	N/A
77	15.6	N/A	N/A	3	N/A	N/A
78	16.2	N/A	N/A	7	N/A	N/A
79	16.3	11.6	8.2	8	0	0
80	17.9	12.0	8.3	19	3	1
81	19.2	13.2	7.9	27	14	(4)
82	22.7	14.2	8.5	50	22	4
83	26.2	16.0	9.8	74	38	20
84	27.5	16.4	9.5	82	41	16
85	26.9	16.1	10.2	78	39	24
86	27.6	18.2	10.8	83	57	32
87	26.6	17.5	11.4	76	51	39
88	24.6	15.3	11.0	63	32	34
89	28.3	15.9	13.1	87	37	60
90	28.4	15.7	11.6	88	35	41
91	29.6	18.2	15.7	96	57	91
92	27.7	21.2	12.4	84	83	52
93	31.9	17.3	13.6	105	49	66
94	29.8	15.5	12.9	97	34	57
95	31.2	14.5	13.4	107	25	63
96	29.1	13.2	12.7	66	14	44
97	28.3	14.2	12.7	87	22	44
98	26.6	15.4	14.4	76	33	76
99	25.4	12.8	11.9	68	10	45
00	26.3	13.7	12.8	74	18	56
01	26.6	13.9	13.2	76	20	61
02	26.0	14.1	12.9	72	22	57

*Figures for Trucks include both light duty (<8500 lbs GVWR) & medium duty (8501 - 16000 lbs GVWR).

PROCUREMENT OF ALTERNATIVE FUELED VEHICLES

As a major supplier of electricity, TVA is particularly interested in supporting the use of electric vehicles (EVs). TVA has incorporated EVs into its fleet operations and supports power distributors and local communities with EV technology demonstrations. TVA is also utilizing electric vehicles at its plant sites to reduce fuel consumption and emissions.

TVA currently has the following EVs:

- **2 U.S. Electricar Prism sedans**
- **1 U.S. Electricar S-10 pickup truck**
- **5 Solectria Ford sedans**
- **5 Ford Ranger pickup trucks**
- **3 GEM electric cars**
- **3 EZGOs electric vehicles**

B. Renewable Energy. Discuss agency's policy and efforts to encourage purchase of electricity generated from renewable energy sources. (Note: The quantitative information related to this section [see below] will be reported on the agency's Data Report and Energy Scorecard. On the Energy Scorecard, self-generated renewable energy use and purchased renewable energy use will be aggregated into a single value).

GREEN POWER SWITCH® (GPS)

TVA and twelve public power companies launched GPS on Earth Day, April 22, 2000. GPS, the first program of its kind offered in the Southeast, provides consumers with the opportunity to participate economically in TVA's development of renewable energy resources. Originally, the program included supply from wind and solar energy sources. GPS expanded the program in 2001 to include electricity generated from methane gas at a landfill in Murfreesboro, Tennessee, and a waste water treatment plant in Memphis, Tennessee. Future expansion plans include additional wind turbines and solar installations at locations across the Tennessee Valley.

Fourteen solar generating facilities are presently operating in Tennessee, Kentucky, Alabama, Virginia and Mississippi. Two additional solar installations are planned to be built by the end of FY 2003. One commercial scale wind power generation site has also been operational since November 2000. TVA is looking at options for expanding its existing wind site by the end of 2003. A 2.6 megawatt landfill gas generation site has been operating since May 2001. GPS also benefits from generation produced from a 4 megawatt waste water treatment methane gas project located at TVA's Allen Fossil plant near Memphis, Tennessee. The GPS program is managed through TVA's Marketing Organization

Under the GPS program, residential, commercial, industrial and government customers sign up for green power blocks of 150 kilowatt hours each, which represent approximately, twelve percent of a typical home's monthly energy use. The associated reduction of atmospheric carbon dioxide is equivalent to the reduction resulting from planting an acre of trees. As of September 30, 2002, there were 5,893 residential customers purchasing 10,237 blocks and 295 business customers purchasing 8,952 blocks, for a total of 19,189 purchased blocks of green power. In 2002, the State of Tennessee became the first southeastern state in the U.S. to purchase blocks of power from the GPS program for some of its buildings.

Today there are 46 TVA power distributors and 1 direct served customer participating in the GPS program throughout the Tennessee Valley. TVA plans to continue expanding the

GPS program by offering it to additional power distributors as the renewable energy supply allows.

TVA's GPS program was awarded the 2002 Federal Energy & Water Management Award. This award from the Department of Energy and the Federal Interagency Energy Policy Committee recognizes TVA's GPS program for its outstanding contribution to expanding renewable energy. Additionally in 2002, DOE's National Renewable Energy Laboratory ranked GPS eighth in the nation for the amount of new energy produced and 10th in the nation for the number of customers participating.

RENEWABLE ENERGY TECHNOLOGY MONITORING

The purpose of the program is to monitor and evaluate new technologies in wind energy, solar photovoltaics (PVs), low-impact hydro, and biopower. Additionally, advanced wind energy resource assessments and siting technologies are being monitored and evaluated.

Renewable energy technologies are increasingly becoming more reliable and cost effective. As more utilities offer renewable energy alternatives, manufacturers achieve economies of scale, resulting in lower costs. The cost of wind energy, for example, has decreased about ninety percent over the last 20 years. Renewable energy portfolios have been mandated in 13 states and may be mandated at the national level in the near future. In anticipation of renewable portfolio mandates, TVA continues to assess and evaluate new and advanced renewable technologies to respond to the needs of its customers. Advanced wind energy forecasting and resource assessment technologies aid in the selection of wind farm sites, resulting in increased efficiencies and lower costs. Hybrid systems, such as combining a renewable resource like wind with energy storage, are also being evaluated. This may alleviate the intermittency problem associated with renewables and results in the ability to offer higher value renewables when the demand is at its greatest. These advancements in technologies will ultimately result in the ability to offer competitively priced renewable energy.

1. **Self-generated renewable energy.** Identify/estimate energy use (in BBtu) from electricity self-generated from renewable sources (photovoltaics, wind) and renewable energy thermal projects (solar thermal, geothermal).

   TVA is in the process of incorporating renewable energy options such as passive solar heating, geothermal heat pumps and daylighting in its new Customer Service Center building design.

   TVA has already installed photovoltaic panels and wind turbines in many locations in its service area to provide renewable energy to its customers through its GPS program.

2. **Purchased renewable energy.** Identify the renewable (i.e., wind, solar, geothermal, biomass) energy component of power purchases under competitive contract in megawatt-hours. (Note: Guidelines for counting renewable energy projects and purchases of electricity from renewable energy sources toward agency progress in reaching their goals are available on the FEMP web site www.eren.doe.gov/femp/resources/countguide.html.

Information on the Federal renewable energy goal is also available on the FEMP Web site at www.eren.doe.gov/femp/resources/renewableguide.html).

TVA purchased 495 MWh from the TVA GPS program for use in its Knoxville Office Complex and Huntsville office.

TVA's current efforts are directed toward large scale solar installations in highly visible locations through its GPS program. There are efforts underway to develop a program that would allow residential and small commercial customers to install solar generation and sell their excess power to TVA's GPS program.

C. **Petroleum.** Identify petroleum-based fuels (fuel oil, LPG/propane) used in buildings in FY 1985 and in FY 2002 and the percentage change from FY 1985. (Note: The FY 2002 data will be reported on the Data Report and the Energy Scorecard).

TVA consumed 13,515 gallons of petroleum in building operations in FY 2002 which is a decrease of thirty-eight percent from the FY 1985 baseline of 21,920 gallons.

D. **Water Conservation.** Identify/estimate water consumption and cost by the agency in FY 2002 and outline any agency-specific issues related to collection of water consumption data. (Note: This information will be reported on the Data Report and the Energy Scorecard). Refer to DOE's *Guidance to Federal Agencies for Determining Baseline Water Usage* and *Guidance to Establish Water Efficiency Improvement Goal for Federal Agencies* on the FEMP web site http://www.eren.doe.gov/femp/resources/water.html and http://www.eren.doe.gov/femp/resources/waterguide.html. Also in this section, highlight activities undertaken to improve water efficiency. Discuss progress in developing Water Management Plans and implementing Best Management Practices for efficient use of water (See the guidance document, *Water Efficiency Improvement Goal for Federal Agencies* on FEMP's Web site www.eren.doe.gov/femp/resources/waterguide.html.)

This fiscal year TVA has moved a large number of buildings from the industrial classification to the exempt classification. These are buildings that are used to generate and transmit electricity. These buildings have also been a major user of potable water in TVA's building inventory. Although TVA is excluding these buildings efforts to improve water efficiency will continue. During FY 2002 energy surveys including water were conducted at nine TVA power plant sites.

TVA consumed 167,600,000 gallons of potable water in FY 2002 with an estimated cost of $337,654. These numbers exclude the water consumption of the exempt buildings.

TVA considers water management plans as part of its operation and maintenance activities. As part of these activities 70 facilities have been covered representing 3,524,250 GSF. This represents thirty-six percent of TVA's standard and industrial facilities GSF.

TVA continues to implement the Best Management Practices (BMPs) for water in its facilities. During FY 2002 TVA's Edney building met 5 of the 10 BMPs. TVA has now implemented BMPs in more than eleven percent of its gross square footage.

III. Implementation Strategies. The purpose of this section is to identify and describe the use of strategies to reduce energy consumption and improve energy efficiency. It is not expected that each agency will have employed every strategy; rather, each strategy identified in Executive Order 13123 is listed as a subsection to remind agency officials of the existence of these strategies and to encourage their use where practical and life-cycle cost effective.

In each of the following subsections, present highlights for each of the strategies that were used. If certain strategies were not used, explain why not. Please provide narrative where strategies that were identified as focal points in the previous year's Implementation Plan were successful, where challenges existed in implementing strategies, and how challenges were overcome.

TVA implements many energy management measures through a number of strategies which includes the following:

AGENCY ENERGY MANAGEMENT COMMITTEE

TVA Agency Energy Management Committee is a forum for sharing of information and success stories on energy efficiency efforts for application across the agency.

NEW CONSTRUCTION

TVA combines teams of designers to incorporate energy efficiency and sustainability at the start of a new building design.

RENOVATION

TVA takes advantage of renovation activities by incorporating energy efficiency and sustainability into its spaces that are being reconfigured for change.

OPERATIONS & MAINTENANCE

Operation and maintenance (O&M) personnel are the front line, used to identify potential energy and sustainable problems and opportunities on a daily basis. O&M staff take corrective action where needed and seek help from engineering, energy and sustainable staff to resolve technical issues when necessary.

Examples of O&M activities are the efficient operation of building EMCS systems, the placement of controls on lighting and other energy consuming equipment, and replacement of inefficient lighting replaced when these actions are determined to be life-cycle cost effective.

As part of its operation and maintenance function, TVA has an emergency curtailment procedure which reduces energy use in its buildings during energy emergencies.

VEHICLE FUEL

TVA looks at its overall fleet and business needs on a continuous basis to match the work

needs of each individual to the most efficient vehicle. TVA investigates efficient vehicles such as hybrid cars and adds these vehicles to its fleet to meet business needs. TVA also investigates ways to extend the life cycle of vehicles especially special purpose vehicles. TVA's detailed Fleet Strategy is provided as Attachment 9.

A. **Life-Cycle Cost Analysis.** Outline procedures in place to ensure the use of life-cycle cost analysis in making investment decisions about in products, services, construction, and other projects to lower the Federal Government's costs and to reduce energy and water consumption. Highlight examples where life-cycle cost analysis was used in capital budgeting decisions concerning energy efficiency. Report on the successes and challenges of implementing life-cycle cost effective projects. (Under EPACT, energy conservation projects that will pay back investment costs within 10 years must be undertaken).

TVA's Energy Plan provides that life-cycle analysis will be used in making investment decisions regarding energy/water efficiency and sustainable measures.

B. **Facility Energy Audits.** Describe the number/percentage of agency facilities audited for energy and water efficiency during FY 2002, and the total percentage of facilities audited to date. (In accordance with EPACT and Executive Order 13123, approximately 10% of facilities should be audited each year).

TVA has evaluated building inventory for potential energy conservation measures. These facilities are being re-evaluated in accordance with E.O. 13123 and TVA's Memorandum of Understanding with the EPA. This past summer, TVA continued survey efforts at its fossil facilities to update building inventory information and uncover potential energy/water-saving opportunities.

C. **Financing Mechanisms.** Provide narrative information related to the use of Energy-Savings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs). (Note: Quantitative information related to ESPCs and UESCs will be reported on the Data Report and the Energy Scorecard). Report funding requested and received for FY 2002 and funding requested for FY 2003 for the performance of energy surveys/audits and for applied energy conservation measures (Note: This information will be reported on the Data Report).

Funding procedures for energy management and related environmental projects are reviewed through the IEMP and the AEMC. Recommendations and comments are submitted to the proper organizations. Projects for facilities are primarily funded through renovation, operation, maintenance, and modernization efforts. Projects covered under general operations are ranked for economic benefit compared to other TVA projects to determine funding availability and implementation status and are funded mainly through the capital budgeting process.

D. **ENERGY STAR® and Other Energy-Efficient Products**. Describe steps taken to promote the purchase of ENERGY STAR® products and/or products that are in the upper 25 percent of energy efficiency as designated by FEMP. Note whether energy efficient criteria have been incorporated into all guide specifications and product specifications developed for new

construction and renovation. Also note whether such criteria have been incorporated into product specification language. (See the ENERGY STAR® products and "green" products web sites by GSA [www.fss.gsa.gov/environ], DOE [www.eren.doe.gov/femp/procurement/begin.html], and EPA [www.energystar.gov/products/])

TVA's Energy Plan provides that TVA will strive, where cost-effective, "to meet the Energy Star Building criteria for energy performance and indoor environmental quality in eligible facilities to the maximum extent practicable by the end of 2002," as described by section 403(c) of E.O. 13123. This includes purchasing Energy Star and other energy efficient products when feasible.

TVA is in the process of evaluating occupancy sensors to control energy use in individual work stations. TVA's Information Services group is partnering with the Procurement and Energy Management groups to investigate equipment that meets E.O. 13221 objectives.

TVA continues its efforts to buy materials which have positive environmental qualities including soy ink, rechargeable batteries, low mercury lamps, and non-toxic supplies. TVA also purchases materials which meet sustainable architecture criteria. These are non-toxic building materials which have recycled content, and their creation, use, and disposal does not damage the environment.

E. **ENERGY STAR® Buildings.** Report the number and percentage of buildings that have met the ENERGY STAR® Building criteria and have officially been designated ENERGY STAR® Buildings. (Buildings must rank in the top 25 percent in energy efficiency relative to comparable commercial and Federal buildings to be eligible for the ENERGY STAR® Buildings designation. See www.energystar.gov).

TVA currently has two facilities that meet the ENERGY STAR® Buildings criteria. These are the Chattanooga Office Complex and the Edney building which represent eleven percent of TVA's overall corporate square footage.

F. **Sustainable Building Design**. Report whether sustainable building design principles have been incorporated into the siting, design, and construction of new facilities. (See www.wbdg.org for a description of sustainable building design principles).

TVA is incorporating sustainable design criteria into renovation and new construction efforts. A Sustainable Checklist and Design Guideline along with an Energy Process that includes sustainability have been written and are being reviewed by the AEMC and management. All of these efforts are being done as part of an agency sustainable program under TVA's IEMP.

TVA continues to buy materials that have positive environmental qualities and include those that meet RCRA requirements and other recycled content materials. Examples of environmental products purchased include soy ink, rechargeable

batteries, low mercury lamps, and non-toxic supplies. TVA also purchases materials which meet sustainable architecture criteria. These non-toxic building materials have recycled content, and their creation, use, and disposal minimize environmental impacts.

G. **Energy Efficiency in Lease Provisions.** Describe how energy and water efficiency are considered when agencies enter into new leases or renegotiate/extend existing leases (e.g., preference for buildings with sustainable design and development, preference for certified ENERGY STAR® Buildings, etc.)

Where applicable, TVA uses model lease provisions based on those recommended by the General Services Administration (GSA) and such provisions will be incorporated into new and renewed leases provided they are cost-effective. The model lease provisions address energy and water efficiency.

H. **Industrial Facility Efficiency Improvements.** Highlight activities undertaken to explore efficiency opportunities in energy-intensive facilities. This may include activity in the following areas: steam systems, boiler operation, air compressor systems, industrial processes, fuel switching, cogeneration, and other efficiency and renewable energy technologies.

TVA continuously looks for opportunities to improve energy efficiency in its industrial facilities. During FY 2002 several projects were implemented in TVA industrial facilities including the TVA Monteagle Place computer center. In Monteagle Place, inefficient lighting was replaced with new direct/indirect lighting, utilizing the new T-5 high-output lamps. Additionally an under floor air-conditioning and heating system was included which provides the occupants individual control which increases comfort and reduces energy use. In many of TVA's laboratory facilities existing exhaust hoods were retrofitted with variable speed drives. In addition, high-efficiency heat pumps were installed and connected to TVA's EMC system as part of the renovation of the Chickamauga laboratory facilities.

I. **Highly Efficient Systems**. Describe new construction and/or retrofit projects for which combined cooling, heating, and power systems were installed. Report whether local natural resources were surveyed to optimize use of available biomass, geothermal, or other naturally occurring energy sources.

TVA considers the implementation of high efficiency systems as mentioned above when it is life-cycle cost effective.

J. **Off-Grid Generation**. Describe the installation of non-renewable distributed generation technologies such as fuel cells, microturbines, generators (dedicated and peak shaving), and other power generation alternatives. Distributed generation from renewable sources (solar, wind, etc.) should have already been reported in Section II, part B. Some distributed generation projects could be grid connected and should be reported if used by the agency to reduce demand usage from the power grid.

TVA is currently researching, testing, and demonstrating the use of green power technologies. TVA is building the first Regenesys energy storage facility in the

United States, near Columbus, Mississippi. The 12 megawatt (MW) facility with a 120 MW-hour storage capacity will be the first utility-scale electrochemical flow-battery plant. With its compact size and minimal environmental impact, a Regenesys system can be located near customer loads reducing transmission system congestion and line losses.

K. Electrical Load Reduction Measures. Describe agency activities undertaken to reduce electricity load during power emergencies. These activities are required under the President's Memorandum of May 3, 2001 on Energy Conservation at Federal Facilities. (See www.eren.doe.gov/femp/resources/presidential_direct.html for information on electrical load reduction measures.)

As part of its operation and maintenance function, TVA has an emergency curtailment procedure which reduces energy use in its buildings during energy emergencies.

IV Data Tables and Inventories. Include the items listed below in the order given.

A. FY 2002 Annual Energy Management Data Report. A blank Data Report form and instructions for completing the form is included as Attachment 1 of this Guidance. Also include a Data Report for any revisions to past years' energy data along with an explanation for the revision.

B. Energy Scorecard for FY 2002. A blank Scorecard is included as Attachment 2 of this Guidance.

C. Goals of Executive Order 13123 and NECPA/EPACT (optional). This table was prepared by OMB/DOE and is attached to this guidance document. Agencies may wish to include this table in their Annual Reports for reference (see Attachment 3) .

D. Industrial and Laboratory Facilities Inventory. This should include the following information: building name and building location (city and state) (see Attachment 4).

E. Exempt Facilities Inventory. This should include the following information: building name, building location (city and state), and justification for exempt status.

V. **Attachment.** Attach a FY 2003 Implementation Plan to this FY 2002 Annual Report. Consult Attachment 6, *Guidance for Preparing the Federal Agency Implementation Plan for FY 2003*.

1) **FY 2002 Annual Energy Management Data Report (electronic file "Data Report_FY2002.xls")**
2) **Energy Scorecard for FY 2002 (electronic file "Scorecard_2002.doc")**
3) **Goals of Executive Order 13123 and NECPA/EPACT (electronic file "EO_13123_Goals.doc")**
4) **Industrial & Lab Buildings (electronic file "Industrial_&_Lab_2002.xls")**
5) **Exempt Facilities Inventory (electronic file "Exempt Facilites_2002.xls")**
6) **FY 2003 Implementation Plan including Guidance for Preparing the Federal Agency Energy Management Implementation Plan (electronic file "Implementation_Plan_03.doc")**
7) **Reporting Units and Conversion Factors for Federal Energy Management Reporting (electronic file "Conversion_Factors_02.doc")**
8) **TVA Energy Plan 12-26-01 Final (electronic file "TVA_Energy_Plan_12-20-02_Final.doc)**
9) **TVA Fleet Strategy FY 2002 (electronic file "Fleet Strategy.doc")**

Attachment 1

FY 2002 ENERGY MANAGEMENT DATA REPORT

Agency: Tennesse Valley Authority
Prepared by: Steve Brothers
Date: 01/01/2003
Phone: 423-751-7369

PART 1: ENERGY CONSUMPTION AND COST DATA

1-1. Standard Buildings/Facilities

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. $)	Unit Cost ($)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	164,055	$9,843.3	$0.06 /kWh	559.8	1,697.3	25,827
Fuel Oil	Thou. Gal.	10.7	$11.8	$1.10 /gallon	1.5	1.5	30
Natural Gas	Thou. Cubic Ft.	3,605.0	$29.1	$8.07 /Thou Cu Ft	3.7	3.7	54
LPG/Propane	Thou. Gal.	0.0	$0.0	#DIV/0! /gallon	0.0	0.0	0
Coal	S. Ton	0.0	$0.0	#DIV/0! /S. Ton	0.0	0.0	0
Purch. Steam	BBtu	0.0	$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Other	BBtu	0.0	$0.0	#DIV/0! /MMBtu	0.0	0.0	
		Total Costs:	$9,884.2	Total:	565.0	1,702.5	25,911
Standard Buildings/Facilities (Thou. Gross Square Feet)		9,295.7		Btu/GSF:	60,776	183,151	

1-2. Industrial, Laboratory, Research, and Other Energy-Intensive Facilities

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. $)	Unit Cost ($)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH	22,019	$1,321.1	$0.06 /kWh	75.1	227.8	3,466
Fuel Oil	Thou. Gal.	0.0	$0.0	#DIV/0! /gallon	0.0	0.0	0
Natural Gas	Thou. Cubic Ft.	0.0	$0.0	#DIV/0! /Thou Cu Ft	0.0	0.0	0
LPG/Propane	Thou. Gal.	0.0	$0.0	#DIV/0! /gallon	0.0	0.0	0
Coal	S. Ton	0.0	$0.0	#DIV/0! /S. Ton	0.0	0.0	0
Purch. Steam	BBtu	0.0	$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Other	BBtu	0.0	$0.0	#DIV/0! /MMBtu	0.0	0.0	
		Total Costs:	$1,321.1	Total:	75.1	227.8	3,466
Energy-Intensive Facilities (Thou. Gross Square Feet)		404.9		Btu/GSF:	185,535	562,588	

1-3. Exempt Facilities

* - Energy indicated below does not include generation and transmission power.

Energy Type	Consumption Units	Annual Consumption	Annual Cost (Thou. $)	Unit Cost ($)	Site-Delivered Btu (Billion)	Est. Source Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Electricity	MWH *	420,844	$25,250.6	$0.06 /kWh	1,435.9	4,354.0	66,253
Fuel Oil	Thou. Gal.	0.0	$0.0	#DIV/0! /gallon	0.0	0.0	0
Natural Gas	Thou. Cubic Ft.	0.0	$0.0	#DIV/0! /Thou Cu Ft	0.0	0.0	0
LPG/Propane	Thou. Gal.	0.0	$0.0	#DIV/0! /gallon	0.0	0.0	0
Coal	S. Ton	0.0	$0.0	#DIV/0! /S. Ton	0.0	0.0	0
Purch. Steam	BBtu	0.0	$0.0	#DIV/0! /MMBtu	0.0	0.0	0
Other	BBtu	0.0	$0.0	#DIV/0! /MMBtu	0.0	0.0	
		Total Costs:	$25,250.6	Total:	1,435.9	4,354.0	66,253
Exempt Facilities (Thou. Gross Square Feet)		21,957.8		Btu/GSF:	65,395	198,292	

1-4. Tactical Vehicles and Other Equipment

	Consumption Units	Annual Consumption	Annual Cost (Thou. $)	Unit Cost ($)	Btu (Billion)	Est. Carbon Emissions (Metric Tons)
Auto Gasoline	Thou. Gal.	2182.5	2413.2	$1.11 /gallon	272.8	5,279
Diesel-Distillate	Thou. Gal.	867.0	1019.5	$1.18 /gallon	120.3	2,399
LPG/Propane	Thou. Gal.	0.0	0.0	#DIV/0! /gallon	0.0	0
Aviation Gasoline	Thou. Gal.	73.5	161.8	$2.20 /gallon	9.2	173
Jet Fuel	Thou. Gal.	74.4	145.8	$1.96 /gallon	9.7	187
Navy Special	Thou. Gal.	0.0	0.0	#DIV/0! /gallon	0.0	0
Other	Thou. Gal.	0.0	0.0	#DIV/0! /MMBtu	0.0	
	Total Costs		$3,740.2		411.9	8,039

1-5. WATER CONSUMPTION, COST AND EFFICIENCY MEASURES

	Consumption Units	Annual Consumption	Annual Cost (Thou. $)
Water	Million Gal.	167.6	$337.7
Best Management Practice Implementation Tracking Data			
Number of facilities* in agency inventory			1,033
Number of facilities with completed water management plans			70
Number of facilities with at least four (4) BMPs fully implemented **			2
*number in the agency inventory, can be buildings, bases, or campuses			

** - These two buildings represent 11% of the gsf.

1-6. RENEWABLE GREEN ENERGY PURCHASES

(Only include renewable energy purchases developed or contracted after 1990)

	Consumption Units	Annual Consumption	Annual Cost (Thou. $)
Electricity from Renewables	MWH	495.0	$13.2
Natural Gas from Landfill/Biomass	MMBtu	0.0	$0.0
Renewable Thermal Energy	MMBtu	0.0	$0.0
Other Renewable Energy_____ *			

*For other renewable energy that does not fit any category, please fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example, biodiesel used in non-transportation applications. (Renewable fuels used for transportation will be collected through GSA's Fleet Managment reporting process.)

1-7. SELF-GENERATED RENEWABLE ENERGY INSTALLED AFTER 1990

	Consumption Units	Total Annual Energy	Energy Used by Agency*
Electricity from Renewables	MWH	30.0	30.0
Natural Gas from Landfill/Biomass	MMBtu	0.0	0.0
Renewable Thermal Energy**	MMBtu	0.0	0.0
Other Renewable Energy HMOD ***	MWH	8,370.0	8,370.0

*Energy used by agency equals total annual generation unless a project sells a portion of the energy it produces to another agency or the private sector. It can equal zero in the case of non-Federal energy projects developed on Federal land.

**Examples are geothermal, solar thermal, and geothermal heat pumps, and the thermal portion of combined heat and power projects. Thermal energy from geothermal heat pumps should be based on energy savings compared to conventional alternatives.

***For other renewable energy that does not fit any category, fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example energy displaced by daylighting technology or passive solar design.

PART 2: ENERGY EFFICIENCY IMPROVEMENTS

2-1. DIRECT AGENCY OBLIGATIONS

	FY 2002		Projected FY 2003	
	(MMBTU)	(Thou. $)	(MMBTU)	(Thou. $)
Direct obligations for facility energy efficiency improvements, including facility surveys/audits		$365.0		$365.0
Estimated annual savings anticipated from obligations	4,151.3	$73.0	4,151.3	$73.0

2-2. ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC)
(we have no ESPCs to report)

	Annual savings (MMBTU)	(number/Thou. $)
Number of ESPC Task/Delivery Orders awarded in fiscal year & annual energy (MMBTU) savings.	0.0	0
Investment value of ESPC Task/Delivery Orders awarded in fiscal year.		$0.0
Amount privately financed under ESPC Task/Delivery Orders awarded in fiscal year.		$0.0
Cumulative guaranteed cost savings of ESPCs awarded in fiscal year relative to the baseline spending.		$0.0
Total contract award value of ESPCs awarded in fiscal year (sum of contractor payments for debt repayment, M&V, and other negotiated performance period services).		$0.0
Total payments made to all ESP contractors in fiscal year.		$0.0

2-3. UTILITY ENERGY SERVICES CONTRACTS (UESC)
(TVA is a utility)

	Annual savings (MMBTU)	(number/Thou. $)
Number of UESC Task/Delivery Orders awarded in fiscal year & annual energy (MMBTU) savings.	0.0	0
Investment value of UESC Task/Delivery Orders awarded in fiscal year.		$0.0
Amount privately financed under UESC Task/Delivery Orders awarded in fiscal year.		$0.0
Cumulative cost savings of UESCs awarded in fiscal year relative to the baseline spending.		$0.0
Total contract award value of UESCs awarded in fiscal year (sum of payments for debt repayment and other negotiated performance period services).		$0.0
Total payments made to all UESC contractors in fiscal year.		$0.0

2-4. UTILITY INCENTIVES (REBATES)
(TVA is a utility)

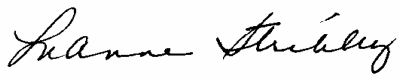
	Annual savings (MMBTU)	(Thou. $)
Incentives received and estimated energy savings	0.0	$0.0
Funds spent in order to receive incentives		$0.0

2-5. TRAINING

	(number)	(Thou. $)
Number of personnel trained/Expenditure	240.0	$14.4

Attachment 2

FY 2002 Federal Agency Energy Scorecard

Department/Agency Name	Contact Name and Phone
Tennessee Valley Authority	Steve Brothers (423) 751-7369
Name of Senior Energy Official	**Signature of Senior Energy Official**
LeAnne Stribley	

Did your agency . . .	Yes	No	Anticipated Submittal Date
Submit its FY 2002 energy report to OMB and DOE by January 1, 2003 (Sec. 303)?	X		12-27-2002
Submit a FY 2003 Implementation Plan by January 1, 2003 (Sec. 302)?	X		12-27-2002

Did your agency . . .	Yes	No	Comments
Implement or continue to use new renewable energy projects at Federal installations or facilitate the siting of renewable generation on Federal land in FY 2002 (Sec. 204)?[1] (Refer to Table 1-6 on the Energy Management Data Report)	X		If yes, how many projects and how much energy generated? (Specify unit: MWH or MMBtu) Solar 1 30 MWH Wind ____ ____ ____ Thermal[2] ____ ____ ____ Biomass ____ ____ ____ Other RE**(1)** 42 8370 MWH
Purchase energy generated from new renewable energy sources in FY 2002 (Sec. 204)?[1]	X		If yes, how much: 495 MWH or _____ MMBtu
Invest direct FY 2002 appropriations in projects contributing to the goals of the Order (Sec. 301)?**(2)**		X	If yes, how much: $_____
Specifically request funding necessary to achieve the goals of the Order in its FY 2004 budget request to OMB (Sec. 301)? **(2)**		X	If yes, how much: $_____
Perform energy audits of 10% of its facility space during the fiscal year (Sec. 402)? **(3)**	X		What percentage of facility space was audited during the FY? 12 % _____% How much facility space has been audited since 1992? 100 %
Issue to private-sector energy service companies (ESCOs) any energy savings performance contract (ESPC) task orders (Sec. 403(a))? (Refer to Table 2-2 on the Energy Management Data Report) **(4)**		X	How many? _____ Annual savings (MMBtu):_____ Total investment value[3]: $_____ Cumulative guaranteed cost savings: $_____ Contracts award value: $_____
Issue any utility energy services contract (UESC) task orders (Sec. 403(a))? (Refer to Table 2-3 on the Energy Management Data Report) **(5)**		X	How many? _____ Annual savings (MMBtu):_____ Total investment value[3]: $_____

1 "New" renewable energy means sources developed after 1990.
2 Examples are geothermal, solar thermal, and geothermal heat pumps. Thermal energy from geothermal heat pumps should be determined as follows: Thermal energy = Total geothermal heat transferred – electrical energy used.
3 Investment value includes design, materials, labor, overhead, and profit but excludes contractor's financing costs and government's administration costs. Using investment value allows comparison with other traditional execution methods such as appropriated and working capital funded projects.

			Cumulative cost savings: $_____ Contracts award value: $_____
Did your agency . . .	**Yes**	**No**	**Comments**
Incorporate energy efficiency requirements into relevant acquisitions (Sec. 403(b)(3))? **(6)**	X		
Adopt and apply the sustainable design principles (e.g., Whole Building Design Guide, Leadership in Energy and Environmental Design) to the siting, design, and construction of new facilities or major (budget line item) renovations begun in FY 2002(Sec. 403(d))? **(7)**	X		Number of new building design/construction projects in FY 2002: 2 Number of these projects that incorporated sustainable design principles: 2
Provide training to appropriate personnel[4] on energy management (Sec. 406(d))? **(8)**	X		Number of appropriate personnel trained: 240 Total number of appropriate personnel: 240
Implement any additional management tools (Sec. 406)?	X		Check all that apply: Awards: X Performance Evaluations: X Showcase Facilities: X Number of Showcase: 2 Facilities designated in fiscal year: 0
Establish Water Management Plans and implement at least 4 Best Management Practices in at least 5% of agency facilities?	X		Number of facilities with Water Management Plans: 2

NOTE: Provide additional information if a Ano@ reply is used for any of the questions above.

Please enter data from annual energy report pertinent to performance toward the goals of Executive Order 13123	Base Year	Previous Year (2001)	Current Year (2002)	% Change (Current vs. Base)
Site Energy Efficiency Improvement Goals (Sec. 202). 1985 Base Year	82,357 Btu/Ft^2	59,516 Btu/Ft^2	60,776 Btu/Ft^2	(26) %
Source Energy Use (Sec. 206). 1985 Base Year	402.4 BBtu	626.2 BBtu	565.0 BBtu	40 %
Industrial/Energy Intensive Facilities Goals (Sec. 203). 1990 Base Year	232,662 Btu/unit	182,774 Btu/unit	185,536 Btu/unit	(20) %
Water Conservation Goal (Sec. 207). 2000 Base Year	173.1 MGal	172.6 MGal	167.6 MGal	(3) %
Renewable Energy (Sec. 204). Energy used from self-generation and RE power purchases**(1)(9)**	N/A	5.6 BBtu	103.2 BBtu	N/A

Abbreviation Key: Btu/Ft^2 = British thermal units per gross square foot
Btu/unit = British thermal units per unit of productivity (or gross square foot when such a unit is inappropriate or unavailable)
MGal = Million gallons
MMBtu = Million British Thermal Units
BBtu = Billion British Thermal Units
RE = Renewable energy
N/A = Not applicable

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4 Appropriate personnel include the agency energy management team as well as Federal employees and on-site contractors who are energy or facility managers, operations and maintenance workers, design personnel, procurement and budget staff, and legal counsel.

1. This value represents a very small percentage of renewable power from hydro modernization and is based on projects covering multiple units and the number of effected facilities.
2. TVA is self funded through its power operations and does not request appropriations to support its statutory mission; therefore, TVA has not submitted any such requests.
3. Since 1992, TVA has evaluated 100-percent of its buildings, and plans to reevaluate facilities as needed to implement cost effective energy management objectives and/or update portfolio information.
4. TVA considers the use of ESCOs where cost effective and in the best interest of the agency and its customers.
5. TVA is a utility.
6. TVA incorporates energy efficiency language where appropriate.
7. TVA is in the process of developing a sustainable design program.
8. This includes employees not specified under sec. 406(d) since all employees play an important part in energy management.
9. The source conversion factor was used for this value (11600 Btu/kWh).

Attachment 3
Goals of Executive Order 13123 and NECPA/EPACT

Executive Order 13123

Category	Goal	Comments
Greenhouse Gas Emissions	30% reduction by 2010	Base year is 1990. DOE will calculate agencies' progress toward this goal and report it on agencies' annual energy scorecards
Energy Efficiency		
Standard Buildings	• 30% improvement by 2005 • 35% improvement by 2010	Base year is 1985
Industrial and Laboratory Facilities	• 20% improvement by 2005 • 25% improvement by 2010	Base year is 1990
Exempt Facilities	N/A	Despite lack of quantitative goal, agencies should implement strategies to improve energy efficiency at these facilities.
Renewable Energy	• Implement renewable energy projects • Purchase electricity from renewable energy sources • Install 2,000 solar energy systems at Federal facilities by 2000 • Install 20,000 solar energy systems at Federal facilities by 2010	Installation of Federal solar energy systems will help support the Million Solar Roofs initiative
Petroleum	Reduce petroleum use	Switches to alternative energy sources should be life-cycle cost effective
Source Energy	Reduce use of source energy	Accomplish by undertaking projects that are life-cycle cost effective
Water Conservation	Reduce water consumption*	Accomplish via life-cycle cost effective measures, energy-savings performance contracts, or other financing mechanism

NECPA/EPACT

Energy Efficiency	20% improvement by 2000	Base year is 1985
Financing	Undertake all energy efficiency improvement projects that have a simple payback period of 10 years or less by 2005	E.O. 13123 expands this goal by mandating that any energy efficiency project that is life-cycle cost effective be undertaken
Audits	Conduct audits for energy efficiency on 10% of facilities annually	E.O. 13123 includes language supporting this goal

* FEMP has established water efficiency improvement goals as directed by the Executive Order. Agencies must implement Water Management Plans and Best Management Practices according to the following schedule:

05% of facilities by 2002
15% of facilities by 2004
30% of facilities by 2006
50% of facilities by 2008
80% of facilities by 2010

For more detail, see the FEMP guidance document Water Efficiency Improvement Goal for Federal Agencies

Attachment 4

TVA Industrial & Lab Laboratory Buildings - FY2002

Building Type Codes	
CMPT	- Computer facility
LAB	- Laboratory building
IND	- Industrial building

Building Type	Building Name	Gross SF
CMPT	Monteagle Place	149,000
IND	Prototype Opers Bldg (Pilot Plant)	40,482
IND	Catalyzer # 3 - Plant	9,000
IND	Well Houses	4,726
IND	Chemical Feed House	3,686
IND	Fermentation Bldg (Pilot Plant)	2,000
IND	Fleet Harbor Pumping Station	1,944
IND	PDW Pumping Station	1,512
IND	Backwater Protection	1,450
IND	Marshall Pump House	621
IND	Martin Pump House	572
IND	Pump House	572
IND	Duck River Ltg/Heat	400
IND	Pump Station (Watts Bar Res)	376
IND	Dandridge Pump Sta. (Doug Dam)	240
IND	Big Sandy Pumphouse - Heat/Ltg	150
IND	Big Sandy Pumphouse - Motor	150
IND	Camden 161 kV Pump House	150
IND	Lexington Water Pump (Temporary)	150
IND	West Sandy Pump House	150
IND	West Sandy Pump House (Lts/Ht)	150
IND	Wellhouse	54
LAB	Chl/Dc/Msc Laboratory Bldg/Power Stores	56,682
LAB	N Engineering Lab Bldg B	21,059
LAB	N Engineering Lab Bldg N	20,710
LAB	BFN Low Lvl Rdwst Bldg. (E-32)	20,000
LAB	Engineering Lab Annex	19,000
LAB	Catalyzer # 4 - Radio/High Pressure Lab	9,000
LAB	Catalyzer # 1 - Mineral Lab	9,000
LAB	Catalyzer # 5 - Plant	9,000
LAB	Catalyzer # 6 - Nitro Fertilization Office	9,000
LAB	Aquatic Biology Lab (Main)	5,619
LAB	Catalyzer # 2 - Nitro Fertilization Lab	3,000
LAB	BFN Biothermal Research	2,658
LAB	N Engineering Lab Bldg H	1,080
LAB	Chl/Dc/Msc Coal Laboratory	1,000
LAB	N Maintenance Building	589

Attachment 5

TVA Exempt Buildings - FY2002

Following is a list of TVA's exempt buildings which house generation, transmission and related energy intensive activities. Energy reduction in these buildings has become increasingly more difficult given that the majority of the energy consumption in these buildings is largely attributed to process energy (generation and transmission of electricity). In recognition of the above and the fact that only so much can be done to make these buildings more efficient in a cost effective manner, TVA, in discussion with DOE has decided to exempt these buildings.

Building Type Codes	
CLHN	- Coal handling facility
CNRL	- Control building
GENR	- Generator building
FIRE	- Fire equipment buildings
LMGT	- Electrical load mangement building
MICRO	- Microwave facility
PRCS	- Process facility that supports power generation
RWRH	- Power House
SUBS	- Substation
SWTH	- Electrical switch house
TBD	- To be determined

Building Type	Building Name	Gross SF
CLHN	CUF Fuel Handling	100,000
CLHN	BRF Fuel Handling	42,500
CLHN	PAF Coal Wash Plant	39,280
CLHN	Live Storage Silo	31,416
CLHN	ALF Fuel Handling	29,000
CLHN	CUF Lime Stone Prep Building	27,720
CLHN	JOF Crusher Bldg	14,434
CLHN	PAF Transfer Station A	11,573
CLHN	PAF Conditioner Bldg 1	10,126
CLHN	Transfer and Breaker	10,000
CLHN	Conveyor System	8,569
CLHN	Hopper Train Bldg.	7,700
CLHN	CUF Surge Hopper Bldg	7,072
CLHN	CONVEYOR 2A & 2B	7,000
CLHN	Transfer G	6,888
CLHN	CRUSHER BUILDING	6,500
CLHN	Transfer Tower #3	6,264
CLHN	Transfer Tower #1	6,240

Building Type	Building Name	Gross SF
CLHN	SHF Fly Ash Blower Bldg	6,176
CLHN	PAF Conditioner Bldg 2	5,888
CLHN	NEW CRUSHER BLDG	5,580
CLHN	SHF Hopper Bldg	5,160
CLHN	KIF Crusher Bldg	5,090
CLHN	Barge Unloader	5,080
CLHN	Barge Unloader (Limestone)	5,080
CLHN	CONVEYOR 1A & 1B	5,000
CLHN	Truck Coal Sample Station	4,876
CLHN	WCF Hopper Bldg	4,700
CLHN	KIF Hopper Bldg No. 1	4,600
CLHN	Crusher Building	4,340
CLHN	Crusher Building	4,340
CLHN	PAF Barge Unloader	4,094
CLHN	Transfer B	4,080
CLHN	KIF Hopper Bldg No. 2	3,900
CLHN	Limestone Storage Silo	3,848
CLHN	Dust Containment Bldg.	3,810
CLHN	Limestone Transfer Tower #2	3,738
CLHN	CONVEYOR 3A & 3B	3,500
CLHN	CONVEYOR 6A	3,500
CLHN	CONVEYOR 6B	3,500
CLHN	JOF Hopper Bldg	3,380
CLHN	Breaker A	3,150
CLHN	Transfer Station 6&7	3,000
CLHN	JSF Conveyor Switchgear Bldg	2,946
CLHN	Barge Unloader 1	2,720
CLHN	Barge Unloader 2	2,720
CLHN	PAF Coal Yard Pump Building	2,520
CLHN	BARGE UNLOADER	2,500
CLHN	BC 8 CONVEYOR & TUBE	2,500
CLHN	Transfer Station	2,448
CLHN	Transfer Station A	2,400
CLHN	Transfer Station E	2,400
CLHN	Barge Unloading Building	2,240
CLHN	Barge Unloading Building	2,240
CLHN	WCF Crusher Bldg	2,200
CLHN	Coal Laboratory	2,098
CLHN	Breakers	2,030
CLHN	TRANSFER STATION B	2,000
CLHN	SHF Sample Prep Building	1,750
CLHN	COF Barge Unloader Building 1	1,680
CLHN	Transfer Station D	1,680
CLHN	Conveyor Control & Crush	1,581
CLHN	TRANSFER TOWER	1,580
CLHN	CONVEYOR 7A	1,500
CLHN	CONVEYOR 7B	1,500
CLHN	JSF Sample Bldg.	1,449

Building Type	Building Name	Gross SF
CLHN	Transfer Station B	1,440
CLHN	Transfer Station D	1,440
CLHN	JSF Sample Preparation Bldg	1,410
CLHN	Sample Prep Building	1,410
CLHN	BRF Breaker Bldg	1,400
CLHN	Coal Wash Sample Bldg	1,248
CLHN	Transfer Station C	1,209
CLHN	COF Barge Unloader Building 2	1,200
CLHN	TRANSFER STATION A	1,200
CLHN	Coal Sampling Crew Bldg.	1,134
CLHN	Transfer Station	1,120
CLHN	Transfer Station 13	1,028
CLHN	SHF Surge Hopper Building 1	1,000
CLHN	Coal Barge Unloader 1	1,000
CLHN	Coal Barge Unloader 2	1,000
CLHN	Coal Wash Pond Equip. Bldg. #1	990
CLHN	Transfer Station LA	990
CLHN	SHF Surge Hopper Building 2	968
CLHN	Barge Unloader 1	961
CLHN	Breaker B	900
CLHN	GAF Hopper Building B	840
CLHN	Transfer Station E	840
CLHN	JSF Conveyor Control Tower	784
CLHN	Transfer Station LC	765
CLHN	Breaker Swgr Building	740
CLHN	Coal Yd. Conveyor Cntrl. Bldg.2	720
CLHN	NEW CRUSHER BLDG ELEC. RM.	720
CLHN	CUF Coal Sample Bldg	640
CLHN	WCF Sample Prep Bldg 2	627
CLHN	PAF BC-4 Sample Building	462
CLHN	Barge Unloader 2	460
CLHN	Coal Sample Building	387
CLHN	UNLOADER ELEC. BLDG	280
CLHN	Coal Sample Bldg 2	252
CLHN	RECLAIM HOPPER A	250
CLHN	RECLAIM HOPPER B	250
CLHN	Coal Sample Bldg 1	240
CLHN	Transfer Station B Valve Hse	240
CLHN	Transfer Station B Valve Hse	240
CLHN	Transfer Station 6	195
CLHN	Transfer Station 6	195
CLHN	Conveyor Switchyard	160
CLHN	Abandoned Scale House	150
CLHN	Retarder House	120
CLHN	Scale House 2	104
CLHN	Scale House	90
CLHN	BC-7	TBD
CNRL	Transfer Station N	41,640

Building Type	Building Name	Gross SF
CNRL	WBN Control Building Cb	23,000
CNRL	GAF Electrical Control Bldg	16,564
CNRL	JSF Control Bldg	16,250
CNRL	JOF Control Bldg	15,428
CNRL	KIF Electrical Control Bldg	14,656
CNRL	BOH Control Building	14,500
CNRL	WCF Switchyard Control Bldg	13,698
CNRL	Transfer Station P	11,500
CNRL	RPS Switchyard Control Building	10,700
CNRL	SHF Control Bldg	10,216
CNRL	Central Electric Control	7,640
CNRL	Control Bldg	7,000
CNRL	Transfer Station H	6,200
CNRL	Surge Hopper Bldg.	4,900
CNRL	GFH Control Building	4,360
CNRL	Silo 6 (2 Silos)	3,620
CNRL	PPTR Control Bldg.	3,519
CNRL	ELEC EQUIP BUILDING	2,900
CNRL	SHF AFBC Control Bldg	2,400
CNRL	KIF Precipitator Control Bldg 2	2,048
CNRL	KIF Precipitator Control Bldg 3	2,048
CNRL	KIF Precipitator Control Bldg 1	2,048
CNRL	Transfer Station J	1,948
CNRL	BRF Control & Sampling Bldg	1,900
CNRL	SHF Crusher Bldg	1,860
CNRL	Transfer Station B	1,300
CNRL	WCF Precipitator Control Bldg 1	1,280
CNRL	WCF Precipitator Control Bldg 2	1,280
CNRL	Precipator Control Room 1	856
CNRL	GAF Conveyor Control Bldg	676
CNRL	Conveyor Cntrl 2	600
CNRL	UNIT 1 SWYD RELAY BLDG	600
CNRL	UNIT 2 SWYD RELAY BLDG	600
CNRL	UNIT 3 SWYD RELAY BLDG	600
CNRL	Coal Dumping Station	264
CNRL	Silo 6 Equip. Bldg.	250
CNRL	Switch Gear Control Room	225
CNRL	MCC BLDG	225
CNRL	Sample Bldg. BC-32	210
CNRL	Spud Hut Control #1	198
CNRL	Spud Hut Control #2	198
CNRL	AMMONIA UNLOADING CONT RM	160
CNRL	PAF FGD Control Building	150
CNRL	Spud Hut #1	128
CNRL	Spud Hut #2	128
CNRL	Spud Hut Control #3	128
CNRL	Control Room by Steam Fitters	123
CNRL	Pump Control Bldg	52

Building Type	Building Name	Gross SF
CNRL	Storage Tank Cntrl Bldg.	40
CNRL	UNIT 1 CONTROL CAB (PEC)	40
CNRL	UNIT 10 CONTROL RM. (PEC)	40
CNRL	UNIT 2 CONTROL CAB (PEC)	40
CNRL	UNIT 3 CONTROL RM. (PEC)	40
CNRL	UNIT 4 CONTROL RM. (PEC)	40
CNRL	UNIT 5 CONTROL RM. (PEC)	40
CNRL	UNIT 6 CONTROL RM. (PEC)	40
CNRL	UNIT 7 CONTROL RM. (PEC)	40
CNRL	UNIT 8 CONTROL RM. (PEC)	40
CNRL	UNIT 9 CONTROL RM. (PEC)	40
FIRE	WBN New Fire Hall	15,000
FIRE	SHF Fire and Rescue Bldg	1,500
FIRE	Fire Equip Storage Bldg	817
FIRE	Fire Equipment Station	750
FIRE	FEH 10	500
FIRE	CRUSHER BLDG FIRE PROT EQUIP BLDG	475
FIRE	FPRS B	396
FIRE	Fire Protection Pump House	300
FIRE	FIRE PROT EQUIP BLDG #1	300
FIRE	Fire Protection Valve House	290
FIRE	FEH 9	279
FIRE	FPVH 2	220
FIRE	FPVH 3	220
FIRE	FPVH 4	220
FIRE	FPVH 5	220
FIRE	FPVH 6	220
FIRE	Fire Protection Valve House 3/4	220
FIRE	Fire Protection Valve House 8/9	220
FIRE	FPVH 3	200
FIRE	FEH #3	181
FIRE	Fire Protection Valve House 1	180
FIRE	Coal Wash Fire Pump House	180
FIRE	FPV Room	180
FIRE	JOF Emergency Fire Equipment	160
FIRE	Fire Shack	160
FIRE	FIRE PROT EQUIP BLDG #2	160
FIRE	WEH Switchyard Fire Equipment Building	130
FIRE	SHF Fire Equipment Storage Building A	120
FIRE	SHF Fire Equipment Storage Building B	120
FIRE	FEH 1	100
FIRE	FEH 1	85
FIRE	FEH 3	85
FIRE	FEH 5	85
FIRE	FEH 6	85
FIRE	FEH 7	85
FIRE	FEH 8	85
FIRE	Fuel Oil and FEH	84

Building Type	Building Name	Gross SF
FIRE	XFMR FIRE PROT VALVE HOUSE	80
FIRE	FEH (new)	78
FIRE	FEH # 1	75
FIRE	FEH # 2	75
FIRE	FEH # 3	75
FIRE	FEH # 4	75
FIRE	FEH # 5	75
FIRE	FEH # 6	75
FIRE	FEH # 7a	75
FIRE	FEH # 7b	75
FIRE	FEH # 8	75
FIRE	Fire Eq 5	72
FIRE	Fire Equip 6	72
FIRE	Coal Wash Fire Protection Room	72
FIRE	FEH 1	72
FIRE	FEH 10	72
FIRE	FEH 2	72
FIRE	FEH 6	72
FIRE	FEH 7	72
FIRE	FEH 8	72
FIRE	FEH 9	72
FIRE	FEH #1	72
FIRE	FEH #2	72
FIRE	FEH #4	72
FIRE	FEH #9	72
FIRE	FEH 2	72
FIRE	FEH 4	72
FIRE	FEH 4	70
FIRE	FEH 1	68
FIRE	FEH 2	68
FIRE	FEH 3	68
FIRE	FEH 4	68
FIRE	FEH 5	68
FIRE	FEH 6	68
FIRE	FEH 7	68
FIRE	FEH 8	68
FIRE	FEH 9	68
FIRE	FEH #1	66
FIRE	FEH #2	66
FIRE	Fire Equipment Building	66
FIRE	FEH 1 500 kv	60
FIRE	FEH 12	60
FIRE	FEH 2	60
FIRE	FEH 3	60
FIRE	FEH 5	60
FIRE	FEH 5b	60
FIRE	FEH 6	60
FIRE	FEH 9	60

Building Type	Building Name	Gross SF
FIRE	Fire Equip 7	48
FIRE	FPVH 2	16
GENR	WBN Diesel Generator Building Dg-1	13,400
GENR	Powerhouse	7,200
GENR	WBN Diesel Generator Building Dg-2	700
GENR	BRH Small Turbine Generator	580
GENR	CHH Diesel Generator Building	350
GENR	TLH Emergency Generator Building	240
GENR	MHH Diesel Generator Bldg	220
GENR	NJH Diesel Generator Building	220
GENR	TFH Diesel Generator Building	210
GENR	TFH Spillway Emergency Generator Building	100
LMGT	Holston Mountain Load	87
MICR	Raccoon Mtn Pump House	806
MICR	Raccoon Mtn Microwave	665
MICR	State Line Microwave	640
MICR	Eaves Bluff Microwave/Radio	525
MICR	Monte Sano Microwave	510
MICR	Montlake Microwave	510
MICR	Roosevelt Mt Microwave	487
MICR	Oswald Dome Microwave	476
MICR	Thorton Town Microwave	462
MICR	Oak Ridge Microwave	462
MICR	Model Microwave	432
MICR	Germantown Microwave	428
MICR	Cottonport Radio	416
MICR	Rogersville Microwave	416
MICR	Grand River Radio/Microwave	416
MICR	Vanleer Microwave	411
MICR	Hiwassee Microwave	405
MICR	Spring Hill Microwave	391
MICR	New Johnsonville Microwave	391
MICR	Hollis Chapel Microwave	390
MICR	Morristown Microwave	390
MICR	Stephensville Microwave	390
MICR	Bowling Green Microwave	390
MICR	Graham Microwave	381
MICR	Lamar Microwave	381
MICR	Woodall Mountain Microwave	381
MICR	Sharps Ridge Microwave	375
MICR	Sewanee Microwave	375
MICR	Bunker Hill Microwave	375
MICR	Van Vleet Radio/Microwave	375
MICR	Combs Knob Microwave	360
MICR	Church Hill Microwave	360
MICR	Finger	352
MICR	Norton Hill Microwave	352
MICR	McEwen Microwave	352

Building Type	Building Name	Gross SF
MICR	Donelson Microwave	341
MICR	Monsanto Microwave	341
MICR	Beech Grove Microwave	341
MICR	New Castle Microwave	336
MICR	Pickwick Microwave	336
MICR	Lambert Chapel Microwave	330
MICR	Smithville Radio	328
MICR	Signal Mountain Microwave	328
MICR	Wininger Microwave	326
MICR	Fabius Microwave	320
MICR	Anderson Microwave	312
MICR	Rock Springs Microwave	312
MICR	Trace Park Microwave	312
MICR	Lynn Grove Microwave	312
MICR	Russell Hill Microwave	312
MICR	Green Top Mountain Microwave	300
MICR	Hickman Microwave	288
MICR	Shawnee Repeater Station	288
MICR	Ellis Mountain Microwave	275
MICR	Sequoyah Training Radio	268
MICR	Elkton Hill Radio/Microwave	144
MICR	Holston Mountain Microwave	128
MICR	Hinze Radio/Microwave	112
MICR	Terrapin Mtn Radio	96
MICR	Roane Mountain Microwave	88
MICR	Martin Radio	84
MICR	Lena Radio/Microwave	80
MICR	Wauchecha Bald Radio	80
MICR	Broadview Microwave	80
MICR	Hornbeak Radio/Microwave	80
MICR	Bruce Radio Station	80
MICR	White Oak Mountain Radio	80
MICR	Brawley Mtn Microwave/Radio	64
MICR	Tuscumbia Microwave	64
MICR	Hopkinsville Microwave	64
MICR	Grandview Radio/Microwave	36
MICR	Sand Hill Microwave	TBD
MICR	Greenville Radio	TBD
MICR	Data Center Microwave	TBD
MICR	Dug Mountain-Radio	TBD
MICR	Jasper Tele	TBD
MICR	Lookout Mountain Radio	TBD
MICR	Moccasin Radio	TBD
MICR	Crossville Radio	TBD
MICR	Ethridge - VHF Radio	TBD
MICR	Blessington Point Microwave	TBD
MICR	Cullman Radio	TBD
MICR	Farley Tele	TBD

Building Type	Building Name	Gross SF
MICR	Chesterfield Tele	TBD
MICR	Elizabethton Tele	TBD
MICR	Holston High Point Radio	TBD
MICR	Tusculum Tele	TBD
MICR	Alcoa Tele	TBD
MICR	Andersonville Microwave	TBD
MICR	Twin Towers Microwave	TBD
MICR	Volunteer Comm	TBD
MICR	Calvert Tele	TBD
MICR	Paducah Tele	TBD
MICR	Union City Microwave	TBD
MICR	Weakley Microwave	TBD
MICR	Carthage Comm	TBD
MICR	Smyrna Tele	TBD
MICR	West Cookeville Tele	TBD
MICR	Wilson Tele	TBD
MICR	Trinity Tele	TBD
MICR	Wilson Mountain Radio	TBD
MICR	Davidson 500 kV Tele	TBD
MICR	Dickson 161 kV Tele	TBD
MICR	Springfield Comm	TBD
MICR	Covington Comm	TBD
MICR	Shelby Tele	TBD
MICR	Manchester Comm	TBD
MICR	Murfreesboro Radio	TBD
MICR	Orme Mountain Microwave	TBD
MICR	Montgomery 500-kV Radio	TBD
MICR	North Nashville Tele	TBD
MICR	South Nashville Microwave	TBD
MICR	South Nashville Tele	TBD
MICR	Newcastle Microwave	TBD
MICR	South Jackson Microwave	TBD
MICR	Selmer Tele	TBD
MICR	FNH Fontana Radio	TBD
MICR	Lafollette Tele	TBD
MICR	Lonsdale Comm	TBD
MICR	Arab Tele	TBD
MICR	Asbury Radio	TBD
MICR	Athens Tele	TBD
MICR	Lexington Radio	TBD
MICR	Mayfield PSC Radio	TBD
MICR	Murray Tele	TBD
MICR	New Albany Tele	TBD
MICR	Oxford Tele	TBD
MICR	Tupelo Comm	TBD
MICR	Union Comm	TBD
MICR	Trenton Microwave	TBD
MICR	Kie 238 Radio	TBD

Building Type	Building Name	Gross SF
MICR	Riceville 69 kV Switch House	TBD
MICR	Philadelphia Microwave	TBD
MICR	Philadelphia Warehouse Radio	TBD
MICR	West Point PSC Radio	TBD
PRCS	SQN Aux.Bldg	217,500
PRCS	WBN Auxillary Building Aux	217,500
PRCS	BLN Auxiliary Bldg	205,000
PRCS	BLN Control Bldg	41,850
PRCS	SQN Control Bldg.	39,200
PRCS	BFN Unit 3 Restart	23,100
PRCS	SHF Limestone Conditioner Bldg	22,050
PRCS	WBN Reactor Building Reac	20,000
PRCS	COF Precipitator 1-2	20,000
PRCS	COF Precipitator 3-4	20,000
PRCS	COF Precipitator 5-6	20,000
PRCS	PAF Precipitator Unit 3A	20,000
PRCS	PAF Precipitator Unit 3B	20,000
PRCS	Waste Silos	17,100
PRCS	Water Supply	16,892
PRCS	HIH Dam	16,500
PRCS	WBN Makeup Water Treatment Plant Mwp	16,000
PRCS	Water Treatment Plant	15,520
PRCS	CUF Precipitator 1A	15,000
PRCS	CUF Precipitator 1B	15,000
PRCS	CUF Precipitator 1C	15,000
PRCS	CUF Precipitator 2A	15,000
PRCS	CUF Precipitator 2B	15,000
PRCS	CUF Precipitator 2C	15,000
PRCS	KIF Water Treatment Plant	14,847
PRCS	Water Treatment Plant	14,847
PRCS	Chlorine Plant	12,012
PRCS	SHF Water Treatment Plant	12,000
PRCS	JOF Water Treatment Plant	11,518
PRCS	SQN Diesel Gen. Bldg.	11,200
PRCS	Surge Bin Equipment Building #1	11,159
PRCS	WTH Control Building	9,827
PRCS	COF Dry Fly Ash Eqpt Bldg	9,216
PRCS	PAF Limestone Preparation Bldg	8,880
PRCS	WBN Intake Pumping Station-Intake	8,200
PRCS	ALF Precipitator 1	8,000
PRCS	ALF Precipitator 2	8,000
PRCS	ALF Precipitator 3	8,000
PRCS	JSF Water Treatment Plant	7,389
PRCS	CUF Breaker Building	7,072
PRCS	BRF Pumping Station	7,068
PRCS	WATER TREATMENT BUILDING	6,300
PRCS	JOF Draft Sys. Electrical Building	6,027
PRCS	WBF Fuel Handling	6,000

Building Type	Building Name	Gross SF
PRCS	CUF 500KV Switchyard Maintenance Building	6,000
PRCS	CUF Water Treatment Plant	6,000
PRCS	PAF Vacume Filter Building	5,750
PRCS	ALF Water Intake Structure	5,000
PRCS	PAF 500 KV Maint Bldg	4,800
PRCS	COF Conveyor Control Bldg	4,603
PRCS	SHF Demineralization Bldg 2	4,500
PRCS	TLH Dam	4,160
PRCS	O3H Dam/Gallery	3,700
PRCS	WBF Hopper Bldg	3,600
PRCS	WCF Ball Mill Bldg	3,400
PRCS	FGD MCC Bldg.	3,240
PRCS	SHF Demineralization Bldg 1	3,150
PRCS	ALF Conveyor Switch Gear Building	3,078
PRCS	JSF Surge Bin Equipment Building	3,034
PRCS	SQN Intake Pump.Stat.	3,000
PRCS	ALF Tire Fuel Handling Facility	2,700
PRCS	TIRE FUEL HANDLING FACILITY	2,700
PRCS	JSF Silo Equipment Building	2,402
PRCS	SHH Intake and Access Tunnel	2,360
PRCS	BRF Pptr Control Bldg	2,000
PRCS	Electrical Equipment Bldg	1,838
PRCS	Silo	1,810
PRCS	CUF Precipitator Control Building 2B	1,800
PRCS	CUF Precipitator Control Building 2C	1,800
PRCS	PAF FGD Pump Building	1,800
PRCS	Scrubber Equip Bldg U-8	1,700
PRCS	CUF Precipitator Control Building 1B	1,596
PRCS	CUF Precipitator Control Building 1C	1,596
PRCS	CUF Precipitator Control Building 2A	1,596
PRCS	BRF Ash Silo	1,587
PRCS	APH Dam	1,550
PRCS	BFN Telephone Node Bldg. (W-19)	1,524
PRCS	APH Valve House	1,480
PRCS	Chemical Lab	1,380
PRCS	Trust. Station N	1,350
PRCS	WCF Unit 8 Maintenance Bldg	1,320
PRCS	BRF Aux Hopper	1,300
PRCS	PAF Clorination Building	1,300
PRCS	Limestone Conv. Cntr.	1,260
PRCS	TFH Intake Structure	1,200
PRCS	Compressor Bldg.	1,200
PRCS	Unit 7 Scrubber Maintenance	1,198
PRCS	Pump House	1,148
PRCS	Conac Bldg.	1,020
PRCS	BRF Sewage Treatment Plant	1,000
PRCS	GFH Rock House	930
PRCS	Whiteside Pump House	720

Building Type	Building Name	Gross SF
PRCS	O3H Valve House	720
PRCS	BRF Ash Silo Equipment Building	720
PRCS	Generator Pump Bldg	700
PRCS	BRH Spillway Equipment Building	680
PRCS	WEH Oil Purification Building	680
PRCS	JSF Fly Ash Silo	600
PRCS	NTH Compressor and Blower Building	600
PRCS	Precipicator Pump Cntrl 3 & 4	600
PRCS	WTH Oil Purification Building	576
PRCS	TFH Aeration and Compressor Building	560
PRCS	CUF Lime Stone Dock Service Building	500
PRCS	Maintenance Bldg U-7	500
PRCS	Breaker Bldg Valve Station	480
PRCS	Building Outside BL-1	435
PRCS	Building Outside BL-1	435
PRCS	Pump Building	427
PRCS	GAF MCC Building	400
PRCS	MCC Building	400
PRCS	Gray Bldg.	396
PRCS	Rockhouse, Buckeye, Bagwell Pump House	360
PRCS	FGD Compressor Bldg.	320
PRCS	O2H Oil Purification Building	300
PRCS	D.I. WATER TANK VALVE RM	250
PRCS	FNH Diesel Generator Building	240
PRCS	CEMS 1 & 2	240
PRCS	CEMS 3 & 4	240
PRCS	O2H Well Pump House	230
PRCS	FGD Slurry Kiosk1	230
PRCS	FGD Slurry Kiosk2	230
PRCS	COF Precipitator 1-2 wash	200
PRCS	COF Precipitator 3-4 wash	200
PRCS	O2H Penstock Valve House	200
PRCS	BRF Coal Sample East	200
PRCS	BRF Coal Sample West	200
PRCS	Valve Station #2	195
PRCS	CEMS Bldg. #3	180
PRCS	South Jackson 161 kV Generator Bldg	165
PRCS	Fuel Oil Booster Pump	165
PRCS	CEMS Keeper	160
PRCS	O2H Water Treatment Plant	160
PRCS	O2H Trash Rack House	160
PRCS	Cont. Emissions Lab 1	160
PRCS	Cont. Emissions Lab 2	160
PRCS	Cont. Emissions Lab 3	160
PRCS	CEMS 1&2	160
PRCS	CEMS 3&4	160
PRCS	CEMS 5&6	160
PRCS	CEMS 7&8	160

Building Type	Building Name	Gross SF
PRCS	CEMS 9&10	160
PRCS	Emissions Control	160
PRCS	APH Diesel Generator Building	154
PRCS	O1H Diesel Generator Building	144
PRCS	Emergency Pond Pump	144
PRCS	Transformer Bldg.	140
PRCS	CEMS Bldg. #1	136
PRCS	CEMS Bldg. #2	136
PRCS	Ash Silo Shed	132
PRCS	Limestone Kiosk	126
PRCS	MCC 3 & 4	124
PRCS	MCC 5 & 6	124
PRCS	MCC Control 1& 2	124
PRCS	Retarder House	120
PRCS	WTH Electrical Equipment Building	114
PRCS	Pump House	102
PRCS	GFH Intake House	100
PRCS	Water Test Bldg.	96
PRCS	Well Control Bldg	96
PRCS	Valve Station #1	90
PRCS	UNIT 1 CEMS BLDG	90
PRCS	UNIT 2 CEMS BLDG	90
PRCS	UNIT 3 CEMS BLDG	90
PRCS	Wellhouse (Watauga Dam)	76
PRCS	Electronic Equipment Building	76
PRCS	BRF Ash Silo Scale House	64
PRCS	Storage Tank Pump House	56
PRCS	Crane Operator Bldg	49
PRCS	Fly Ash Building	36
PRCS	CHEM POND PUMP STR EQUIP SHED	24
PRCS	O2H Water Level Gauge House	16
PRCS	WLH Lock	TBD
PWRH	WBF Powerhouse	2,322,244
PWRH	PAF Powerhouse	1,823,203
PWRH	CUF Powerhouse	1,564,438
PWRH	KIF Powerhouse	1,255,721
PWRH	JOF Powerhouse	1,069,704
PWRH	COF Powerhouse	954,936
PWRH	SHF Powerhouse	929,764
PWRH	WCF Powerhouse Plant B	868,255
PWRH	JSF Powerhouse	836,722
PWRH	BRF Powerhouse	720,636
PWRH	GAF Powerhouse	713,267
PWRH	WCF Powerhouse Plant A	637,603
PWRH	BFN Turbine Building	468,442
PWRH	ALF Powerhouse	428,539
PWRH	BFN Reactor Building	361,944
PWRH	PH Power Plant	357,503

Building Type	Building Name	Gross SF
PWRH	BLN Turbine Bldg	342,090
PWRH	SQN Turbine Bldg.	325,542
PWRH	RPS Powerplant Chamber and Tunnels	244,200
PWRH	WEH Powerhouse/Dam	200,200
PWRH	PKH Powerhouse/Dam	177,200
PWRH	WBF Boiler Bay	122,000
PWRH	SHF AFBC Boiler Bldg	120,000
PWRH	FNH Powerhouse/Dam	118,414
PWRH	WBN Turbine Building Tb	112,500
PWRH	CUF Absorber Building	107,500
PWRH	CHH Powerhouse/Dam	102,200
PWRH	FLH Powerhouse/Dam	92,540
PWRH	DGH Powerhouse/Dam	84,700
PWRH	CRH Powerhouse/Dam	83,100
PWRH	GUH Powerhouse/Dam	80,747
PWRH	PH MAINT. & POWER STORES	77,482
PWRH	NOH Powerhouse/Dam	73,900
PWRH	BLN Reactor Bldg	72,000
PWRH	WBH Powerhouse/Dam	68,970
PWRH	KYH Powerhouse/Dam	67,400
PWRH	Boiler Bay	64,500
PWRH	NJH Powerhouse/Dam	63,900
PWRH	CUF Service Building	60,000
PWRH	SQN Reactor Bldg.	45,000
PWRH	MHH Powerhouse/Dam	44,400
PWRH	BOH Powerhouse/Dam	37,000
PWRH	BFN Control Building	36,000
PWRH	RPS Surge Chamber and Tunnel	28,500
PWRH	APH Powerhouse	27,500
PWRH	Fan Room	26,400
PWRH	HIH Powerhouse/Control Building	25,100
PWRH	O1H Powerhouse/Dam	22,926
PWRH	FPH Powerhouse/Dam	22,129
PWRH	WCF Scrubber Unit 7	21,500
PWRH	PPTR U-8	21,000
PWRH	WBH Control Bldg	20,370
PWRH	WTH Powerhouse	19,854
PWRH	BFN Unit 3 Diesel Generator Bldg	17,850
PWRH	BFN Unit 1 & 2 Dsl.Gen. Bldg	17,285
PWRH	Heater Bay	16,000
PWRH	O3H Powerhouse/Control Bay	14,900
PWRH	PPTR U-7	14,000
PWRH	BC-12&13	13,000
PWRH	Precipitator 1	12,276
PWRH	Precipitator 2	12,276
PWRH	TFH Powerhouse/Dam	12,200
PWRH	O2H Powerhouse/Dam	12,000
PWRH	SHH Powerhouse	11,130

Building Type	Building Name	Gross SF
PWRH	WCF Scrubber Unit 8	11,000
PWRH	PPTR 3	10,800
PWRH	PPTR 3-2	10,800
PWRH	PPTR 4	10,800
PWRH	WIH Powerhouse/Dam	10,040
PWRH	PPTR 1,2	10,000
PWRH	PPTR 1-2	10,000
PWRH	PPTR 2-2	10,000
PWRH	PPTR 4-3	10,000
PWRH	GFH Powerhouse	9,780
PWRH	Office Bldg	8,800
PWRH	Fan Room U1-U6	7,800
PWRH	GAF Water Supply Building	7,755
PWRH	Precipitator 5	7,128
PWRH	Precipitator 6	7,128
PWRH	Precipitator 7	7,128
PWRH	Precipitator 8	7,128
PWRH	Precipitator 9	7,128
PWRH	Mechanic Bldg Equip Room	6,750
PWRH	BC-2	6,300
PWRH	RPS Power Storage Building	6,230
PWRH	RPS Service Equipment Building	6,200
PWRH	Old Smoke Stack 1	6,082
PWRH	Old Smoke Stack 2	6,082
PWRH	NTH Powerhouse	5,800
PWRH	Smoke Stack	5,542
PWRH	Precipitator 1	5,241
PWRH	Precipitator 2	5,241
PWRH	Precipitator 3	5,241
PWRH	Precipitator 4	5,241
PWRH	PH PPTR 1A & 1B	5,200
PWRH	PH PPTR 2A & 2B	5,200
PWRH	PH PPTR 3A & 3B	5,200
PWRH	Large Smoke Stack #1	5,024
PWRH	Large Smoke Stack #2	5,024
PWRH	Large Smoke Stack 1	5,024
PWRH	Large Smoke Stack 2	5,024
PWRH	BC-L1 & L3	5,000
PWRH	EPRI Office	4,848
PWRH	Scrubber #1	4,800
PWRH	BC-3&4	4,800
PWRH	Smoke Stack #1	4,779
PWRH	Smoke Stack #2	4,779
PWRH	New Smoke Stack	4,778
PWRH	Scrubber #2	4,752
PWRH	BFN Radwaste Evaporator Bldg	4,680
PWRH	Smoke Stack	4,453
PWRH	CTH Powerhouse/Dam	4,430

Building Type	Building Name	Gross SF
PWRH	BC-10&11	4,400
PWRH	BRH Powerhouse	4,216
PWRH	Fan Room U-8	3,800
PWRH	GAF Carpenter Shop	3,675
PWRH	Cogen Turbine Bldg	3,500
PWRH	Smoke Stack	3,443
PWRH	Ash Silo 1	3,421
PWRH	Ash Silo 2	3,421
PWRH	Assembly Room	3,200
PWRH	Fan Room U-7	3,200
PWRH	Old Smoke Stacks (8 @380ea)	3,040
PWRH	RPS Ventilation Fan Building	2,800
PWRH	Ball Mill Bldg Addition	2,700
PWRH	PPTR U1	2,500
PWRH	PPTR U2	2,500
PWRH	PPTR U3	2,500
PWRH	PPTR U4	2,500
PWRH	PPTR U5	2,500
PWRH	PPTR U6	2,500
PWRH	Old Smoke Stack 1	2,375
PWRH	Old Smoke Stack 2	2,375
PWRH	Ash Silo Service Bldg	2,268
PWRH	Oxygen Blower Bldg	2,200
PWRH	BC-1	2,000
PWRH	BC-L5 & L6	2,000
PWRH	New Smoke Stack 2	1,964
PWRH	New Smoke Stack 1	1,963
PWRH	BIO-GAS BUILDING	1,800
PWRH	CUF Caustic Treatment Building	1,680
PWRH	New Smoke Stack	1,418
PWRH	BC-5	1,300
PWRH	BC-L2	1,200
PWRH	GAF Oil Pumping Station	1,148
PWRH	PPTR Control Room	1,088
PWRH	Smoke Stack #1	1,017
PWRH	Smoke Stack #2	1,017
PWRH	Slurry Pump Bldg	1,000
PWRH	BC-L4	1,000
PWRH	Boiler Room 1	880
PWRH	Boiler Room 2	880
PWRH	Stackout Conveyer Tower	804
PWRH	PH COMPRESSOR SHED 1	800
PWRH	PH COMPRESSOR SHED 2	800
PWRH	Transfer Station LB	670
PWRH	Ash Silo	600
PWRH	Receiving Hopper	500
PWRH	Compressor Building	474
PWRH	6900 Transformer Yard Valve St.	440

Building Type	Building Name	Gross SF
PWRH	Ash Silo Control Room	432
PWRH	Fan Control 2A1/2A2	384
PWRH	Fan Control 2B1/2C2	384
PWRH	Fan Control 2C1/2C2	384
PWRH	Old Smoke Stacks (10)	380
PWRH	New Smoke Stack #5(functional)	371
PWRH	Valve House (By Transfer Station)	250
PWRH	BOTTLE GAS STORAGE SHED	250
PWRH	Old Smoke Stack #1	162
PWRH	Old Smoke Stack #2	162
PWRH	Old Smoke Stack #3	162
PWRH	Old Smoke Stack #4	162
PWRH	RPS Discharge Structure Pumping Station	140
PWRH	Emissions Control Bldg 2	128
PWRH	Emissions Control. Bldg.	120
PWRH	Pump Building	77
PWRH	CHH Chickamauga Lock	TBD
SUBS	JSF 161kV Switch House Structure	20,520
SUBS	Vonore 69 kV Switch House	16,737
SUBS	Niles Ferry 69 kV Switch House	16,000
SUBS	South Nashville 161 kV Switch House/Nash ADCC	14,649
SUBS	South Jackson	11,469
SUBS	Raccoon Mtn Ps Plant 500 kV (161 kV)	10,123
SUBS	COF 161 kV Switch House	9,549
SUBS	Marshall 500 kV Switch House	8,418
SUBS	South Jackson 161 kV Switch House	7,368
SUBS	Radnor 161 kV Switch House	7,290
SUBS	Phipps Bend 500 kV Switch House	7,150
SUBS	Lonsdale 161 kV Switch House	7,128
SUBS	Trinity 500 kV Switch House	6,700
SUBS	Freeport 500 kV Switch House	6,582
SUBS	Limestone 500 kV Switch House	6,500
SUBS	Jackson 500 kV Switch House	6,448
SUBS	Madison 500 kV Switch House	6,124
SUBS	Lowndes 500 kV Switch House	5,720
SUBS	Maury 500 kV Switch House	5,689
SUBS	Northeast Johnson City 161 kV Switch House	5,375
SUBS	Wilson 500 kV Switch House	5,297
SUBS	Union 500 kV Switch House	4,816
SUBS	Roane 500 kV Switch House	4,760
SUBS	Weakley 500 kV Switch House	4,536
SUBS	Northeast Substation	4,500
SUBS	Sullivan Static Condensor	4,500
SUBS	Murffessboro Ind Park 161 kV Switch House	4,468
SUBS	Alcoa 161 kV Switch House	4,389
SUBS	West Point 500 kV Switch House	4,345
SUBS	West Nashville 161 Kv Switch House	4,228
SUBS	Athens 161 kV Switch House	4,200

Building Type	Building Name	Gross SF
SUBS	Shelby 500 kV Switch House	4,088
SUBS	Winchester 161 kV Switch House	4,032
SUBS	Crossville 161 kV Switch House	4,000
SUBS	Summer Shade 161 kV Switch House	3,882
SUBS	Huntsville 161 kV Switch House	3,800
SUBS	Albertville 161 kV Switch House	3,700
SUBS	Hopkinsville 161 kV Switch House	3,700
SUBS	Bowling Green 161 kV Switch House	3,640
SUBS	Oglethorpe 161 kV Switch House	3,600
SUBS	Sullivan 500 kV Switch House	3,593
SUBS	Belfast 161 kV Switch House	3,562
SUBS	Milan 161 kV Switch House	3,552
SUBS	Fayetteville 161 kV Switch House	3,552
SUBS	Davidson 500 kV Switch House	3,439
SUBS	Midway 161 kV Switch House	3,368
SUBS	Hickory Valley 161kV Switch House	3,360
SUBS	Covington 161 kV Switch House	3,304
SUBS	Franklin 161 kV Switch House	3,273
SUBS	Lafayette 161 kV Switch House	3,240
SUBS	White Pine 161 kV Switch House	3,220
SUBS	Rockwood 161 kV Switch House	3,159
SUBS	North Nashville 161 kV Switch House	3,109
SUBS	New Albany 161 kV Switch House	3,109
SUBS	Chesterfield 161 kV Switch House	3,109
SUBS	Columbus 161 kV Switch House	3,090
SUBS	East Cleveland 161 kV Switch House	3,080
SUBS	Paducah 161 kV Switch House	3,080
SUBS	Clarksville 161 kV Switch House	3,074
SUBS	Charleston 161 kV Switch House	2,952
SUBS	Wartrace 161 kV Switch House	2,928
SUBS	Scottsboro 161 kV Switch House	2,860
SUBS	Mount Pleasant 161 kV Switch House	2,800
SUBS	Okolona 161 kV Switch House	2,714
SUBS	Moccasin 161 kV Switch House	2,500
SUBS	North Knoxville 161 kV Switch House	2,448
SUBS	Shoals 161 kV Switch House	2,250
SUBS	Decatur 161 kV Switch House	2,045
SUBS	Calvert 161 kV Switch House	2,043
SUBS	Tupelo 161 kV Switch House	2,000
SUBS	Lawrenceburg 161 kV Switch House	1,945
SUBS	Smithville 161 kV Switch House	1,945
SUBS	Dyersburg 161 kV Switch House	1,944
SUBS	Lebanon 161 kV Switch House	1,939
SUBS	Mayfield 161 kV Switch House	1,925
SUBS	Philadelphia 161 kV Switch House	1,834
SUBS	WPM Philadelphia	1,834
SUBS	North Bristol 161 kV Switch House	1,820
SUBS	Jetport 161 kV Switch House	1,800

Building Type	Building Name	Gross SF
SUBS	Bluff City 161 kV Switch House	1,800
SUBS	Counce 161 kV Switch House	1,800
SUBS	Monsanto 161 kV Switch House	1,700
SUBS	Martin 161 kV Switch House	1,691
SUBS	Franklin 500 kV Switch House	1,660
SUBS	Murfreesboro Maintenance Building	1,632
SUBS	Columbia 161 kV Shelter	1,600
SUBS	Batesville 161 kV Switch House	1,584
SUBS	Brownsville District 161 kV Switch House	1,578
SUBS	Humboldt 161 kV Switch House	1,578
SUBS	Finley 161 kV Switch House	1,578
SUBS	Starkville (Old) 161 kV Switch House	1,578
SUBS	Spring City 161 kV Switch House	1,568
SUBS	Reynolds 161 kV Switch House	1,560
SUBS	West Cookeville 161 kV Switch House	1,555
SUBS	Fort Payne 161 kV Switch House	1,550
SUBS	Athens 161 kV Switch House	1,540
SUBS	Cullman 161 kV Switch House	1,526
SUBS	National Carbide 161 kV Switch House	1,400
SUBS	Mt. Pleasant 161 kV Switch House	1,380
SUBS	Union City 161 kV Switch House	1,360
SUBS	Columbia Primary 161 kV Switch House	1,350
SUBS	Alpha 69 kV Switch House	1,344
SUBS	West Ringgold 230kV Switch House	1,344
SUBS	Lowland 69 kV Switch House	1,320
SUBS	GAF 161 kV Switch House	1,319
SUBS	East McMinnville 161 kV Switch House	1,290
SUBS	McMinnville 161 kV Switch House	1,290
SUBS	Concord 161 kV Switch House	1,280
SUBS	Burnsville 161 kV Switch House	1,200
SUBS	Murfreesboro 161 kV Switch House	1,184
SUBS	Farley 161 kV Switch House	1,152
SUBS	Valley Creek 115 kV Switch House	1,152
SUBS	North Pigeon Forge 161 kV Switch House	1,152
SUBS	Ardmore 161 kV Switch House	1,120
SUBS	Columbia District 46 kV Switch House	1,101
SUBS	Goose Pond 161 kV Switch House	1,100
SUBS	East Shelbyville 161 kV Switch House	1,092
SUBS	Knoxville 161 kV Switch House	1,066
SUBS	Oxford 161 kV Switch House	1,056
SUBS	Dickson 161 kV Switch House	1,056
SUBS	Columbus District 46 kV Switch House	1,018
SUBS	Smyrna 161 kV Switch House	1,008
SUBS	Calhoun City 161 kV Switch House	1,008
SUBS	Corinth 161 kV Switch House	1,008
SUBS	Cadiz 161 kV Switch House	1,008
SUBS	Portland 161 kV Switch House	1,008
SUBS	Pin Hook 161 kV Switch House	1,008

Building Type	Building Name	Gross SF
SUBS	Huntsville 161 kV Switch House	1,008
SUBS	NASA 161 kV Switch House	1,008
SUBS	Double Bridges 161 kV Switch House	1,008
SUBS	FTL Plant 161 kV Switch House	1,008
SUBS	Albertville District 46 kV Switch House	1,000
SUBS	Hartsville N.P. 161kV Switch House	962
SUBS	Murphy 161 kV Switch House	960
SUBS	Loudon 161 kV Switch House	952
SUBS	Nixon Road 161 kV Switch House	918
SUBS	Edgoten 161 kV Switch House	912
SUBS	Elizabethton 161 kV Switch House	885
SUBS	Pigeon Forge 161 kV Switch House	882
SUBS	North Huntsville 161 kV Switch House	864
SUBS	Holly Springs 161 kV Switch House	864
SUBS	Springfield 161 kV Switch House	864
SUBS	Selmer 161kV Switch House	864
SUBS	Tusculum 161 kV Switch House	864
SUBS	Carthage 161 kV Switch House	864
SUBS	Arab 161 kV Switch House	864
SUBS	Oakland 161 kV Switch House	864
SUBS	Centerville 161 kV Switch House	851
SUBS	Centerville Fallout Shelter	816
SUBS	Newport 161 kV Switch House	806
SUBS	Shelbyville 46 kV Switch House	768
SUBS	Lewisburg 46 kV Switch House	763
SUBS	Booneville 161 kV Switch House	756
SUBS	Leake 161 kV Switch House	740
SUBS	Dekalb 161 kV Switch House	735
SUBS	East Bowling Green 161 kV Switch House	696
SUBS	Copper Basin 161 kV Switch House	665
SUBS	WBF Plant 161 kV Switch House	665
SUBS	Coffeeville 161 kV Switch House	640
SUBS	Louisville 161 kV Switch House	625
SUBS	Bolivar 161 kV Switch House	609
SUBS	Manchester 161 kV Switch House	600
SUBS	Louisville 161 kV Switch House	576
SUBS	Trinity 500 kV Pump House	572
SUBS	Wilson 500 kV Pump House	572
SUBS	Shelby 500 kV Pump House	572
SUBS	Sullivan 500 kV Pump House	572
SUBS	Montgomery 500-kV-Pump House	572
SUBS	Madison 500 kV Pump House	572
SUBS	Cordova 500 kV Pump House	572
SUBS	Henegar 161 kV Switch House	560
SUBS	Sturgis 161 kV Switch House	540
SUBS	Moulton 161 kV Switch House	500
SUBS	Jackson 500 kV Switch House	500
SUBS	Nance 161 kV Switch House	480

Building Type	Building Name	Gross SF
SUBS	Olive Branch 161 kV Switch House	480
SUBS	Davidson 500 kV Pump House	480
SUBS	Stevenson 161 kV Switch House	480
SUBS	Casky 161 kV Switch House	480
SUBS	Morristown 161 kV Switch House	405
SUBS	Bolivar	400
SUBS	Clinton 161 kV Switch House	400
SUBS	Monsanto Chemical 161 kV Switch House	400
SUBS	Morristown District 69 kV Switch House	384
SUBS	Starkville (New) 161 kV Switch House	320
SUBS	Lewisburg 161 kV Switch House	320
SUBS	Cranberry 161 kV Switch House	320
SUBS	Rollins 46 kV Switch House	300
SUBS	Scott 115 kV Switch House	294
SUBS	Erin 161 kV Switch House	288
SUBS	Waynesboro 161 kV Switch House	288
SUBS	Bolivar District 46 kV Switch House	288
SUBS	Braytown 161 kV Switch House	288
SUBS	Livingston 161 kV Switch House	288
SUBS	Elkton 69 kV Switch House	288
SUBS	Franklin 161 kV Switch House	288
SUBS	Hopson 69 kV Switch House	288
SUBS	Logan Aluminum	288
SUBS	Penchem 69 kV Switch House	288
SUBS	Alamo 161 kV Switch House	288
SUBS	Aberdeen 161 kV Switch House	287
SUBS	Glasgow 161 kV Switch House	284
SUBS	Water Valley 161 kV Switch House	280
SUBS	Savannah 161 kV Switch House	276
SUBS	Aberdeen	275
SUBS	Dayton 161 kV Switch House	273
SUBS	Bristow	272
SUBS	Fultondale 115 kV Switch House	259
SUBS	Casky 69 kV Switch House	241
SUBS	Lynchburg 46 kV Switch House	240
SUBS	Collinsville 161 kV Switch House	240
SUBS	Guntersville 161 Kv Switch House	240
SUBS	Red Bay 161 kV Switch House	240
SUBS	Sardis 161 kV Switch House	240
SUBS	Hardwick Clothes Inc	240
SUBS	Dry Creek Primary 161 kV Switch House	240
SUBS	Brownsville 161 kV Switch House	240
SUBS	Guntown 161 kV Switch House	240
SUBS	Huntsville 161 kV Storage	240
SUBS	Moscow 161 kV Switch House	240
SUBS	Russellville 161 kV Switch House	240
SUBS	Bonicord	225
SUBS	Saulsbury 46 kV Switch House	200

Building Type	Building Name	Gross SF
SUBS	Lightfoot 69 kV Switch House	170
SUBS	West Point 500 kV Pump House	169
SUBS	Kerr-Mcgee Inc. 161 kV Switch House	143
SUBS	Ridgedale 161 kV Switch House	100
SUBS	Sherwood 46 kV Switch House	100
SUBS	Hickory Valley 161 kV Pump House	99
SUBS	Belfast 161 kV Pump House	96
SUBS	Ludlow 46 kV Switch House	96
SUBS	Booneville District 46 kV Switch House	96
SUBS	North Sardis 161 kV Switch House	92
SUBS	Dunmor 69 kV Switch House	88
SUBS	Roane Mountain 161 kV Switch House	88
SUBS	Greeneville Ind Park 161 kV Switch House	86
SUBS	Culleoka 46 kV Switch House	85
SUBS	Hendersonville 161 kV Switch House	85
SUBS	Dupont 69 kV Switch House	85
SUBS	Charlotte 69 kV Switch House	85
SUBS	Kirkville 46 kV Switch House	85
SUBS	Jersey Miniere Zinc-Elmwood	85
SUBS	Jersey Miniere Zinc Co 161 kV Switch House	85
SUBS	Russellville District 69 kV Switch House	84
SUBS	Clarksville Water Tower/COMM	80
SUBS	Weyerhauser 161 kV Switch House	80
SUBS	Bryant 161 kV Switch House	80
SUBS	Grove Oak 46 kV Switch House	80
SUBS	Section 46 kV Switch House	80
SUBS	Clarksburg 161 kV Switch House	80
SUBS	South Macon 161 kV Switch House	80
SUBS	Falling Water 161 kV Switch House	80
SUBS	Middale 69 kV Switch House	80
SUBS	Cowan 46 kV Switch House	80
SUBS	Sewanee 69 kV Switch House	80
SUBS	Columbus Air Force Base 46 kV Switch House	80
SUBS	South Calvert 161 kV Switch House	80
SUBS	Lebanon 161 kV Pump House	80
SUBS	Weyerhaeuser Co. 161 kV Switch House	80
SUBS	Courtland 46 kV Switch House	75
SUBS	Columbia 161 kV Pump House	72
SUBS	Bluff City 161 kV Pump House	56
SUBS	Rienzi 46 Switch House	55
SUBS	Kirkmansville 69 kV Switch House	54
SUBS	Marble 69 kV Switch House	54
SUBS	Williamsport 46 kV Switch House	52
SUBS	Cornersville 46 kV Switch House	52
SUBS	Haletown 69 kV Switch House	48
SUBS	Cerulean 69 kV Switch House	48
SUBS	Etowah Switch House 69 kV Switch House	48
SUBS	Unionville 46 kV Switch House	48

Building Type	Building Name	Gross SF
SUBS	Estill Springs 46 kV Switch House	48
SUBS	Hillsboro 46 kV Switch House	48
SUBS	Adairville 69 kV Switch House	48
SUBS	Salem Carpet Mills 46 kV Switch House	48
SUBS	Peedee 69 kV Switch House	48
SUBS	Pembroke 69 kV Switch House	48
SUBS	Brindley 46 kV Switch House	42
SUBS	Bandy, R. H. 115 kV Switch House	TBD
SUBS	Pulaski 161 kV Switch House	TBD
SUBS	Avion Farms	TBD
SUBS	Barkley Hydro Plant 161 kV Switch House	TBD
SUBS	Bristow 161 kV Switch House	TBD
SUBS	Burkesville 69 kV Switch House	TBD
SUBS	Cadiz District 69 kV Switch House	TBD
SUBS	Caneyville 69 kV Switch House	TBD
SUBS	Celina 69 kV Switch House	TBD
SUBS	Clifty Creek 161 kV Switch House	TBD
SUBS	Clifty 69 kV Switch House	TBD
SUBS	Country Club 69 kV Switch House	TBD
SUBS	Dale Hollow Hydro Plant 69 kV Switch House	TBD
SUBS	East Leitchfield 69 kV Switch House	TBD
SUBS	Edmonton 69 kV Switch House	TBD
SUBS	Fountain Run 69 kV Switch House	TBD
SUBS	Happy Hollow 69 kV Switch House	TBD
SUBS	Hartsville Nuc Plant Const 69 kV Switch House	TBD
SUBS	Homer 69 kV Switch House	TBD
SUBS	Hopkinsville District 69 kV Switch House	TBD
SUBS	James River Corp.	TBD
SUBS	Kendall Mfg Co.	TBD
SUBS	Kentech Plastics	TBD
SUBS	Lafayette Tele	TBD
SUBS	Lafayette District 69 kV Switch House	TBD
SUBS	Leitchfield 69 kV Switch House	TBD
SUBS	Logan Aluminum 161 kV Switch House	TBD
SUBS	Lyon 69 kV Switch House	TBD
SUBS	McCreary County 161 kV Switch House	TBD
SUBS	Mid South Stone	TBD
SUBS	Monticello 69 kV Switch House	TBD
SUBS	Morgantown 69 kV Switch House	TBD
SUBS	Moss 69 kV Switch House	TBD
SUBS	North Drive 69 kV Switch House	TBD
SUBS	Orlinda 69 kV Switch House	TBD
SUBS	Paradise Fossil Plant 500 kV	TBD
SUBS	Coalmont Comm	TBD
SUBS	Coalmont A & B 161 kV Switch House	TBD
SUBS	Colonial Pipeline 69 kV Switch House	TBD
SUBS	Colvard, T. W. 115 kV Switch House	TBD
SUBS	Conagra Processing Plant	TBD

Building Type	Building Name	Gross SF
SUBS	Conagra Cold&Dry Storage	TBD
SUBS	Cooper Heights	TBD
SUBS	Coronet Industries	TBD
SUBS	Dalton	TBD
SUBS	Dayton District 69 kV Switch House	TBD
SUBS	Dixie Yarns Ringgold Plant	TBD
SUBS	Dixie Yarns Watkins St	TBD
SUBS	Dug Gap 115 kV Switch House	TBD
SUBS	Dunlap 69 kV Switch House	TBD
SUBS	Edwards, J. C. 161 kV Switch House	TBD
SUBS	Eureka Foundry Co.	TBD
SUBS	Fort Oglethorpe	TBD
SUBS	Fuller, R. C. 115 kV Switch House	TBD
SUBS	GA - Al State Line	TBD
SUBS	Galaxy Carpet Mills, Inc	TBD
SUBS	Garrett 115 kV Switch House	TBD
SUBS	Gordon County Ind Pk 115 kV Switch House	TBD
SUBS	Gore 46 kV Switch House	TBD
SUBS	H. R. International 161 kV Switch House	TBD
SUBS	Hamilton 161 kV Switch House	TBD
SUBS	Hassler 115 kV Switch House	TBD
SUBS	Imperial Bondware Corp.	TBD
SUBS	Jasper 161 kV Switch House	TBD
SUBS	Kayser-Roth Corp.	TBD
SUBS	Kensington	TBD
SUBS	Kiker B. H. 115 kV Switch House	TBD
SUBS	Kimball 69 kV Switch House	TBD
SUBS	Kimball 161 kV Switch House	TBD
SUBS	Lafayette 115 kV Switch House	TBD
SUBS	Lodge Manufacturing Co.	TBD
SUBS	Loughridge 115 kV Switch House	TBD
SUBS	Lovell Field	TBD
SUBS	Missionary Ridge Pcc	TBD
SUBS	Moccasin Bend Waste Water Pl	TBD
SUBS	Monteagle 69 kV Switch House	TBD
SUBS	Walker County 161 kV Switch House	TBD
SUBS	Wallaceville 161 kV Switch House	TBD
SUBS	Whiteside 26 kV Switch House	TBD
SUBS	Whitfield Industrial Park 115 kV	TBD
SUBS	Whitfield 115 kV Switch House	TBD
SUBS	Whitwell 69 kV Switch House	TBD
SUBS	Young, R. W.	TBD
SUBS	Young, R. W. 115 kV	TBD
SUBS	Allied Signal (Bendix)	TBD
SUBS	APH 161 kV Switch House	TBD
SUBS	Avery Dennison Corp.	TBD
SUBS	Copper Basin Comm	TBD
SUBS	Bendix Corporation	TBD

Building Type	Building Name	Gross SF
SUBS	Benton 69 kV Switch House	TBD
SUBS	Blairsville 69 kV Switch House	TBD
SUBS	Blue Ridge Hydro Plant 69 kV Switch House	TBD
SUBS	Bowater 161 kV Switch House	TBD
SUBS	Bowater De-Inking Plant 161 kV Switch House	TBD
SUBS	Byrdstown 69 kV Switch House	TBD
SUBS	Carlex Glass Co. 69 kV Switch House	TBD
SUBS	Caterpillar Corp.	TBD
SUBS	Charleston District 69 kVSwitch House	TBD
SUBS	Chatuge Hydro Plant 69 kV Switch House	TBD
SUBS	Crab Orchard 69 kV Switch House	TBD
SUBS	Decatur 69 kV Switch House	TBD
SUBS	Delano 26 kV Switch House	TBD
SUBS	East Cleveland Comm	TBD
SUBS	Englewood 69 kV Switch House	TBD
SUBS	Epworth 69 kV Switch House	TBD
SUBS	Fort Creek 69 kV Switch House	TBD
SUBS	Fredonia 161 kV Switch House	TBD
SUBS	Friendsville 69 kV Switch House	TBD
SUBS	Georgetown 69 kV Switch House	TBD
SUBS	Grimsley 69 kV Switch House	TBD
SUBS	Harrison Bay 161 kV Switch House	TBD
SUBS	Hayesville 69 kV Switch House	TBD
SUBS	Hiwassee Hydro Plant 161 kV Switch House	TBD
SUBS	Hopewell 69 kV Switch House	TBD
SUBS	WBN Const	TBD
SUBS	WBN Plant 500 kV	TBD
SUBS	WBN Util Corr	TBD
SUBS	Wellsville 161 kV Switch House	TBD
SUBS	Wood Grove 69 kV Switch House	TBD
SUBS	American Megotteaux	TBD
SUBS	Blue Springs 46 kV Switch House	TBD
SUBS	Bon Aqua 161 kV Switch House	TBD
SUBS	Boston Woven Hose 69 kV Switch House	TBD
SUBS	Clifton City 69 kV Switch House	TBD
SUBS	Collins Creek 46 kV Switch House	TBD
SUBS	Collins Creek 161 kV Switch House	TBD
SUBS	Collinwood 69 kV Switch House	TBD
SUBS	Columbia Specialties, Inc	TBD
SUBS	Cosmolab Inc	TBD
SUBS	Denver 69 kV Switch House	TBD
SUBS	Dunn 46 kV Switch House	TBD
SUBS	Elkton 46 kV Switch House	TBD
SUBS	Fedders Lane 46 kV Switch House	TBD
SUBS	Freeman Wood Products	TBD
SUBS	Ganton Technologies	TBD
SUBS	General Electric 46 kV Switch House	TBD
SUBS	Graham Lumber Co Inc.	TBD

Building Type	Building Name	Gross SF
SUBS	Hassell & Hughes Lumber Co.	TBD
SUBS	Henpeck Lane 161 kV Switch House	TBD
SUBS	Hilltop 161 kV Switch House	TBD
SUBS	Hohenwald 161 kV Switch House	TBD
SUBS	Hooker-Shea 46 kV Switch House	TBD
SUBS	Hoover-Mason 46 kV Switch House	TBD
SUBS	Hustburg 161 kV Switch House(Chem Metal)	TBD
SUBS	Jingo 161 kV Switch House	TBD
SUBS	Johnsonville Fossil Plant 500 kV Switch House	TBD
SUBS	Kantus Corporation	TBD
SUBS	Lawrenceburg Remote	TBD
SUBS	Lawrenceburg District 46 kV Switch House	TBD
SUBS	Linden 69 kV Switch House	TBD
SUBS	Lobelville 161 kV Switch House	TBD
SUBS	Loretto 46 kV Switch House	TBD
SUBS	McEwen 69 kV Switch House	TBD
SUBS	McEwen - Eng Gen	TBD
SUBS	Monsanto 46 kV Switch House	TBD
SUBS	Blountville 115 kV Switch House	TBD
SUBS	Boaz 46 kV Switch House	TBD
SUBS	Boaz Carpet Yarn, Inc	TBD
SUBS	Boaz South 46 kV Switch House	TBD
SUBS	Bowater Lumber Co.	TBD
SUBS	Bridgeport 69 kV Switch House	TBD
SUBS	Centre 46 kV Switch House	TBD
SUBS	Chase 161 kV Switch House	TBD
SUBS	Collinsville District 46 kV Switch House	TBD
SUBS	Continental Grains	TBD
SUBS	Coyne Cylinder Co.	TBD
SUBS	Engelhard Corporation	TBD
SUBS	Fabius Mine #1 26 kV Switch House	TBD
SUBS	Fabius Mine #2 26 kV Switch House	TBD
SUBS	Fabius Mine #3 46 kV Switch House	TBD
SUBS	Federal Mogul 46 kV Switch House	TBD
SUBS	Flat Rock 46 kV Switch House	TBD
SUBS	Fort Payne District 46 kV Switch House	TBD
SUBS	French Mill 46 kV Switch House	TBD
SUBS	Fyffe 161 kV Switch House	TBD
SUBS	Gaylesville 46 kV Switch House	TBD
SUBS	General Motors 161 kV Switch House	TBD
SUBS	Geraldine 46 kV Switch House	TBD
SUBS	Gold Kist, Inc	TBD
SUBS	Gurley 161 kV Switch House	TBD
SUBS	Haney 161 kV Switch House	TBD
SUBS	Henagar 161 kV Switch House	TBD
SUBS	Hollywood 46 kV Switch House	TBD
SUBS	Horton 46 kV Switch House	TBD
SUBS	Jacksonville 46 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Key 46 kV Switch House	TBD
SUBS	Keyes Fibre Co. 46 kV Switch House	TBD
SUBS	Knighton 46 kV Switch House	TBD
SUBS	Leesburg 161 kV Switch House	TBD
SUBS	Bekaert Steel	TBD
SUBS	Bells 69 kV Switch House	TBD
SUBS	Bethel Springs 69 kV Switch House	TBD
SUBS	Consolidated Aluminum Corp.	TBD
SUBS	Dupree 161 kV Switch House	TBD
SUBS	Dyersburg District 69 kV Switch House	TBD
SUBS	Dyersburg Fabrics	TBD
SUBS	Dyersburg Fabrics-North Plt	TBD
SUBS	Dyersburg Fabrics-South Plt	TBD
SUBS	Dyersburg Ind Park 161 kV Switch House	TBD
SUBS	Eaton Axle Corp. 69 kV Switch House	TBD
SUBS	Florida Steel 161 kV Switch House	TBD
SUBS	Gates 69 kV Switch House	TBD
SUBS	Grand Junction 46 kV Switch House	TBD
SUBS	Greenway 69 kV Switch House	TBD
SUBS	Halls 69 kV Switch House	TBD
SUBS	Harmon Automotive	TBD
SUBS	Haywood Co Plastic Plant	TBD
SUBS	Haywood Co Rubber Plant	TBD
SUBS	Hebron 161 kV Switch House	TBD
SUBS	Henderson 161 kV Switch House	TBD
SUBS	Henning 69 kV Switch House	TBD
SUBS	Hornsby 46 kV Switch House	TBD
SUBS	Humboldt District 69 kV Switch House	TBD
SUBS	Hwy 412 161 kV Switch House	TBD
SUBS	Jacks Creek 46 kV Switch House	TBD
SUBS	Jackson Appliance Co.	TBD
SUBS	Jackson Region Office	TBD
SUBS	Jackson 161 kV Switch House	TBD
SUBS	Lexington 69 kV Switch House	TBD
SUBS	Magnetek Century	TBD
SUBS	Medina 161 kV Switch House	TBD
SUBS	Milan District 69 kV Switch House	TBD
SUBS	Milledgeville 69 kV Switch House	TBD
SUBS	Montgomery District 69 kV Switch House	TBD
SUBS	Morris 69 kV Switch House	TBD
SUBS	Mt. Peter	TBD
SUBS	North Adamsville 161 kV Switch House	TBD
SUBS	North Ind Park 69 kV Switch House	TBD
SUBS	C E Minerals/Tateho Sub	TBD
SUBS	Camac Corp.	TBD
SUBS	Church Hill 69 kV Switch House	TBD
SUBS	Clinch Valley Mining	TBD
SUBS	Colonial Heights 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Copper Ridge 69 kV Switch House	TBD
SUBS	Cosby 161 kV Switch House	TBD
SUBS	Dandridge 69 kV Switch House	TBD
SUBS	Davy Crockett Pkwy 69 kV Switch House	TBD
SUBS	DOE 69 kV Switch House	TBD
SUBS	Doehler Jarvis Limited	TBD
SUBS	East Newport 69 kV Switch House	TBD
SUBS	Electrolux Corp.	TBD
SUBS	Elizabethton District 69 kV Switch House	TBD
SUBS	Erwin 69 kV Switch House	TBD
SUBS	Exide Corporation	TBD
SUBS	Fitts Gap 69 kV Switch House	TBD
SUBS	Fordtown 161 kV Switch House	TBD
SUBS	FPH 69 kV Switch House	TBD
SUBS	Gordon's, Inc-Ckt	TBD
SUBS	Gray 69 kV Switch House	TBD
SUBS	Greenland 69 kV Switch House	TBD
SUBS	Greenland-Afg Ind.	TBD
SUBS	Hampton 161 kV Switch House	TBD
SUBS	Harrogate 69 kV Switch House	TBD
SUBS	Hurd Lock & Mfg Co.	TBD
SUBS	Ind Park 69 kV Switch House	TBD
SUBS	International Playing Card	TBD
SUBS	Jarl	TBD
SUBS	Jessee Stone Co.	TBD
SUBS	John Sevier Fossil Plant 161 kV Switch House	TBD
SUBS	Jonesboro 69 kV Switch House	TBD
SUBS	Jug 69 kV Switch House	TBD
SUBS	King College 69 kV Switch House	TBD
SUBS	Kingston-Warren Corp.	TBD
SUBS	Kyles Ford 69 kV Switch House	TBD
SUBS	Leon Farenbach, Inc	TBD
SUBS	Lin Pac	TBD
SUBS	Locust Springs 69 kV Switch House	TBD
SUBS	Mahle Inc	TBD
SUBS	Maid 69 kV Switch House	TBD
SUBS	Meco Corp.	TBD
SUBS	Microporus Products, Inc	TBD
SUBS	Milligan College 69 kV Switch House	TBD
SUBS	Minco Inc.	TBD
SUBS	Mitchell 69 kV Switch House	TBD
SUBS	Modern Forge	TBD
SUBS	Telford 69 kV Switch House	TBD
SUBS	TRW, Inc	TBD
SUBS	U. S. Textile Corp.	TBD
SUBS	West Elizabethton 69 kV Switch House	TBD
SUBS	West Johnson City 161 kV Switch House	TBD
SUBS	West Johnson City District 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	West Morristown 69 kV Switch House	TBD
SUBS	Washington College 69 kV Switch House	TBD
SUBS	Watauga Hydro Plant 69 kV Switch House	TBD
SUBS	Wilbur Hydro Plant 69 kV Switch House	TBD
SUBS	Winner 69 kV Switch House	TBD
SUBS	Zinc Products Co.	TBD
SUBS	Andersonville 161 kV Switch House	TBD
SUBS	Armstrong Rubber Co. 69 kV Switch House	TBD
SUBS	Asarco, Inc (Beaver Crk)	TBD
SUBS	Asarco, Inc (Immel Rd)	TBD
SUBS	Bear Creek Ind Pk Switch House	TBD
SUBS	Bear Creek 700 161 kV Switch House	TBD
SUBS	Bechtal Eng.	TBD
SUBS	Bee Cove	TBD
SUBS	Beech Grove Processing Co. 69 kV Switch House	TBD
SUBS	Blair Road 161 kV Switch House	TBD
SUBS	Block 69 kV Switch House	TBD
SUBS	Blockhouse 69 kV Switch House	TBD
SUBS	BRF Plant 500 kV Switch House	TBD
SUBS	Calderwood Hydro	TBD
SUBS	Cardiff Valley 69 kV Switch House	TBD
SUBS	Caryville 161 kV Switch House	TBD
SUBS	Cedar Bluff 69 kV Switch House	TBD
SUBS	Chandler 161 kV Switch House	TBD
SUBS	Cheoah Hydro Plant 161 kV Switch House	TBD
SUBS	Cherokee Hydro Plant 161 kV Switch House	TBD
SUBS	Chilhowee Hydro 161 kV Switch House	TBD
SUBS	Claxton 69 kV Switch House	TBD
SUBS	Clinch River Breeder Cst 161 kV Switch House	TBD
SUBS	Clinton 69 kV Switch House	TBD
SUBS	Coal Creek 69 kV Switch House	TBD
SUBS	Coalfield 69 kV Switch House	TBD
SUBS	D H Compounding Co.	TBD
SUBS	Dixie Cement	TBD
SUBS	DOE-Oak Ridge K-25 161 kV Switch House	TBD
SUBS	DOE-Oak Ridge K-27 161 kV Switch House	TBD
SUBS	DOE-Oak Ridge K-31 161 kV Switch House	TBD
SUBS	DOE-Oak Ridge K-33 161 kV Switch House	TBD
SUBS	DOE-TVA 161 kV Switch House	TBD
SUBS	Douglas Hydro Plant 161 kV Switch House	TBD
SUBS	Duncan 69 kV Switch House	TBD
SUBS	East Sevierville 69 kV Switch House	TBD
SUBS	Eagle Bend 161 kV Dyersburg	TBD
SUBS	Eagle Bend Manufacturing	TBD
SUBS	Pineville 161 kV Switch House	TBD
SUBS	Porter, H. K. 69 kV Switch House	TBD
SUBS	Power Stores - Knox	TBD
SUBS	River 161 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Roane Hosiery Mill	TBD
SUBS	Rockford 161 kV Switch House	TBD
SUBS	Rockford Manufacturing Co.	TBD
SUBS	Rosedale 69 kV Switch House	TBD
SUBS	South Gatlinburg 69 kV Switch House	TBD
SUBS	Santeetlah Hydro 161 kV Switch House	TBD
SUBS	Sceintific Ecology Group	TBD
SUBS	Sevierville 69 kV Switch House	TBD
SUBS	Sharps Ridge Eng Gen	TBD
SUBS	Shookes Gap	TBD
SUBS	Ski Mountain 69 kV Switch House	TBD
SUBS	Solway 161 kV Switch House	TBD
SUBS	Speedwell 69 kV Switch House	TBD
SUBS	Speedwell District 69 kV Switch House	TBD
SUBS	Sunbright 69 kV Switch House	TBD
SUBS	The Burruss Co.	TBD
SUBS	TN Emergency Mgmt Assoc	TBD
SUBS	TN Luttrell Co.	TBD
SUBS	TN Valley Steel Corp 69 kV Switch House	TBD
SUBS	Vulcan Materials, Knox	TBD
SUBS	Walters Hydro Plant 161 kV Switch House	TBD
SUBS	Wartburg 69 kV Switch House	TBD
SUBS	Westbourne 69 kV Switch House	TBD
SUBS	Wildwood 69 kV Switch House	TBD
SUBS	Young Mine 69 kV Switch House	TBD
SUBS	Acety-Arc Inc	TBD
SUBS	SHF AFBC Pilot Plant 161 kV Switch House	TBD
SUBS	Air Prods & Chems, Inc	TBD
SUBS	Ashland Oil 69 kV Switch House	TBD
SUBS	Benton 161 kV Switch House	TBD
SUBS	Benton City 69 kV Switch House	TBD
SUBS	Biffle Road 161 kV Switch House	TBD
SUBS	Bogota 69 kV Switch House	TBD
SUBS	Bruceton 69 kV Switch House	TBD
SUBS	Camden 161 kV Switch House	TBD
SUBS	Camden Casting, Inc	TBD
SUBS	Carbon Graphite	TBD
SUBS	Chicken Road (Dresden Ind) 69 kV Switch House	TBD
SUBS	Coldwater 69 kV Switch House	TBD
SUBS	Coleman Road 161 kV Switch House	TBD
SUBS	Crutchfield	TBD
SUBS	Degussa	TBD
SUBS	DOE-Paducah C-31 161 kV Switch House	TBD
SUBS	DOE-Paducah C-35 161 kV Switch House	TBD
SUBS	DOE-Paducah C-37 161 kV Switch House	TBD
SUBS	DOE-Paducha C-33 161 kV Switch House	TBD
SUBS	Dresden 69 kV Switch House	TBD
SUBS	New Tiptonville 161 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Newbern 161 kV Switch House	TBD
SUBS	Norandal Inc 161 kV Switch House	TBD
SUBS	Obion 69 kV Switch House	TBD
SUBS	Obion Ps 161 kV Switch House	TBD
SUBS	Old Hickory Clay Co.	TBD
SUBS	Palmersville Hwy 69 kV Switch House	TBD
SUBS	Paris 161 kV Switch House	TBD
SUBS	Pilot Oak 69 kV Switch House	TBD
SUBS	Plumley Co.	TBD
SUBS	Ridgely 69 kV Switch House	TBD
SUBS	Rutherford 161 kV Switch House	TBD
SUBS	Rutherford 500 kV Switch House	TBD
SUBS	South McKenzie 69 kV Switch House	TBD
SUBS	SHF 500 kV	TBD
SUBS	Spinks Clay Coy Co.	TBD
SUBS	Stella 161 kV Switch House	TBD
SUBS	Tiptonville 69 kV Switch House	TBD
SUBS	Trezevant 69 kV Switch House	TBD
SUBS	Troy 69 kV Switch House	TBD
SUBS	United Clay Co.	TBD
SUBS	Vulcan Materials, Mayf	TBD
SUBS	West Murray 69 kV Switch House	TBD
SUBS	Westlake	TBD
SUBS	AEDC 161 kV Switch House	TBD
SUBS	Algood 69 kV Switch House	TBD
SUBS	Allied Automotive 69 kV Switch House	TBD
SUBS	Anderson 46 kV Switch House	TBD
SUBS	Aquatech Corp.	TBD
SUBS	Batesville Casket Co.	TBD
SUBS	GAF Baxter 69 kV Switch House	TBD
SUBS	Blanche 46 kV Switch House	TBD
SUBS	Bridgestone Tire Co. 161 kV Switch House	TBD
SUBS	Calsonic	TBD
SUBS	Carrier Corp.	TBD
SUBS	Carthage District 46 kV Switch House	TBD
SUBS	Center Hill Hydro Plant 161 kV Switch House	TBD
SUBS	Cookeville 69 kV Switch House	TBD
SUBS	Copperweld Corp. 46 kV Switch House	TBD
SUBS	Cordell Hull Hydro Plant 161 kV Switch House	TBD
SUBS	Cumberland Mfg Co.	TBD
SUBS	Custom Forrest Products	TBD
SUBS	Dezurik Corp.	TBD
SUBS	DOE-MHD Laboratory 46 kV Switch House	TBD
SUBS	Double Springs 161 kV Switch House	TBD
SUBS	Dry Creek District 46 kV Switch House	TBD
SUBS	East Cookeville 69 kV Switch House	TBD
SUBS	East Murfreesboro 161 kV Switch House	TBD
SUBS	East Shelbyville 46 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	South Church Street 46 kV Switch House	TBD
SUBS	Samsonite Furniture Co.	TBD
SUBS	Sparta 46 kV Switch House	TBD
SUBS	Spencer 46 kV Switch House	TBD
SUBS	Stanley Tools	TBD
SUBS	Stone Man	TBD
SUBS	Sumner Resource Auth Plant	TBD
SUBS	TFH Plant 46 kV Switch House	TBD
SUBS	Triune 161 kV Switch House	TBD
SUBS	Tullahoma 46 kV Switch House	TBD
SUBS	West Sparta 161 kV Switch House	TBD
SUBS	Watertown 161 kV Switch House	TBD
SUBS	William L Bonnell	TBD
SUBS	Winchester District 46 kV Switch House	TBD
SUBS	Woodbury 161 kV Switch House	TBD
SUBS	Addison 161 kV Switch House	TBD
SUBS	Air Prods	TBD
SUBS	American Maize	TBD
SUBS	Americold Compressor Co.	TBD
SUBS	Amoco 161 kV Switch House	TBD
SUBS	COF Baker Lane 46 kV Switch House	TBD
SUBS	COF Barton Ps 161 kV Switch House	TBD
SUBS	Berlin 46 kV Switch House	TBD
SUBS	Bremen 46 kV Switch House	TBD
SUBS	BFN Plant 500 kV Switch House	TBD
SUBS	Caddo (Temp. Tap) 46 kV Switch House	TBD
SUBS	Caddo 161 kV Switch House	TBD
SUBS	Cedar Creek 46 kV Switch House	TBD
SUBS	Cedar Lake 161 kV Switch House	TBD
SUBS	Cerro Wire & Cable Co. Inc	TBD
SUBS	Chemical Plant Ps 46 kV Switch House	TBD
SUBS	Cherokee 161 kV Switch House	TBD
SUBS	Cherokee District 46 kV Switch House	TBD
SUBS	Colbert Ind Park 46 kV Switch House	TBD
SUBS	Copeland Corp. 46 kV Switch House	TBD
SUBS	Danville 46 kV Switch House	TBD
SUBS	Red Bay District 46 kV Switch House	TBD
SUBS	Reynolds River Road 46 kV Switch House	TBD
SUBS	Robbins Inc - East	TBD
SUBS	Robbins Inc - West	TBD
SUBS	Robbins Tire & Rubber Co.	TBD
SUBS	Rogers Group Inc	TBD
SUBS	Russellville 161 kV Switch House	TBD
SUBS	South Cullman 46 kV Switch House	TBD
SUBS	South Cullman Ind Park 161 kV Switch House	TBD
SUBS	Spring Creek 161 kV Switch House	TBD
SUBS	State Street 46 kV Switch House	TBD
SUBS	Town Creek 46 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Trade 46 kV Switch House	TBD
SUBS	Trimble 46 kV Switch House	TBD
SUBS	Tuscumbia 46 kV Switch House	TBD
SUBS	Waco 161 kV Switch House	TBD
SUBS	Washington Ave 46 kV Switch House	TBD
SUBS	Wheeler Hydro Plant 161 kV Switch House	TBD
SUBS	WLH Plant 161 kV Switch House	TBD
SUBS	WLH Pwr Service Bldg 46 kV Switch House	TBD
SUBS	WLH Pwr Service Shop #4 46 kV Switch House	TBD
SUBS	Wolverine Co.	TBD
SUBS	Adams 69 kV Switch House	TBD
SUBS	Airco 161 kV Switch House	TBD
SUBS	Armstrong Tire	TBD
SUBS	Ashland City 69 kV Switch House	TBD
SUBS	Ashland City Ind Park 69 kV Switch House	TBD
SUBS	Aspen Grove 161 kV Switch House	TBD
SUBS	AVCO	TBD
SUBS	Bearwallow 161 kV Switch House	TBD
SUBS	Brentwood 161 kV Switch House	TBD
SUBS	Burns Stone Co.	TBD
SUBS	Cane Ridge 161 kV Switch House	TBD
SUBS	Central Pike 161 kV Switch House	TBD
SUBS	Cheatham Hydro Plant 69 kV	TBD
SUBS	Clarksville District 69 kV Switch House	TBD
SUBS	Craighead 161 kV Switch House	TBD
SUBS	Cumberland City 69 kV Switch House	TBD
SUBS	Cumberland Fossil Plant 500 kV Switch House	TBD
SUBS	Cumberland Furnace 69 kV Switch House	TBD
SUBS	Curd Lane 161 kV Switch House	TBD
SUBS	David Lipscomb University	TBD
SUBS	Davidson Road 161 kV Switch House	TBD
SUBS	Shady Grove 69 kV Switch House	TBD
SUBS	Sleepy Hollow 69 kV Switch House	TBD
SUBS	Springfield District 69 kV Switch House	TBD
SUBS	St Bethlehem 161 kV Switch House	TBD
SUBS	State Stove 69 kV Switch House	TBD
SUBS	Steel Place 69 kV Switch House	TBD
SUBS	TN Emergency Mgmt Assoc	TBD
SUBS	Trane Co.	TBD
SUBS	TRW Ross Gear	TBD
SUBS	Union Carbide 161 kV Switch House	TBD
SUBS	Vulcan Materials, Nash	TBD
SUBS	Wartrace District 69 kV Switch House	TBD
SUBS	White Bluff 69 kV Switch House	TBD
SUBS	White House 69 kV Switch House	TBD
SUBS	Whites Creek 161 kV Switch House	TBD
SUBS	Woodlawn 161 kV Switch House	TBD
SUBS	Aberdeen District 46 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Ackerman 69 kV Switch House	TBD
SUBS	Adaton 161 kV Switch House	TBD
SUBS	Artesia 46 kV Switch House	TBD
SUBS	Bent Tree 46 kV Switch House	TBD
SUBS	Bond 46 kV Switch House	TBD
SUBS	Boral Bricks	TBD
SUBS	Brooksville 161 kV Switch House	TBD
SUBS	Bryan Foods 46 kV Switch House	TBD
SUBS	Caledonia 46 kV Switch House	TBD
SUBS	Carbonic 161 kV Switch House	TBD
SUBS	Choctaw Maid Farms, Inc	TBD
SUBS	Columbus Modified Fluff 161 kV Switch House	TBD
SUBS	East Columbus 161 kV Switch House	TBD
SUBS	Egypt PS 161 kV Switch House	TBD
SUBS	Eka Nobel, Inc 161 kV Switch House	TBD
SUBS	Eupora 161 kV Switch House	TBD
SUBS	Gattman 161 kV Switch House	TBD
SUBS	Hackney, Inc	TBD
SUBS	Handle 46 kV Switch House	TBD
SUBS	Handle 161 kV Switch House	TBD
SUBS	Hooker 46 kV Switch House	TBD
SUBS	House 46 kV Switch House	TBD
SUBS	Houston 161 kV Switch House	TBD
SUBS	Kosciusko 46 kV Switch House	TBD
SUBS	Lake 46 kV Switch House	TBD
SUBS	Lakeside 161 kV Switch House	TBD
SUBS	Langford 46 kV Switch House	TBD
SUBS	Amory District 46 kV Switch House	TBD
SUBS	Ashland 46 kV Switch House	TBD
SUBS	Baldwyn 161 kV Switch House	TBD
SUBS	Bankhead 161 kV Switch House	TBD
SUBS	Barnes Crossing 46 kV Switch House	TBD
SUBS	Batesville Casket Co.	TBD
SUBS	Bay Springs 161 kV Switch House	TBD
SUBS	Belden 46 kV Switch House	TBD
SUBS	Belmont 46 kV Switch House	TBD
SUBS	Bissell 161 kV Switch House	TBD
SUBS	Blue Mountain 46 kV Switch House	TBD
SUBS	Blue Springs 161 kV Switch House	TBD
SUBS	Bruce 69 kV Switch House	TBD
SUBS	Bruce 161 kV Switch House	TBD
SUBS	Carolina 46 kV Switch House	TBD
SUBS	Charleston 26 kV Switch House	TBD
SUBS	College Hill	TBD
SUBS	Cooper Tire 46 kV Switch House	TBD
SUBS	Corinth District 46 kV Switch House	TBD
SUBS	Cornersville 46 kV Switch House	TBD
SUBS	Crenshaw	TBD

Building Type	Building Name	Gross SF
SUBS	East Ripley 161 kV Switch House	TBD
SUBS	East Tupelo 46 kV Switch House	TBD
SUBS	Ecru 46 kV Switch House	TBD
SUBS	Enterprise 46 kV Switch House	TBD
SUBS	Fairview 26 kV Switch House	TBD
SUBS	Falkner 46 kV Switch House	TBD
SUBS	Fulton 161 kV Switch House	TBD
SUBS	Fulton District 46 kV Switch House	TBD
SUBS	Glen 161 kV Switch House	TBD
SUBS	Graham - Kie 255	TBD
SUBS	Hickory Flat 46 kV Switch House	TBD
SUBS	Hills Chapel 161 kV Switch House	TBD
SUBS	Holcut 46 kV Switch House	TBD
SUBS	Holly Springs Tele	TBD
SUBS	Kimberly-Clark 161 kV Switch House	TBD
SUBS	Kossuth 161 kV Switch House	TBD
SUBS	Lafayette Springs 161 kV Switch House	TBD
SUBS	Lamar Eng Gen	TBD
SUBS	Lamar Kie 241	TBD
SUBS	Medical Center 161 kV Switch House	TBD
SUBS	Mooreville 161 kV Switch House	TBD
SUBS	North Booneville 46 kV Switch House	TBD
SUBS	North Crossroads, MS 161 kV Switch House	TBD
SUBS	North Lee 161 kV Switch House	TBD
SUBS	North Oxford 161 kV Switch House	TBD
SUBS	Dancyville 161 kV Switch House	TBD
SUBS	Desoto Rd 161 kV Switch House	TBD
SUBS	Drummonds 161 kV Switch House	TBD
SUBS	Mason 69 kV Switch House	TBD
SUBS	Memphis Hardwood Flooring	TBD
SUBS	Miller 161 kV Switch House	TBD
SUBS	Miller District 46 kV Switch House	TBD
SUBS	Millington Naval Air Sta	TBD
SUBS	Mlgwd Subs	TBD
SUBS	North Collierville (Temp) 161 kV Switch House	TBD
SUBS	North Covington 69 kV Switch House	TBD
SUBS	Oakland 161 kV Switch House	TBD
SUBS	Pleasant Hill 46 kV Switch House	TBD
SUBS	Rialto 69 kV Switch House	TBD
SUBS	Rossville 161 kV Switch House	TBD
SUBS	South Memphis 161 kV Switch House	TBD
SUBS	Somerville 161 kV Switch House	TBD
SUBS	West Memphisr 500 kV Switch House	TBD
SUBS	Capacitors And Other	TBD
SUBS	Mobile & Portable Cap. & Grd	TBD
SUBS	Voltage/Current Transformers	TBD
SUBS	Elk River 46 kV Switch House	TBD
SUBS	Essex	TBD

Building Type	Building Name	Gross SF
SUBS	Fayetteville District 46 kV Switch House	TBD
SUBS	Fleetguard, Inc	TBD
SUBS	Flintville 46 kV Switch House	TBD
SUBS	Florence 161 kV Switch House	TBD
SUBS	Franklin Industrial Minerals	TBD
SUBS	Gainesboro 69 kV Switch House	TBD
SUBS	Gladeville 46 kV Switch House	TBD
SUBS	Gladeville PS 161 kV Switch House	TBD
SUBS	Gonce 26 kV Switch House	TBD
SUBS	Gordonsville 46 kV Switch House	TBD
SUBS	Great Falls Hydro Plant 161 kV Switch House	TBD
SUBS	Hamilton 161 kV Switch House	TBD
SUBS	Hoeganaes Corp. 161 kV Switch House	TBD
SUBS	Jack Daniels-North Plant	TBD
SUBS	Jack Daniels-South Plant	TBD
SUBS	Jersey Miniere Zinc Co 46 kV Switch House	TBD
SUBS	Jones Blvd 46 kV Switch House	TBD
SUBS	Lakeview 161 kV Switch House	TBD
SUBS	Lebanon City 46 kV Switch House	TBD
SUBS	Lebanon Indl Park 161 kV	TBD
SUBS	Magnetek Century Electric	TBD
SUBS	Martha 161 kV Switch House	TBD
SUBS	McBurg 161 kV Switch House	TBD
SUBS	Mobile Transformer No. 6 69 kV Switch House	TBD
SUBS	Morrison 161 kV Switch House	TBD
SUBS	North Cookeville 69 kV Switch House	TBD
SUBS	North Tullahoma 161 kV Switch House	TBD
SUBS	Nissan Motors 161 kV Switch House	TBD
SUBS	Ocana 69 kV Switch House	TBD
SUBS	Oster Corp.	TBD
SUBS	Park City 46 kV Switch House	TBD
SUBS	Petersburg 46 kV Switch House	TBD
SUBS	Pitts Lane 46 kV Switch House	TBD
SUBS	Rogers Group Inc-Cowan Plt	TBD
SUBS	Aberdeen 161 kV Switch House	TBD
SUBS	Dickson District 69 kV Switch House	TBD
SUBS	Donelson 161 kV Switch House	TBD
SUBS	Dover 69 kV Switch House	TBD
SUBS	Dunbar Cave 161 kV Switch House	TBD
SUBS	Dupont 161 kV Switch House	TBD
SUBS	East Clarksville 69 kV Switch House	TBD
SUBS	Elysian Fields 161 kV Switch House	TBD
SUBS	Ford Glass Co.	TBD
SUBS	Fountainhead 161 kV Switch House	TBD
SUBS	GAF #1 & #2	TBD
SUBS	Goodlettsville 161 kV Switch House	TBD
SUBS	Grassland 161 kV Switch House	TBD
SUBS	Green Brier 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Hermitage 161 kV Switch House	TBD
SUBS	Hurricane Creek 161 kV Switch House	TBD
SUBS	J. Percy Priest Hydro Plant 69 kV	TBD
SUBS	Kingston Springs 161 kV Switch House	TBD
SUBS	Ladd W G 69 kV Switch House	TBD
SUBS	Lone Oak 69 kV Switch House	TBD
SUBS	McCrory 161 kV Switch House	TBD
SUBS	Nashville Thermal Plt 69 kV Switch House	TBD
SUBS	Northeast Subs	TBD
SUBS	New Providence 69 kV Switch House	TBD
SUBS	Nolensville Road 161 kV Switch House	TBD
SUBS	Ocana 161 kV Switch House	TBD
SUBS	Old Hickory Hydro Plant 69 kV Switch House	TBD
SUBS	Orlinda	TBD
SUBS	Pin Hook Comm	TBD
SUBS	Pleasant View 69 kV Switch House	TBD
SUBS	Pomona 161 kV Switch House	TBD
SUBS	Quebecor Printing	TBD
SUBS	Ridgevale 69 kV Switch House	TBD
SUBS	Robert Orr Sysco	TBD
SUBS	Rodgers Group	TBD
SUBS	Round Pond 161 kV Switch House	TBD
SUBS	Saundersville 161 kV Switch House	TBD
SUBS	North Lexington 161 kV Switch House	TBD
SUBS	National Guard	TBD
SUBS	Nixon 69 kV Switch House	TBD
SUBS	Parnell 161 kV Switch House	TBD
SUBS	Parsons 69 kV Switch House	TBD
SUBS	Pickwick Hydro Plant 161 kV Switch House	TBD
SUBS	Porter Cable Co.	TBD
SUBS	Quaker Oaks Company	TBD
SUBS	Ramer 161 kV Switch House	TBD
SUBS	Richwood 69 kV Switch House	TBD
SUBS	Ripley 161 kV Switch House	TBD
SUBS	South Milan 69 kV Switch House	TBD
SUBS	Selmer District 69 kV Switch House	TBD
SUBS	Toone 46 kV Switch House	TBD
SUBS	Trenton 69 kV Switch House	TBD
SUBS	Tulu 69 kV Switch House	TBD
SUBS	Vulcan Materials, Jack	TBD
SUBS	West Dyersburg 69 kV Switch House	TBD
SUBS	West Lexington 161 kV Switch House	TBD
SUBS	Whiteville 46 kV Switch House	TBD
SUBS	World Color Press (East)	TBD
SUBS	World Color Press (West)	TBD
SUBS	Ace Products	TBD
SUBS	Advanced Anchors, Inc	TBD
SUBS	Alladin Plastics, Inc	TBD

Building Type	Building Name	Gross SF
SUBS	American Limestone Co.	TBD
SUBS	Anchor Advanced Products	TBD
SUBS	Arcata Graphics	TBD
SUBS	Banner Elk 69 kV Switch House	TBD
SUBS	Barnes 69 kV Switch House	TBD
SUBS	Bean Station 69 kV Switch House	TBD
SUBS	Beech Mountain 161 kV Switch House	TBD
SUBS	Blountville 69 kV Switch House	TBD
SUBS	Blountville 161 kV Switch House	TBD
SUBS	Boone Hydro Plant 161 kV	TBD
SUBS	Boones Creek 69 kV Switch House	TBD
SUBS	Bristol Compressor	TBD
SUBS	Bristol Metals Corp.	TBD
SUBS	Bulls Gap 69 kV Switch House	TBD
SUBS	Bunker Hill - Gen	TBD
SUBS	Eaton Crossroads 161 kV Switch House	TBD
SUBS	Ebenezer 161 kV Switch House	TBD
SUBS	Elza 161 kV Switch House	TBD
SUBS	Fairview 69 kV Switch House	TBD
SUBS	Flat Fork 69 kV Switch House	TBD
SUBS	FNH 161 kV Switch House	TBD
SUBS	Harmon Automotive	TBD
SUBS	Harriman 161 kV Switch House	TBD
SUBS	Harriman District 69 kV Switch House	TBD
SUBS	Harriman Paperboard Corp. 69 kV Switch House	TBD
SUBS	Heiskell 161 kV Switch House	TBD
SUBS	Hwy 411 161 kV Switch House	TBD
SUBS	Jefferson City 69 kV Switch House	TBD
SUBS	Jefferson City Zinc	TBD
SUBS	Jellico 161 kV Switch House	TBD
SUBS	Karns 161 kV Switch House	TBD
SUBS	Kingston 69 kV Switch House	TBD
SUBS	Kingston Fossil Plant 161 kV Switch House	TBD
SUBS	Kingston Pumping Sta 69 kV Switch House	TBD
SUBS	Kub Subs	TBD
SUBS	Lafollette 161 kV Switch House	TBD
SUBS	Lafollette District 69 kV Switch House	TBD
SUBS	Lenoir City 69 kV Switch House	TBD
SUBS	Lost Creek 161 kV Switch House	TBD
SUBS	Lovell 69 kV Switch House	TBD
SUBS	Maryville 69 kV Switch House	TBD
SUBS	Melton Hill Hydro Plant 69 kV Switch House	TBD
SUBS	Mossy Grove 69 kV Switch House	TBD
SUBS	North Gatlinburg 161 kV Switch House	TBD
SUBS	North Shore 69 kV Switch House	TBD
SUBS	Northeast Harriman 69 kV Switch House	TBD
SUBS	New Cherokee Corp.	TBD
SUBS	Nippondenso 161 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Norris Hydro Plant 161 kV Switch House	TBD
SUBS	North View 161 kV Switch House	TBD
SUBS	Oak Ridge 161 kV Switch House	TBD
SUBS	Oliver Springs 69 kV Switch House	TBD
SUBS	Oneida 69 kV Switch House	TBD
SUBS	Petros 69 kV Switch House	TBD
SUBS	Mount Pleasant District 46 kV Switch House	TBD
SUBS	Mount Pleasant Ps 161 kV Switch House	TBD
SUBS	Mt. Pleasant ps 161 kV Switch House	TBD
SUBS	Murray-Ohio Mfg Co.	TBD
SUBS	North Columbia 46 kV Switch House	TBD
SUBS	North Waverly 69 kV Switch House	TBD
SUBS	National Carbon Co. 46 kV Switch House	TBD
SUBS	National Carbon Co. East 46 kV Switch House	TBD
SUBS	National Carbon Co. West 46 kV Switch House	TBD
SUBS	New Johnsonville Eng Gen	TBD
SUBS	New Johnsonville 69 kV Switch House	TBD
SUBS	Only 161 kV Switch House	TBD
SUBS	Pickens Lane 46 kV Switch House	TBD
SUBS	Pulaski District 46 kV Switch House	TBD
SUBS	Pulaski Ind Park 46 kV Switch House	TBD
SUBS	South Columbia 161 kV Switch House	TBD
SUBS	Saturn 161 kV Switch House	TBD
SUBS	Spontex Inc	TBD
SUBS	Spring Hill 46 kV Switch House	TBD
SUBS	Teledyne Systems Co.	TBD
SUBS	Trace Creek 161 kV Switch House	TBD
SUBS	Ucar Carbon Co.	TBD
SUBS	Victor Switch House	TBD
SUBS	West Columbia 46 kV Switch House	TBD
SUBS	West Columbia 161 kV Switch House	TBD
SUBS	Walker Die Casting, Inc	TBD
SUBS	Walter L. Anderson 161 kV Switch House	TBD
SUBS	Waverly 69 kV Switch House	TBD
SUBS	Waynesboro District 69 kV Switch House	TBD
SUBS	Wrigley 69 kV Switch House	TBD
SUBS	Airport Rd 161 kV Switch House	TBD
SUBS	Akzo Industrial Fibers	TBD
SUBS	Arab District 46 kV Switch House	TBD
SUBS	Athens District 46 kV Switch House	TBD
SUBS	Beaulieu Of America Const.	TBD
SUBS	Bechtel Corp.	TBD
SUBS	Belle Mina 46 kV Switch House	TBD
SUBS	BLN Const 46 kV Switch House	TBD
SUBS	BLN Plant 500 kV Switch House	TBD
SUBS	Bessemer 115 kV Switch House	TBD
SUBS	Drummond 115 kV Switch House	TBD
SUBS	East Cullman 161 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Eva Road 161 kV Switch House	TBD
SUBS	Fairview 46 kV Switch House	TBD
SUBS	Falkville 46 kV Switch House	TBD
SUBS	Flint 46 kV Switch House	TBD
SUBS	Florence 46 kV Switch House	TBD
SUBS	Ford Motor Co.	TBD
SUBS	Fruhauf Corp.	TBD
SUBS	Goodyear Inc.	TBD
SUBS	Hanceville 46 kV Switch House	TBD
SUBS	Hanceville Ind 46 kV Switch House	TBD
SUBS	Hanceville 161 kV Switch House	TBD
SUBS	Hanceville (Temp)	TBD
SUBS	Hartselle 161 kV Switch House	TBD
SUBS	Hartselle District 46 kV Switch House	TBD
SUBS	Hickory Hills 46 kV Switch House	TBD
SUBS	Holly Pond 46 kV Switch House	TBD
SUBS	Ind Park 46 kV Switch House	TBD
SUBS	Ironman 161 kV Switch House	TBD
SUBS	Jones Chapel 46 kV Switch House	TBD
SUBS	King Coal Co. 46 kV Switch House	TBD
SUBS	Laceys Spring 161 kV Switch House	TBD
SUBS	Leighton 46 kV Switch House	TBD
SUBS	Liquid Carbonic Dioxide	TBD
SUBS	Littleville 46 kV Switch House	TBD
SUBS	Mallard-Fox Ind Park 161 kV Switch House	TBD
SUBS	Margerum 46 kV Switch House	TBD
SUBS	McKinny Lumber Co AL	TBD
SUBS	Mobile Transformer No. 3 46 kV Switch House	TBD
SUBS	Mobile Transformer No. 4 69 kV Switch House	TBD
SUBS	Mobile Transformer No. 5 69 kV Switch House	TBD
SUBS	Morgan 46 kV Switch House	TBD
SUBS	Moulton District 46 kV Switch House	TBD
SUBS	Mount Hope 46 kV Switch House	TBD
SUBS	Mount Tabor 46 kV Switch House	TBD
SUBS	Mulberry 46 kV Switch House	TBD
SUBS	Muscle Shoals 46 kV Switch House	TBD
SUBS	Neel 161 kV Switch House	TBD
SUBS	Occidental Chemical Corp. 161 kV Switch House	TBD
SUBS	Pence 46 kV Switch House	TBD
SUBS	Pleasant View 161 kV Switch House	TBD
SUBS	Priceville 46 kV Switch House	TBD
SUBS	Priceville 161 kV Switch House	TBD
SUBS	Pride 46 kV Switch House	TBD
SUBS	East Camden 161 kV Switch House	TBD
SUBS	East Murray 69 kV Switch House	TBD
SUBS	Elf Atochem N. Amer. Ink 161 kV Switch House	TBD
SUBS	Emerson Electric Co.	TBD
SUBS	Fulton 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Gilbertsville 69 kV Switch House	TBD
SUBS	Gleason 69 kV Switch House	TBD
SUBS	Goodrich Z1 161 kV Switch House	TBD
SUBS	Goodrich Z2 161 kV Switch House	TBD
SUBS	Goodrich Z3 161 kV Switch House	TBD
SUBS	Goodyear Tire & Rubber Co. 69 kV Switch House	TBD
SUBS	Great Lakes 69 kV Switch House	TBD
SUBS	Greenfield 69 kV Switch House	TBD
SUBS	Hardin 69 kV Switch House	TBD
SUBS	Hawkes Rd 69 kV Switch House	TBD
SUBS	Hickman 69 kV Switch House	TBD
SUBS	Hickman City 69 kV Switch House	TBD
SUBS	Hickory Grove 69 kV Switch House	TBD
SUBS	Huntingdon 161 kV Switch House	TBD
SUBS	Huntingdon District 69 kV Switch House	TBD
SUBS	Ingersoll-Rand 69 kV Switch House	TBD
SUBS	International Specialty Prod	TBD
SUBS	Kenton 69 kV Switch House	TBD
SUBS	Kentucky Hydro Plant 161 kV Switch House	TBD
SUBS	Kentucky-Tenn Clay Co.	TBD
SUBS	Ky-Tenn Clay Co.	TBD
SUBS	L.W.D., Inc	TBD
SUBS	Livingston County 161 kV Switch House	TBD
SUBS	Martin Steam Plant	TBD
SUBS	Mayfield District 69 kV Switch House	TBD
SUBS	McKenzie 69 kV Switch House	TBD
SUBS	Milburn 69 kV Switch House	TBD
SUBS	Morie	TBD
SUBS	Mtd Products, Inc 69 kV Switch House	TBD
SUBS	Murray 161 kV Switch House	TBD
SUBS	Murray District 69 kV Switch House	TBD
SUBS	North Martin 69 kV Switch House	TBD
SUBS	North Star Steel 161 kV Switch House	TBD
SUBS	New Madrid 161 kV Switch House	TBD
SUBS	Leesburg Delivery Point 46 kV Switch House	TBD
SUBS	Leesburg Yarn Mill	TBD
SUBS	Lim Rock 161 kV Switch House	TBD
SUBS	Little River 46 kV Switch House	TBD
SUBS	Locust Fork 115 kV Switch House	TBD
SUBS	Mathis Mill 46 kV Switch House	TBD
SUBS	Mead 161 kV Switch House	TBD
SUBS	Merico	TBD
SUBS	Miller Steam 500 kV Switch House	TBD
SUBS	Mount High 46 kV Switch House	TBD
SUBS	Mount Roszell 46 kV Switch House	TBD
SUBS	Mueller Co.	TBD
SUBS	Murphy Hill 500 kV Switch House	TBD
SUBS	Norandal 161 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Norton Industries	TBD
SUBS	Onan, Inc. Met Sta	TBD
SUBS	Painter 46 kV Switch House	TBD
SUBS	Poplar Creek 46 kV Switch House	TBD
SUBS	Rainsville 46 kV Switch House	TBD
SUBS	Rainsville 161 kV Switch House	TBD
SUBS	Redstone Arsenal No. 1 161 kV Switch House	TBD
SUBS	Redstone Arsenal No. 2 161 kV Switch House	TBD
SUBS	Redstone Arsenal No. 3 161 kV Switch House	TBD
SUBS	Sand Rock 46 kV Switch House	TBD
SUBS	Selox	TBD
SUBS	Shaw Industries 69 kV Switch House	TBD
SUBS	Southern Ductile Casting Co	TBD
SUBS	Stevenson 69 kV Switch House	TBD
SUBS	Tarrant City 46 kV Switch House	TBD
SUBS	Trafford 115 kV	TBD
SUBS	Union Grove 46 kV Switch House	TBD
SUBS	Valley Head 46 kV Switch House	TBD
SUBS	Webb Wheel 46 kV Switch House	TBD
SUBS	Whitesboro 46 kV Switch House	TBD
SUBS	Widows Creek Fossil Plant 500 kV	TBD
SUBS	Adamsville 69 kV Switch House	TBD
SUBS	Alumax 161 kV Switch House	TBD
SUBS	Beech Bluff 161 kV Switch House	TBD
SUBS	North Shannon 161 kV Switch House	TBD
SUBS	Northeast Corinth 161 kV Switch House	TBD
SUBS	Nettleton 46 kV Switch House	TBD
SUBS	Newsprint South, Inc 161 kV Switch House	TBD
SUBS	Northwest New Albany 161 kV Switch House	TBD
SUBS	Northwest Tupelo 46 kV Switch House	TBD
SUBS	O. W. Ball 46 kV Switch House	TBD
SUBS	Oakland 115 kV	TBD
SUBS	Okolona District 46 kV Switch House	TBD
SUBS	Piper Impact 46 kV Switch House	TBD
SUBS	Pontotoc 161 kV Switch House	TBD
SUBS	Ripley 161 kV Switch House	TBD
SUBS	South Baldwyn 161 kV Switch House	TBD
SUBS	South Fulton 161 kV Switch House	TBD
SUBS	South Tupelo 46 kV Switch House	TBD
SUBS	Shannon 46 kV Switch House	TBD
SUBS	Slayden 46 kV Switch House	TBD
SUBS	Stateline 161 kV Switch House	TBD
SUBS	Southwest Tupelo 161 kV Switch House	TBD
SUBS	Tecumseh Products Co.	TBD
SUBS	Tenneco 161 kV Switch House	TBD
SUBS	Tishomingo 46 kV Switch House	TBD
SUBS	Turner Ind Park 46 kV Switch House	TBD
SUBS	Walkers Store 161 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Walnut 46 kV Switch House	TBD
SUBS	Waterford	TBD
SUBS	Wolvering Tubing	TBD
SUBS	Woodson Ridge 161 kV Switch House	TBD
SUBS	Yellow Creek Np Const 161 kV Switch House	TBD
SUBS	AFP 161 kV Switch House	TBD
SUBS	Atoka 161 kV Switch House	TBD
SUBS	Byhalia 46 kV Switch House	TBD
SUBS	Byhalia 161 kV Switch House	TBD
SUBS	Canadaville 161 kV Switch House	TBD
SUBS	Cargill	TBD
SUBS	Colliervillе Ps 161 kV Switch House	TBD
SUBS	Morganville 161 kV Switch House	TBD
SUBS	Moss Lake 115 kV Switch House	TBD
SUBS	Mueller Co.	TBD
SUBS	Nickajack Hydro Plant 161 kV Switch House	TBD
SUBS	Nickajack Lock	TBD
SUBS	Outboard Marine Corp.	TBD
SUBS	Palmer 69 kV Switch House	TBD
SUBS	Pikeville 161 kV Switch House	TBD
SUBS	Powell 69 kV Switch House	TBD
SUBS	Reese Ferry 161 kV Switch House	TBD
SUBS	Reichhold Chemicals, Inc	TBD
SUBS	Richard City 46 kV Switch House	TBD
SUBS	Rock Spring 500 kV	TBD
SUBS	Rock-Tenn Corp.	TBD
SUBS	Roper Corporation	TBD
SUBS	Roper, 115 kV	TBD
SUBS	South Calhoun Industrial Park 115 kV	TBD
SUBS	South Pittsburg 69 kV Switch House	TBD
SUBS	Salem Carpet Mills(Lafayett)	TBD
SUBS	Salem Carpet Mills(S Pittsb)	TBD
SUBS	SCT Yarns	TBD
SUBS	Selox, Inc - Access Rd	TBD
SUBS	Selox, Inc - St. Elmo	TBD
SUBS	SQN 500 kV	TBD
SUBS	Shaw Industries	TBD
SUBS	Signal Mountain Cement 69 kV Switch House	TBD
SUBS	Sixth Street 69 kV Switch House	TBD
SUBS	Skyline 161 kV Switch House	TBD
SUBS	Southern Cellulose Inc.	TBD
SUBS	Southern Foundry	TBD
SUBS	Spring Place	TBD
SUBS	Summerfield 69 kV Switch House	TBD
SUBS	Summerville	TBD
SUBS	Sutton Lumber Co.	TBD
SUBS	Taylors Ridge	TBD
SUBS	Tecumseh Products	TBD

Building Type	Building Name	Gross SF
SUBS	Textile Rubber & Chemical Co	TBD
SUBS	Tilton 115 kV	TBD
SUBS	Tracy City 69 kV Switch House	TBD
SUBS	U. S. Pipe & Foundry	TBD
SUBS	United Technologies	TBD
SUBS	VAAP 161 kV Switch House	TBD
SUBS	Velsicol Chemical Corp.	TBD
SUBS	Vulcan Materials, Chat	TBD
SUBS	Huber Corp. 69 kV Switch House	TBD
SUBS	Jamestown 69 kV Switch House	TBD
SUBS	Jena 69 kV Switch House	TBD
SUBS	Johnson Controls	TBD
SUBS	Kayser-Roth Hosiery	TBD
SUBS	Kimberly-Clark Corp. 161 kV Switch House	TBD
SUBS	Lamontville Rd 161 kV Switch House	TBD
SUBS	Lang Street 69 kV Switch House	TBD
SUBS	Loudon District 69 kV Switch House	TBD
SUBS	Madisonville 69 kV Switch House	TBD
SUBS	Magic Chef	TBD
SUBS	Maremont 69 kV Switch House	TBD
SUBS	Mayland 69 kV Switch House	TBD
SUBS	McDonald 69 kV Switch House	TBD
SUBS	Monterey 161 kV Switch House	TBD
SUBS	Mouse Creek 69 kV Switch House	TBD
SUBS	New Hayesville 69 kV Switch House	TBD
SUBS	Niota 69 kV Switch House	TBD
SUBS	Nottely 69 kV Switch House	TBD
SUBS	Nottely Hydro Plant 69 kV Switch House	TBD
SUBS	Ocoee No. 1 Hydro Plant 69 kV Switch House	TBD
SUBS	Ocoee No. 2 Hydro Plant 69 kV Switch House	TBD
SUBS	Ocoee No. 3 Hydro Plant 161 kV Switch House	TBD
SUBS	Ocoee Village 69 kV Switch House	TBD
SUBS	Peerless Road	TBD
SUBS	Pond Creek - Fibre Optic	TBD
SUBS	Rockwood District 69 kV Switch House	TBD
SUBS	South Athens 69 kV Switch House	TBD
SUBS	South Cleveland 161 kV Switch House	TBD
SUBS	Schuller International	TBD
SUBS	Sequoia 69 kV Switch House	TBD
SUBS	Shuller International 69 kV Switch House	TBD
SUBS	Spring Creek 69 kV Switch House	TBD
SUBS	Staley 161 kV Switch House	TBD
SUBS	Sugar Grove 161 kV Switch House	TBD
SUBS	Sweetwater 69 kV Switch House	TBD
SUBS	Sweetwater 161 kV Switch House	TBD
SUBS	Tasso 69 kV Switch House	TBD
SUBS	Tellico 161 kV Switch House	TBD
SUBS	Tellico District 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Tellico Res.Dev.Auth. 69 kV Switch House	TBD
SUBS	Ten Mile 161 kV Switch House	TBD
SUBS	Viskase Corp Plant 69 kV Switch House	TBD
SUBS	WBH Plant 161 kV Switch House	TBD
SUBS	Langford 161 kV Switch House	TBD
SUBS	Longino Delivery Point 46 kV Switch House	TBD
SUBS	Maben 46 kV Switch House	TBD
SUBS	Macon 161 kV Switch House	TBD
SUBS	Magbee 161 kV Switch House	TBD
SUBS	Miss State University 46 kV Switch House	TBD
SUBS	Monroe County 46 kV Switch House	TBD
SUBS	North Louisville, MS 161 kV Switch House	TBD
SUBS	North Philadelphia 161 kV Switch House	TBD
SUBS	New Hamilton 46 kV Switch House	TBD
SUBS	New Hope 161 kV Switch House	TBD
SUBS	Noxapater 161 kV Switch House	TBD
SUBS	Northwest Columbus 46 kV Switch House	TBD
SUBS	Pearl River 46 kV Switch House	TBD
SUBS	Prairie 46 kV Switch House	TBD
SUBS	South West Point 46 kV Switch House	TBD
SUBS	Sanderson Plumbing Products	TBD
SUBS	Scooba 46 kV Switch House	TBD
SUBS	Southeast Columbus 69 kV Switch House	TBD
SUBS	Sebastopole 161 kV Switch House	TBD
SUBS	Shell Oil Co 161 kV Switch House	TBD
SUBS	Shuqualak Lumber Co	TBD
SUBS	Singleton 46 kV Switch House	TBD
SUBS	Smithville 161 kV Switch House	TBD
SUBS	Southwire Starkville	TBD
SUBS	Starkville District 46 kV Switch House	TBD
SUBS	Sturgis District 69 kV Switch House	TBD
SUBS	Southwest Starkville 46 kV Switch House	TBD
SUBS	TMA Forest Products	TBD
SUBS	Twin City 161 kV Switch House	TBD
SUBS	U. S. Electrical Motors	TBD
SUBS	United Cement Co. 161 kV Switch House	TBD
SUBS	United Technologies Motor Sy	TBD
SUBS	Vista Chemical Co.	TBD
SUBS	West Point District 46 kV Switch House	TBD
SUBS	Abbeville Ind 46 kV Switch House	TBD
SUBS	Amory 161 kV Switch House	TBD
SUBS	Peabody 69 kV Switch House	TBD
SUBS	Portland 161 kV Switch House	TBD
SUBS	Potter & Brumfield, Inc.	TBD
SUBS	Princeton 161 kV Switch House	TBD
SUBS	Red Boiling Springs, TN 69 kV Switch House	TBD
SUBS	Rockcastle 69 kV Switch House	TBD
SUBS	Rosine 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	South Bowling Green 161 kV Switch House	TBD
SUBS	South Scottsville 161 kV Switch House	TBD
SUBS	Salmons 161 kV Switch House	TBD
SUBS	Scottsville 161 kV Switch House	TBD
SUBS	Skyline Drive 69 kV Switch House	TBD
SUBS	Superior Graphite 69 kV Switch House	TBD
SUBS	Tompkinsville 69 kV Switch House	TBD
SUBS	Tompkinsville Ps 161 kV Switch House	TBD
SUBS	Wayne County 161 kV Switch House	TBD
SUBS	Westmoreland 161 kV Switch House	TBD
SUBS	Wolf Creek Hydro Plant 161 kV Switch House	TBD
SUBS	Zielinski Const Co. 69 kV Switch House	TBD
SUBS	ABB Combustion Eng Tubemill	TBD
SUBS	Adm Milling Co.	TBD
SUBS	Altamont 69 kV Switch House	TBD
SUBS	BASF Amnicola Hwy	TBD
SUBS	BASF Polymer Drive	TBD
SUBS	Beaulieu 161 kV Switch House	TBD
SUBS	Brison 115 kV Switch House	TBD
SUBS	Bunge Foods	TBD
SUBS	Buster Brown Apparel	TBD
SUBS	Butler, J. W. 115 kV Switch House	TBD
SUBS	Calhoun	TBD
SUBS	Cargill, Inc.(Flour Mill)	TBD
SUBS	Catoosa 161 kV Switch House	TBD
SUBS	Center Point 115 kV Switch House	TBD
SUBS	Central Soya Co. Inc	TBD
SUBS	Chatt PSC Radio	TBD
SUBS	Chattanooga Paperboard Corp	TBD
SUBS	Chickamauga Hydro Plant 161 kV Switch House	TBD
SUBS	Coalmont 161 kV Switch House	TBD
SUBS	Mooresburg 161 kV Switch House	TBD
SUBS	Mooresburg (Temp Inter)	TBD
SUBS	Morrison Molded Fiberglass	TBD
SUBS	Morristown Ind Pk East 69 kV Switch House	TBD
SUBS	Morristown Ind Park 69 kV Switch House	TBD
SUBS	Mountain City 69 kV Switch House	TBD
SUBS	North American Rayon 69 kV Switch House	TBD
SUBS	Nagel 500 kV Switch House	TBD
SUBS	Newland 69 kV Switch House	TBD
SUBS	Newport District 69 kV Switch House	TBD
SUBS	Nolichucky Hydro Plant 69 kV Switch House	TBD
SUBS	Northwest Ball & Roller Inc.	TBD
SUBS	Oak Grove 69 kV Switch House	TBD
SUBS	Okolona 69 kV Switch House	TBD
SUBS	Pandora 69 kV Switch House	TBD
SUBS	Pattonsville 69 kV Switch House	TBD
SUBS	Pemberton 69 kV Switch House	TBD

Building Type	Building Name	Gross SF
SUBS	Philips Consumer Electronics	TBD
SUBS	Phipps Bend Ind Park 69 kV Switch House	TBD
SUBS	Piney Flats 69 kV Switch House	TBD
SUBS	Plusmark, Inc.	TBD
SUBS	Power Stores - Jcty	TBD
SUBS	Raytheon 69 kV Switch House	TBD
SUBS	Reliance Electric Industrial	TBD
SUBS	Rockwell International Corp	TBD
SUBS	Rogersville 69 kV Switch House	TBD
SUBS	RSR Industries	TBD
SUBS	Ruthton 69 kV Switch House	TBD
SUBS	Rutledge 69 kV Switch House	TBD
SUBS	South Holston Hydro Plant 69 kV Switch House	TBD
SUBS	South Morristown 69 kV Switch House	TBD
SUBS	Sandvik Rock Tools, Inc	TBD
SUBS	Sara Lee	TBD
SUBS	Southeast Johnson City 69 kV Switch House	TBD
SUBS	Shelby Street 69 kV Switch House	TBD
SUBS	Short Mountain Silica Co.	TBD
SUBS	Shouns 69 kV Switch House	TBD
SUBS	Siemens	TBD
SUBS	Sigmond Coal Co.	TBD
SUBS	Stone Creek 69 kV Switch House	TBD
SUBS	Stone Mountain 69 kV Switch House	TBD
SUBS	Sullivan Comm	TBD
SUBS	Surgoinsville 69 kV Switch House	TBD
SUBS	Tanglewood 69 kV Switch House	TBD
SUBS	Taylor, Roy L. 69 kV Switch House	TBD
SUBS	Tazewell 161 kV Switch House	TBD
SWTH	ALF Switchgear Bldg.	2,303
SWTH	Breaker Building	1,911
SWTH	Limestone Switch Gear	1,355
SWTH	BRF Electrical Switchgear Bldg	1,272
SWTH	Switchgear Cntrl Bldg.	1,125
SWTH	GAF Breaker Switchgear Bldg	740
SWTH	FP Transformer House	220
SWTH	COF Gas Turbine Switchgear 1	200
SWTH	500kv Switchgear House	150
SWTH	W.T.P. Switchgear 1	80
SWTH	W.T.P. Switchgear 2	80
SWTH	Mobile Sw Gear No. 1	TBD
SWTH	Mobile Sw Gear No. 2	TBD

Attachment 6

Guidance for Preparing the Federal Agency Energy Management Implementation Plan for FY 2003

The Implementation Plan should be formatted as described below. The format generally follows the outline for the Annual Report. Although the Implementation Plan will be submitted as an attachment to the Annual Report, the Plan should be considered a stand-alone document. Therefore, please do not refer to the Annual Report for Section I, Part A, or for any other part of the Plan that you feel may be redundant with the Annual Report. This Plan should be brief and should describe only activities planned for the next fiscal year.

I. Management and Administration. This section will describe (1) the agency's establishment of an energy management infrastructure and (2) the agency's plans to use management tools in implementing Executive Order 13123.

The TVA Energy Policy (Policy) was approved by the TVA Board on April 19, 1995. The Policy describes TVA's commitment to achieving leadership in efficient and environmentally sound energy management. The Policy also facilitates TVA's compliance with legal and regulatory energy use reduction policies and associated environmental goals and procedures. TVA's Energy Plan (Attachment 7) was written to implement the Policy. TVA is in the process of developing, evaluating, and updating performance goals and measures in strategic plans such as the Energy Plan.

TVA formed the Agency Energy Management Committee (AEMC) to facilitate compliance with Federal statutes, Executive Orders, Federal regulations, TVA energy and related environmental management objectives, and obligations under the Environmental Protection Agency (EPA) Green Lights Program (GL), EPA Energy Star Buildings Program (ESB), and Energy Star Program (ES). This AEMC is comprised of representatives from each TVA organization responsible for energy management and associated environmental considerations in facility and general operations inside the agency. The AEMC will continue to provide an avenue for sharing lessons learned and replicating success. The AEMC will continue to meet every other month during FY 2002.

TVA will continue to evaluate energy efficiency in its facilities through assessments and surveys carried out through each responsible organization and under the strategy of the Energy Plan. TVA has developed an evaluation sheet to record energy conservation measures. These measures are then loaded into the agency energy management database for automated retrieval and analysis. During FY 2002 TVA plans to evaluate facilities, when necessary, in accordance with Executive Order 13123.

A. Energy Management Infrastructure

1. **Senior Agency Official.** Identify the agency's senior energy official and describe the official's role and responsibilities.

   LeAnne Stribley is the designated senior energy official and Executive Vice President of Administration.

   Stephen L. Brothers is the manager of the TVA Internal Energy Management Program (IEMP) located within Facilities Management under Administration.

2. **Agency Energy Team.** Identify the members of the team and describe the team's responsibilities.

   TVA formed the AEMC to facilitate compliance with federal statutes, Executive Orders, federal regulations, TVA energy and related environmental management objectives, and obligations under the EPA's GL program, EPA's ESB program and EPA's ES program. The AEMC serves as the agency energy team. This committee is comprised of representatives from each TVA organization responsible for energy management and associated environmental considerations in facility and general operations inside the agency. The AEMC provides an avenue for sharing lessons learned and replicating success. The members are:

   - **Stephen L. Brothers, chairperson for the AEMC and manager of TVA's IEMP;**
   - **William H. Lehman, Fleet Management;**
   - **David R. Zimmerman, Sustainable Design;**
   - **David W. Stewart, Fossil;**
   - **Darlene Keller, Facilities Management Environmental;**
   - **W. Richard King, Nuclear;**
   - **Kent W. Brown, Nuclear alternate;**
   - **Teresa S. Wampler, River System Operations and Environment;**
   - **David R. Dinse, Public Power Institute;**
   - **Tommy K. McEntyre, Hydro;**
   - **Carolyn B. Marvel, Fossil alternate;**
   - **David A. Gordon, Heavy Equipment;**
   - **Thomas M. Alford, Chief Financial Officer representative;**
   - **Robert E. Henning, Transmission and Power Supply;**
   - **V. Edward Hudson, Demand Side Management Program;**
   - **David R. Chamberlain, Customer Service and Marketing;**
   - **Thomas A. Wojtalik, Transmission and Power Supply; and**
   - **Mary H. Moore, General Counsel.**

B. Management Tools

1. **Awards (Employee Incentive Programs).** Describe the agency's plans to use employee incentive programs to reward exceptional performance in implementing Executive Order 13123.

   TVA is evaluating ways to award employees for energy accomplishments.

2. **Performance Evaluations.** Describe agency plans to include successful implementation of provisions of Executive Order 13123 in the position descriptions and performance evaluations of members of the agency energy team and facility/energy mangers.

   To the extent employees are responsible for activities that are related to the objectives of Executive Order 13123, their job descriptions contain reflective line items and their performance is evaluated in terms of the extent to which they accomplish such goals.

3. **Training and Education.** Describe plans to ensure that all appropriate personnel receive training for energy management requirements. Describe plans to develop and implement agency outreach programs that include education, training, and promotion of ENERGY STAR[7] and other energy efficient products for Federal purchase card users.

   The AEMC continues to work on ways to inform TVA employees of how their daily activities influence energy and associated environmental impacts in TVA. The AEMC had its annual employee awareness display on tour during October. In conjunction with the tour, an energy-related article was published in TVA's newspaper, "Inside TVA."

   TVA trains employees to accomplish objectives of the IEMP. Updates are provided on current federal requirements and regulations to employees, managers, and TVA customers when requested. Energy management and associated environmental training is provided to managers and employees as needed. Employee awareness activities are used to educate employees on how they impact energy and the environment through their daily activities at work and home. TVA also educates staff in both energy and environmental related topics through the TVA University.

4. **Showcase Facilities.** Describe plans to construct or renovate exemplary facilities that the agency plans to designate as Showcase Facilities. Discuss why the facilities will be considered Showcase Facilities (i.e., discuss the facility design, the improvements made in energy or water efficiency, the use of renewable energy, etc.).

   The TVA Chattanooga Office Complex (COC) continues to be TVA's designated showcase facility. The COC was completed in 1986 and encloses approximately 1.2 million square feet of floor area. It integrates the use of passive energy strategies, energy management practices, and environmental programs and activities. Occupants' daily activities have been recognized as a major component in facility performance. Energy and environmental awareness programs have been established to inform the occupants of the impacts their actions have on this performance. The combination of original design elements, energy and environmental activities, and aggressive energy reduction operation and maintenance efforts have resulted in the COC becoming a model facility. TVA plans to continue with the COC as its designated showcase facility for FY 2002.

II. Implementation Strategies. The purpose of this section is to describe plans to use strategies to reduce energy consumption and improve energy efficiency. It is not expected that each agency will employ every strategy; rather, each strategy identified in Executive Order 13123 is listed as a subsection to remind agency officials of the existence of these strategies and to encourage their use where practical and life-cycle cost effective. If certain strategies will not be used, please explain why not.

TVA has implemented numerous energy management measures through its operation and maintenance activities and building retrofits. Through TVA's SWAP program, controls are placed on lighting and other energy consuming equipment, and inefficient lighting is replaced when these actions are determined to be life-cycle cost effective. This program is implemented through the operations and maintenance staff as part of its daily activities. TVA has also installed energy management control systems (EMCSs) in the majority of its corporate facility space and considers the use of EMCSs for all facilities when their use is life-cycle cost effective. Energy management measures will be implemented through operations and maintenance activities and through the capital budget process during FY 2002.

As part of its operations and maintenance function, TVA has an emergency curtailment procedure which reduces energy use in its buildings during energy emergencies.

A. **Life-Cycle Cost Analysis.** Outline plans to institute procedures to ensure the use of life-cycle cost analysis in making investment decisions about in products, services, construction, and other projects to lower the Federal Government's costs and to reduce energy and water consumption. Report on plans to implement the 10-Year Simple Payback Rule. (Under EPACT, energy conservation projects that will pay back investment costs within 10 years must be undertaken).

TVA's Energy Plan provides that life-cycle analysis will be used in making investment decisions regarding energy conservation measures.

B. Facility Energy Audits. Describe the number/percentage of agency facilities that will be audited for energy and water efficiency during the next fiscal year. (Approximately 10% of facilities should be audited each year). Describe the prioritization criteria for audits (e.g., oldest facilities, most energy intensive facilities, etc.).

TVA has currently evaluated its building inventory for potential energy conservation measures. These facilities will be re-evaluated in accordance with the Executive Order 13123 and TVA's Memorandum of Understanding with the EPA. Energy surveys and building assessments are planned for FY 2002.

C. Financing Mechanisms. Provide narrative information related to the planned use of Energy-Savings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs).

Funding procedures for energy management and related environmental projects are reviewed through the IEMP and the AEMC. Recommendations and comments are submitted to the proper organizations. Projects for facilities are primarily funded through renovation, operation, maintenance, and modernization efforts. Projects covered under general operations are ranked for economic benefit compared to other TVA projects to determine funding availability and implementation status and are funded mainly through the capital budgeting process.

D. ENERGY STAR[7] and Other Energy-Efficient Products. Describe steps to be taken to promote the purchase of ENERGY STAR[7] products and/or products that are in the upper 25 percent of energy efficiency as designated by FEMP. Note whether energy efficient criteria will be incorporated into all guide specifications and product specifications developed for new construction and renovation. Also note whether such criteria will be incorporated into product specification language. (See the ENERGY STAR[7] products and Agreen@ products web sites by GSA [www.fss.gsa.gov/environ], DOE [www.eren.doe.gov/femp/procurement/begin.html], and EPA [www.epa.gov/uiseerko/index.html])

TVA's Energy Plan provides that TVA will strive, when cost-effective, "to meet the Energy Star Building criteria for energy performance and indoor environmental quality in its eligible facilities to the maximum extent practicable by the end of 2002," as described by section 403(c) of Executive Order 13123. This necessarily includes purchasing Energy Star and other energy efficient products whenever feasible. TVA continues its efforts to buy materials that have positive environmental qualities.

E. ENERGY STAR[7] Buildings. Report the number and percentage of buildings that, in the next fiscal year, are expected to meet the ENERGY STAR[7] Building criteria and to be officially designated ENERGY STAR[7] Buildings. (Buildings must rank in the top 25 percent in energy efficiency relative to comparable commercial and Federal buildings to be eligible for the ENERGY STAR[7] Buildings designation. See www.epa.gov/buildings/label).

TVA will continue to evaluate its buildings for compliance with Energy Star Building criteria. During FY 2002, TVA has plans to evaluate multiple facilities for energy efficiency and, where applicable, compliance with Energy Star Building criteria.

F. Sustainable Building Design. Report whether sustainable building design principles will be incorporated into the siting, design, and construction of new facilities. (See www.wbdg.org for a description of sustainable building design principles).

TVA is building on past sustainable efforts by incorporating sustainable design criteria into renovation and new construction efforts. A "Sustainable Design Guideline" along with a "Sustainable Process" have been written and are currently being reviewed. All of these efforts are being incorporated into an agency sustainable program under TVA's IEMP. The guideline and process should be completed during FY 2002.

G. Energy Efficiency in Lease Provisions. Describe how energy and water efficiency will be considered when agencies enter into new leases or renegotiate/extend existing leases (e.g., preference for buildings with sustainable design and development, preference for certified ENERGY STAR[7] Buildings, etc.)

Where applicable, TVA will use model lease provisions based on those recommended by the GSA, and such provisions will be incorporated into new and renewed leases provided they are cost-effective. The model lease provisions address energy and water efficiency.

H. Industrial Facility Efficiency Improvements. Highlight planned activities to explore efficiency opportunities in energy-intensive facilities. This may include activity in the following areas: steam systems, boiler operation, air compressor systems, industrial processes, fuel switching, cogeneration, and other efficiency and renewable energy technologies.

TVA will continue its current activities and will continue to investigate areas to improve industrial facility efficiency through FY 2002.

I. Highly Efficient Systems. Describe plans for new construction and/or retrofit projects for which combined cooling, heating, and power systems will be installed. Report whether local natural resources will be surveyed to optimize use of available biomass, geothermal, or other naturally occurring energy sources.

TVA will continue to investigate ways to improve system efficiency and will look for options which include biomass through FY 2002.

J. Off-Grid Generation. Describe plans for installing new solar hot water, solar electric, solar outdoor lighting, small wind turbines, fuel cells, and other off-grid alternatives.

TVA is a utility; hence, it generally does not engage in off-grid generation. However, TVA does consider such facilities when life-cycle cost effective.

K. Electrical Load Reduction Measures. Describe agency plans for implementing electrical load reduction measures to be taken during power emergencies to cut electricity consumption

in buildings and facilities. (See www.eren.doe.gov/femp/resources/presidential_direct.html for information on electrical load reduction measures.)

As part of its operation and maintenance function, TVA has an emergency curtailment procedure which reduces energy use in its buildings during energy emergencies.

L. Water Conservation. Highlight activities to be undertaken to improve water efficiency. Discuss plans to develop and implement Water Management Plans and Best Management Practices for efficient use of water (Note: See the guidance document entitled *Water Efficiency Improvement Goal for Federal Agencies* on FEMP's Web site [www.eren.doe.gov/femp/resources/guidances.html]).

TVA will continue to implement best management practices in FY 2002 when life-cycle cost effective. Some of the buildings not yet surveyed for the application of best management practices will be evaluated in FY 2002.

Attachment 7

REPORTING UNITS AND CONVERSION FACTORS FOR FEDERAL ENERGY MANAGEMENT REPORTING

Standard Buildings/Facilities
Industrial, Laboratory, and Other Energy-Intensive Facilities
Exempt Facilities

Fuel Type	*Reporting Units*	*BTUs per Reporting Unit*	*Joules per Reporting Unit*	*GigaJoules (GJ) per Reporting Unit*
Electricity	Megawatt Hour (MWH)	3,412,000	3,599,660,000	3.59966
Fuel Oil	1,000 Gallons	138,700,000	146,328,500,000	146.3285
Natural Gas	1,000 Cubic Feet	1,031,000	1,087,705,000	1.087705
LPG/Propane	1,000 Gallons	95,500,000	100,752,500,000	100.7525
Coal	Short Ton	24,580,000	25,931,900,000	25.9319
Purchased Steam	Billion Btu (BBtu)	1,000,000,000	1,055,000,000,000	1,055.0
Other	Billion Btu (BBtu)	1,000,000,000	1,055,000,000,000	1,055.0

Vehicles/Equipment

Fuel Type	*Reporting Units*	*BTUs per Reporting Unit*	*Joules per Reporting Unit*	*GigaJoules (GJ) per Reporting Unit*
Auto Gas	1,000 Gallons	125,000,000	131,875,000,000	131.875
Diesel	1,000 Gallons	138,700,000	146,328,500,000	146.3285
LPG/Propane	1,000 Gallons	95,500,000	100,752,500,000	100.7525
Aviation Gas	1,000 Gallons	125,000,000	131,875,000,000	131.875
Jet Fuel	1,000 Gallons	130,000,000	137,150,000,000	137.150
Navy Special	1,000 Gallons	138,700,000	146,328,500,000	146.3285
Other	Billion Btu (BBtu)	1,000,000,000	1,055,000,000,000	1,055.0

Other Conversion Factors

100 Cubic Feet (Ccf) = 748 Gallons
1 Acre-Foot = 325,851 Gallons
1 Liter = 0.264 Gallons
1 Cubic Meter = 264 Gallons

Attachement 8

12/20/02

TVA ENERGY POLICY

TVA is committed to being a leader in the efficient and environmentally sound use of energy. Through the adoption of an energy plan TVA facilitates compliance with legally and regulatorily required energy reduction goals and procedures. Delegation of authority is given to the Chief Operating Officer or that official's designee to develop a plan to achieve the objectives of this Policy and subsequently to modify the Plan when necessary.

COVER PAGE FOR THE TVA AGENCY ENERGY PLAN

This Plan is coordinated through TVA's Internal Energy Management Program (IEMP).

Contact:

Steve Brothers
Address: EB 3G-C
Phone: 423-751-7369
E-Mail: slbrothers@tva.gov

REVISIONS, DATES and REASON:

Revision 1, May 27, 1997. Revisions were made to incorporate new regulations, the joining of the Energy Star Building Program and the Motor Challenge, and to facilitate the move of the IEMP from Customer Group under the COO to Facilities Services under the CAO.

Revision 2, September 10, 1998. Revisions were made to incorporate changes in organizational names and changes to regulations.

Revision 3, December 15, 1999. Revisions were made to incorporate changes in regulations.

Revision 4, October 23, 2000. Revisions were made to incorporate changes in regulations including Executive Order 13123 and Executive Order 13149.

Revision 5, December 26, 2001. Revisions were made to incorporate changes in organizational names and changes to regulations.

Revision 6, December 20, 2002. Revisions were made to incorporate changes in organizational names and changes to regulations including Executive Order 13221.

TABLE OF CONTENTS

TVA AGENCY ENERGY PLAN (revised 12/02)

ENERGY PLAN

I. Introduction/Background

The following plan (hereafter "the Plan") has been established to meet Federal statutory and regulatory requirements and the requirements of TVA's Green Lights agreement with the Environmental Protection Agency (hereafter "the EPA"), the Energy Star Building Program, the DOE Motor Challenge, and to comply with the annual implementation plan requirements of section 302 of Executive Order (E.O.) 13123, 13221 and 13149. Our intention is to make TVA a Federal agency role model and leader in the wise management and use of energy. This Plan will be implemented by Chief Officers and Vice presidents (heads of TVA major groups). The Vice President, Facilities Management, through the IEMP, will coordinate the implementation of the Plan. This Plan promotes, recommends, and outlines the wise use of energy in TVA's operations and in energy intensive equipment purchased for use inside the Agency. The Plan covers all organizations which are responsible for use of energy or purchase of energy consuming equipment. The Plan and supporting organizational energy management plans are intended to meet or exceed the energy reduction goals required under Federal law, regulations, executive orders, and the voluntary goals TVA has established as a participant in EPA's Green Lights, Energy Star Buildings, Energy Star and DOE's Motor Challenge Programs.

II. Organization

A. Implementation of Plan and Dissemination of Information

The Agency Energy Management Committee (AEMC), under the sponsorship of Facilities Management, will be responsible for implementing this Plan and the clearing house for information regarding energy responsibility to the various TVA Groups. The AEMC shall be the team described in section 305 of E.O. 13123.

B. Organizational Plans

Each Group shall establish its own plan to meet or exceed the goals and objectives described under the Plan. These plans shall be updated and maintained to show how each organization intends to accomplish its goals and objectives. Plans and updates will be submitted to the IEMP through organizations representatives on the AEMC at least annually, or when revisions are made, for reporting to DOE. Reports will be made to the EPA and other federal agencies as requested or required.

III. Major Plan Components

A. Strategy

TVA has established the following goals and schedule to comply with Federal laws, memorandums of understanding (MOU), regulations, and executive orders to make TVA a more energy efficient and environmentally friendly agency:

A. Strategy (continued)

1. Goals and Schedule

a) Through life-cycle cost-effective energy measures, reduce its greenhouse gas emissions attributed to subject facility energy use by thirty percent by 2010, as discussed in section 201 of Executive Order 13123.

b) Reduce overall energy consumption in TVA owned and leased buildings subject to the National Energy Conservation Policy Act, as amended and implementing Executive Orders and regulations from FY 1985 to FY 2000 by 20 percent (BTU/SQ FT/YR), thirty percent by the year 2005, and thirty-five percent by the year 2010 to the extent to which this reduction by 2005 and 2010 is cost effective. Implement all cost-effective energy and water Energy Conservation Opportunities (ECOs) with a less than 10-year payback by the year 2005 for all subject TVA-owned buildings. A building is defined as: "any enclosed structure that consumes energy and is not on wheels."

c) Reduce energy consumption of subject industrial and laboratory facilities by at least twenty percent by the year 2005 and 25 percent by 2010, as compared with 1990, to the extent that those measures are cost-effective, as noted by E.O. 13123 section 203.

d) Design all new TVA buildings (those designed after July 31, 1989) to be energy efficient, sustainable, and in compliance with 10 C.F.R. Part 435. Have new buildings designs meet Energy Star standards where practicable and life cycle cost effective. Have acquired buildings comply with 10 C.F.R. 435/434, if cost effective.

e) Conduct lighting surveys on all TVA buildings and reduce lighting energy use at least fifty percent without compromising lighting quality as part of the EPA Green Lights Program. Implement appropriate lighting upgrades, with a 10-year payback or less, covering ninety percent of TVA's surveyed gross square footage by September 30, 2000, and one hundred percent by 2005. This will not apply to those parts of TVA buildings which are exempt from the TVA/Green Lights agreement pursuant to Addendum 1 Section 1.B of the agreement.

f) Strive to extend the use of renewable energy within its subject facilities and in its activities by implementing renewable energy projects and by obtaining electricity from renewable sources, as described in E.O. 13123 section 204. Utilize TVA renewable and green programs to achieve E.O. requirements.

g) Through life-cycle cost-effective measures, reduce energy consumption and associated environmental impacts within its subject facilities, as described in E.O.13123 section 205

h) Strive to reduce total energy use and associated greenhouse gas and other air emissions, as measured at the source, as described in E.O. 13123 section 206.

i) Implement best management practices to reduce water consumption and associated energy use in subject facilities to reach goals to be established under

E.O. 13123 section 503 (f), to the extent that these measures are cost-effective, as described in E.O. 13123 section 207.

A. Strategy (continued)

1. Goals and Schedule

j) Annually report progress in meeting the goals and requirements of E.O. 13123 to the President, as described in section 303 of the E.O.

k) Applicable to those facilities which are covered by the National Energy Conservation Policy Act, as amended and E.O. 13123, enter and participate in a Federal Energy Star Program Partnership Memorandum of Understanding (MOU) as an attachment to the current Federal Energy Star Buildings Program and Green Lights MOU with the Department of Energy and Environmental Protection Agency. Under the Federal Energy Star Buildings Program Partnership MOU, TVA will generally agree aggressively to pursue all life-cycle cost-effective energy efficient building systems upgrades in its existing facilities and will generally agree to design all new facilities in compliance with applicable codes and regulations, particularly 10 C.F.R. Part 435/434, subpart A or its successor.

l) Join and participate in the DOE Motor Challenge program under which TVA will participate in a coordinated effort to encourage increased market penetration of more efficient electric motor systems. This will include TVA receiving reliable product and system information from DOE, customers and other Federal Agencies, helping develop new information based on communication with other organizations and experience in TVA facilities, and may entail TVA being recognized for developing more efficient and effective motor systems.

m) Obtain, where applicable, alternative fuel vehicles (AFVs) and or hybrid vehicles as provided by the Energy Policy Act of 1992 (EPAct 92) and E.O. 13149.

n) Continue to conduct energy and water audits for its subject facilities each year, either independently or through Energy Savings Performance Contracts or utility energy-efficiency service contracts, as described in section 402 of E.O. 13123.

o) When entering and/or renewing leases, as provided by section 403 (e) of E.O. 13123, to the extent wherever life-cycle cost-effective and legally permitted, seek to incorporate provisions in each lease that minimize the cost of energy and water, while maintaining occupant health and safety. Consideration shall be given to providing cost-effective preferences to buildings carrying the Energy Star Building label.

p) Designate exemplary new and existing facilities with significant public access and exposure as showcase facilities to highlight energy or water efficiency and renewable energy improvements, as described in section 406 (e) of the E O.

q) In accordance with section 304 of E.O. 13123, designate a senior official to be responsible for achieving the goals of this policy. Such official shall be appointed to the Interagency Energy Policy Committee (656 Committee).

r) Strive, where cost-effective, to meet the Energy Star criteria for energy performance and indoor environmental quality in its eligible facilities to the maximum extent practicable by the end of 2002, as described by E.O. 13123 section 403 (c).

s) Re-survey appropriate buildings every 5 years.

t) Explore efficiency opportunities in its subject industrial facilities for steam systems, boiler operation, air compressor systems, industrial processes, and fuel switching, including cogeneration and other efficiency and renewable energy technologies, as described in E.O. 13123 section 403 (f).

u) Implement district energy systems, and other highly efficient systems, in new construction or retrofit projects when life-cycle cost-effective, as described in section 403 (g) of E.O. 13123.

v) Strive to improve the design, construction, and operation of its mobile equipment and implement all life-cycle cost-effective energy efficiency measures that result in cost savings while improving mission performance, as discussed in section 405 of E.O. 13123.

w) Strive to use management strategies, such as employee incentive programs, as described in section 406 of E.O. 13123, to achieve the objectives of the E.O.

x) In accordance with E.O. 13221 purchase standby power equipment which meets the standards of the E.O. where life cycle cost effective and when practical.

2. Building Design and Renovation

a) Apply sustainable design principles developed by DOD and GSA pursuant to section 403 (d) of E.O. 13123 to the siting, design, and construction of its subject new facilities. Apply these and other cost effective principals through the TVA Sustainable Design Program.

b) New Building Design. All design firms doing building design work on TVA buildings must certify compliance at the contract execution. This statement shows that the firm will adhere as required to 10 C.F.R. 435 and any other energy regulation applicable to the particular building type under design. At the conclusion of the design, the responsible design organization will complete, sign, and submit a 10 C.F.R. Part 435 Compliance Form to the IEMP.

c) Existing Building Renovation. Energy and water surveys will be conducted to discover potential energy conservation opportunities (ECOs) and best management practices (BMPs) for water. The life-cycle cost-effective recommendations from these surveys will be implemented in existing buildings. Also, buildings will be evaluated for cost effective sustainable options.

III. Major Plan Components (continued)

B. Implementation

ECOs, BMPs, and sustainable options will be considered for implementation if after completion of the life-cycle cost analysis the project is shown to be cost effective and has a less than 10-year payback.

To ensure effective Policy implementation, reports on progress toward energy reduction goals, BMPs, and sustainable options achieved are required to be submitted to the IEMP by all TVA organizations affected at least annually.

TVA will use all practical means to ensure its programs, projects, and activities protect and enhance the quality of the human and natural environment. At the earliest practicable time, when a proposed project has environmental impacts, the office proposing an action under this plan will initiate environmental review.

C. Identify and Prioritize Projects

Life-Cycle-Cost effective ECOs, BMPs, and sustainable options will be reviewed and ranked for implementation based on their Savings to Investment Ratio (SIR), their Internal Rate of Return (IRR), and their impact on TVA's mission. The projects will be prioritized for implementation based on best return on investment and necessity to support TVA's mission and responsibility to its customers.

D. Funding Strategy

All ECOs, BMPs, and sustainable options analyzed shall be evaluated using the guideline of NIST Handbook 135, Life-Cycle-Costing Manual for the Federal Energy Management Program. Those cost-effective ECOs, BMPs and sustainable options having a 10-year or less payback and a savings to investment ration greater than one will be budgeted for and implemented prior to FY 2005. For ECOs on TVA buildings not covered under EPAct 92, but considered under Green Lights, cost effectiveness shall be based on current TVA financial standards and business practices.

The following funding options will be considered when implementing ECOs, BMPs, and sustainable options:

1. Direct funding from TVA operating capital,

2. Utility sponsored demand side management programs,

3. Energy Savings Performance Contracts and Shared Savings Agreements,

4. Federal Energy Efficiency Fund.

III. Major Plan Components (continued)

E. Other Activities

TVA will consider implementation of all cost-effective operation and maintenance energy management projects in its day-to-day energy management activities. Water flow restriction devices and other activities which would conserve and preserve our water resources will be considered for implementation. TVA will demonstrate and implement energy efficient electrical equipment in its internal operations where appropriate and will promote their use to its customers. TVA will implement an energy awareness campaign to obtain employee assistance in reducing energy use. TVA will also continue its sustainable design efforts through the direction of the Sustainable Design program.

IV. Tracking and Reporting

A. Implementation Procedures

If an ECO has a less than 5-year payback and meets TVA's IRR, as defined by TVA's CFO, this ECO will be considered for implementation during the next budget cycle. Water conservation objectives and sustainable options will be considered for implementation when, after life-cycle-cost analysis, their payback is less than ten years.

B. Progress Toward Meeting Objectives

All TVA organizations which have responsibility for energy and water consumption in buildings or operations will report this usage to the IEMP.

1. Quarterly Reporting

a) On a quarterly basis, unless otherwise specified, organizations which have identified or implemented ECOs, BMPs, and/or sustainable options will report this information to the IEMP.

2. Annual Reporting

a) On an annual basis, all organizations which have responsibilities over energy and/or water use in operations or buildings will describe energy management or conservation programs, projects, or operations performed during that fiscal year and those projects, programs, and operations planned for the next fiscal year. The date for submission for this information will be no later than 45 calendar days after the end of the fiscal year.

3. Other Reporting

a) Individual organizations may implement reporting requirements within their organizations in order to monitor usage in an effort to enhance performance.

b) Organizations may receive copies of the reports sent to DOE upon request. All other reports generated to assist TVA in its effort to be a leader in energy management and conservation will be available upon request.

IV. Tracking and Reporting (continued)

C. General

All TVA employees and organizations are encouraged to reduce energy and water waste. New and innovative ideas and techniques for the reduction of energy and water waste and better energy management should be communicated to the IEMP so the information can be shared throughout TVA. In selection of equipment, electrical alternatives shall be chosen whenever cost-effective and whenever possible. TVA buildings will be used to demonstrate the application of innovative energy and water efficient technologies.

V. Special Problems

Organizations having special problems meeting The Plan should submit a description of those problems to the IEMP for review. Any problems needing DOE attention will be communicated annually in TVA's annual report to DOE.

VI. Additional Provisions

A. TVA FLEET EFFICIENCY STRATEGY (see attached)

Background:

This strategy defines TVA’s commitment to vehicle fleet and transportation efficiencies as described in EPAct 92 and Executive Order 13149. The strategy is an internal part of the decision making process for fleet purchases and operations for TVA.

Responsibilities:

Administration: Program administrator and owner of the fleet efficiency strategy; goal setting, etc. Transportation Services will coordinate the implementation of the strategy in TVA through the Agency Energy Management Committee. Committee members representing this program include Fleet Management, William Lehman and Heavy Equipment, David Gordon:

a) LeAnne Stribley is the designated Senior Energy Official and Executive Vice President of Administration.
b) Stephen L. Brothers is the manager for the TVA Internal Energy Management Program (IEMP) and chairperson for the Agency Energy Management Committee.

Attachment 9

Tennessee Valley Authority
Compliance Strategy
for E.O. 13149

October 4, 2002

Executive Summary

TVA's mission includes generating and transmitting electric power to fulfill the needs of almost 8 million users throughout TVA's seven-state service territory, and specifically includes the major objective of selling the power at rates as low as feasible. All TVA operations (including but not limited to 29 hydroelectric plants, 15 fossil-fueled plants, 3 nuclear plants, and 17,000 miles of transmission lines and facilities) are independently funded by power sales and by power revenue bonds (which are not obligations of, nor backed by, the United States); TVA receives no appropriated funds. Consistent with its mission requirements and its independent corporate status, TVA intends to comply with EO 13149 to the extent feasible. TVA has a long history of demonstrating stewardship toward energy reduction and fuel efficiency and will continue to work toward meeting fuel reduction and vehicle efficiency.

TVA's fleet strategy is to examine current vehicle use and where possible when vehicles need replacement choose those that are more efficient. TVA being a major provider of electricity will continue to make use of alternative fueled vehicles that use electric power and acquire additional vehicles to meet requirements under EPAct92. TVA has also recognized the value of hybrid electric vehicle technology in reducing fuel consumption, increasing versatility, and promoting electric propulsion. TVA has added hybrid vehicles to its fleet and will continue to do so.

In (FY) 1999 TVA reported in its "Federal Agency Annual Report on Energy Management" the following data:

- Annual MPG Sedans – 25.4
- Annual MPG Light Trucks (4x2) – 12.8
- Annual MPG Light Trucks (4x4) – 11.9
- 19 AFVs consisting of 4 U.S. Electricar Prism Sedans, 5 U.S Electricar S-10 pickup trucks, 5 Solectrica Ford sedans and 5 Ford Ranger electric pickup trucks.

I-1. TVA Petroleum Use

Petroleum use for covered vehicles will continue to be reported in FAST however, gasoline and diesel fuel usage for FY 1999 and associated cost is listed below. This data includes fuel used by light duty, medium duty and heavy duty vehicles. The source of this data is the "TVA Energy Management Annual Report for FY 1999"

- Auto Gas – 2,128,680 gallons. Cost: $2,064,820
- Diesel Fuel – 1,037,64 gallons. Cost: $985,760

During FY 2002 TVA purchased 41 covered vehicles with a combined usage rate of 24 MPG and estimated consumption of 25,625 gallons. These vehicles included 2 mail trucks, 7 utility vehicles and 4 mini vans. To increase MPG for FY 2003 TVA plans to purchase

higher mileage vehicles including 10 hybrid vehicles. Fuel saving activities will be reported each year in the TVA Energy Management Annual Report.

I-2. TVA Fleet Characteristics and AFVs

TVA vehicles are spread across its seven-state service area. Due to the nature of TVA operations, such as the facts that TVA power plants and transmission facilities are generally located in rural areas and that much TVA travel originating in urban areas is to distant areas (for example, between Knoxville, TN, and Muscle Shoals, AL), most TVA vehicles are used primarily outside of metropolitan statistical areas as described in EPAct92. Also, significantly for purposes of EPAct92 Alternative Fueled Vehicle requirements, TVA has no central fueling facilities in metropolitan statistical areas. Further, as coordinated with DOE, TVA vehicles used in maintaining the reliable operation of the power system appear to be within the intent of EPAct92 exemptions such as for emergency or off-road vehicles. Based on these facts, EPAct92 does not impose significant AFV purchase requirements on TVA but, TVA nonetheless does intend to continue to add to its current fleet of AFVs. Annual fleet characteristics for vehicles covered under EPAct92 will be reported in FAST.

I-3. TVA Fleet Strategy to Reduce Fuel Use and Increase Efficiency

TVA's fleet strategy is to replace vehicles with those that are more efficient where practical. To facilitate this effort TVA has produced several guides accessible to employees as needed, which graphically compare the fuel use and operating costs of existing TVA fleet vehicles.

TVA will continue to utilize various transportation options related to increasing efficiency including the use of personal vehicles, short term rental cars, short term leases and assigned vehicles. This information will also be made available to employees to determine the best method of transportation based on trip duration and miles driven.

TVA examines current vehicle use and where possible, when vehicles need replacement, chooses those that are more efficient. TVA being a major provider of electricity will continue to make use of alternative fueled vehicles that use electric power and acquire additional vehicles to meet requirements under EPAct92. TVA has also recognized the value of hybrid electric vehicle technology in reducing fuel consumption, increasing versatility, and promoting electric propulsion. TVA has added hybrid vehicles to its fleet and will continue to do so.

TVA's Agency Energy Management Committee (AEMC) facilitates compliance with federal statutes, Executive Orders, federal regulations, TVA energy and related environmental management objectives, and obligations under the Environmental Protection Agency's (EPA) Green Lights Program (GL), EPA's Energy Star Buildings Program (ESB) and EPA's Energy Star Program (ESP). The AEMC serves as the agency energy team. This committee is comprised of representatives from each TVA organization responsible for energy management and associated environmental considerations in facility and general operations inside the agency. The AEMC provides an avenue for sharing lessons learned

and replicating success, including fuel use and increased vehicle efficiency. This committee meets every other month.

I. Recognition and Awards

As part of its strategy, TVA is considering special recognition or awards for its personnel that exceed the strategy's requirements or exhibit leadership in attaining its objectives. The nature of this recognition is being developed.