

Tennessee Valley Authority

Government Performance and Results Act (GPRA)

Annual Performance Report

FY 2004

For the Fiscal Year Ending
September 30, 2004

Submitted to Congress
April 2005



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Introduction

The Government Performance and Results Act of 1993 (GPRA) requires federal agencies to establish standards measuring their performance and effectiveness. Federal agencies are required to develop strategic plans describing their overall goals and objectives, annual performance plans containing quantifiable measures of their progress, and performance reports describing their success in meeting those standards and measures. This report documents the Tennessee Valley Authority's (TVA) actual performance and progress in achieving the goals and objectives identified in its annual performance plan for FY 2004. Information is expressed in terms required by GPRA and the Office of Management and Budget (OMB) Circular A-11. This Performance Report is aligned with TVA's GPRA Strategic Plan submitted to Congress for the period 2003-2008.

While TVA is a corporation of the federal government, it is unique in that it receives no federal appropriations and must finance itself entirely through sales and revenue and borrowing. In addition to the normal challenges of operating and financing a \$7.5 billion business, TVA is now preparing for change from a monopoly to a competitive business model. To guide the organization through this transition, TVA has developed a corporate strategic plan consistent with and complementary to the plan required by GPRA.

TVA exists to improve the quality of life for the 8.5 million people of the Tennessee Valley through its work in three major areas: energy, the environment, and economic development. Now operating in an increasingly vigorous and competitive marketplace, TVA fulfills its mission of public service by making prudent business decisions and using the best practices of private enterprise.

Mission

TVA was established to develop and operate the Tennessee River system to improve navigation, minimize flood damage, and provide energy and related products and services safely, reliably, and at the lowest feasible cost to residents and businesses in the multi-state Tennessee Valley region. TVA's management of the entire Tennessee River watershed optimizes the benefits of the water resource. Major functions of the corporation include:

- Management of the Tennessee River system for multiple purposes including navigation, flood control, power generation, water quality and water supply, public lands conservation, recreation, and economic development;
- Generation of electricity;
- Sale and transmission of electricity to wholesale and large industrial customers;
- Stimulation of economic development activities that generate a higher quality of life for citizens of the Tennessee Valley;
- Preservation and environmentally sensitive management of TVA assets and federal lands entrusted to TVA; and
- Research and technology development that addresses environmental problems related to TVA's statutory responsibilities for river and land management and power generation.

TVA's Vision, General Goals, and Strategic Objectives

Vision

Generating Prosperity in the Valley

Goals

TVA employees will set the standard for . . .

Supplying low-cost, reliable power

Meet the changing needs of power distributors and directly served customers for energy products and services in changing markets.

Supporting a thriving river system

Minimize flood damage, maintain navigation, support power production, improve water quality, protect public health and the environment, and support recreational uses.

Stimulating economic growth

Provide services based on core expertise to solve regional problems, protect natural resources, create jobs, and build partnerships for the public benefit.

. . . to improve the quality of every life.

Strategic Objectives:

- Meet customers' needs with affordable, reliable electric power;
- Reduce TVA's delivered cost of power relative to the market;
- Continue the trend of debt reduction;
- Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship;
- Demonstrate leadership in sustainable economic development in the Valley; and
- Strengthen working relationships with all of TVA's stakeholders.

Relationship of TVA's General Goals and Strategies to Performance Goals

Performance Goals are selected to support attainment of the General Goals and Strategies and are expressed as performance indicators and annual targets. The following table summarizes information from the previous section and demonstrates the linkages between TVA's General Goals, Objectives, Strategies, and Performance Goals / Measures.

TVA GENERAL GOALS, OBJECTIVES, STRATEGIES, AND PERFORMANCE MEASURES

Goals	Objectives	Strategies	Performance Measures	
1. Supplying low-cost, reliable power	1.A Control O&M expenses to allow TVA to focus on competitiveness in a deregulated wholesale power market.	1.A.1 Generate more for less.	<ul style="list-style-type: none"> Delivered Cost of Power O&M Costs 	
	1.B Continue the trend of debt reduction.	1.B.1 Invest prudently.	<ul style="list-style-type: none"> Debt/kW of Capacity Financial Strength Bond Rating 	
	1.C Meet customers' needs with affordable, reliable electric power.	1.C.1 Improve power reliability to meet customer requirements.		<ul style="list-style-type: none"> System Reliability (Load Not Served)
		1.C.2 Achieve excellence in the asset optimization and production processes.		<ul style="list-style-type: none"> Fossil Plant Equivalent Availability Factor Hydro Equivalent Availability Factor Nuclear Plant Net Capacity Factor
		1.C.3 Provide flexible contracts and competitive pricing of products and services.		<ul style="list-style-type: none"> Energy Sales (kWh) Wholesale Customers with Continuing Contracts
		1.C.4 Manage the environmental and safety impacts TVA's operations have on employees and the region.		<ul style="list-style-type: none"> Reportable Environmental Events Environmental Impact Index Sulfur Dioxide Emissions Nitrogen Oxide Emissions INPO Index Environmental Research Center RCRA Cleanup (ERC)

Goals	Objectives	Strategies	Performance Measures
		1.C.5 Achieve excellence in the customer value and relationship process.	<ul style="list-style-type: none"> • Customer Satisfaction
2. Supporting a thriving river system	2.A Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.	2.A.1 Minimize flood damage by operating the river system according to best management practices with flood control as a priority.	<ul style="list-style-type: none"> • Flood Storage Availability
		2.A.2 Maintain a navigable commercial waterway from Knoxville to Paducah.	<ul style="list-style-type: none"> • Days Navigable Waterway is Available from Knoxville to Paducah • Shipper Savings
		2.A.3 Provide acceptable water quality.	<ul style="list-style-type: none"> • Dissolved Oxygen Deficit Due to Forced Outages • Minimum Flow Achievement • Watershed Water Quality
		2.A.4 Optimize the value of hydro generation subject to flood control, navigation, water quality, and summer reservoir-level constraints.	<ul style="list-style-type: none"> • Discretionary Zone Attainment
		2.A.5 Support recreational uses of the river system and associated federal lands.	<ul style="list-style-type: none"> • Summer Reservoir Level Attainment • Completed Comprehensive Reservoir Land Management Plans
3. Stimulating economic growth	3.A Demonstrate leadership in sustainable economic development in the Valley.	3.A.1 Promote development through targeted growth initiatives.	<ul style="list-style-type: none"> • Economic Development Index • Capital Investment Leveraged • Jobs Added or Retained • Stakeholder Process Satisfaction Index

Summary of Changes in Performance Indicators

As part of its continuous performance management process, TVA periodically assesses its key performance indicators for optimal alignment with TVA's goals and objectives. Accordingly, certain indicators have been discontinued or replaced as business conditions have changed and as new indicators are developed that provide for better alignment. The following table summarizes the changes in performance indicators subsequent to submission of TVA's 2004 GPRA Performance Plan.

Measure	Status	Reason
Delivered Cost of Power (DCOP)	Replaced by O&M Costs indicator in FY 2004.	The O&M Costs indicator provides better alignment than the DCOP indicator because it excludes certain costs that are not controllable by TVA employees.
Debt/kW of Capacity	Replaced by Financial Strength indicator in FY 2004.	The Financial Strength indicator measures the change in TVA's total financing obligations rather than only debt, and therefore, is a more comprehensive measure than the Debt/kW of Capacity indicator.
Wholesale Customers with Continuing Contracts	Discontinued after FY 2004.	The objectives of this measure are now captured in the Customer Satisfaction indicator.
Environmental Research Center RCRA Cleanup	Discontinued in FY 2004.	Cleanup activities related to this indicator were completed in FY 2003. Thus this indicator is no longer applicable.
Reportable Environmental Events	Replaced by Environmental Impact Index beginning in FY 2005.	Components of this indicator are included in the more comprehensive Environmental Impact Index beginning in FY 2005.
Customer Satisfaction	Replaced by Customer Impact beginning in FY 2005.	Customer Impact focuses on two elements rated as most critical by TVA customers; power reliability and competitive price.
Watershed Water Quality	Discontinued at the end of FY 2003.	Components of this measure are now captured in the Environmental Impact Index indicator.
Discretionary Zone Attainment	Discontinued in FY 2004.	This indicator was discontinued in June 2004 due to the implementation of the Reservoir Operations Study.
Summer Reservoir Level Attainment.	Discontinued in FY 2004.	This indicator was discontinued in June 2004 due to the implementation of the Reservoir Operations Study.
Completed Comprehensive Reservoir Plans	Discontinued in FY 2004.	After management review, it was determined that this indicator does not impact TVA's core business.
Capital Investment Leveraged	Discontinued in FY 2003.	This indicator was incorporated into the more comprehensive Economic Development indicator.
Jobs Added or Retained	Discontinued in FY 2003.	This indicator was incorporated into the more comprehensive Economic Development indicator.
Stakeholder Satisfaction Index Weightings: Employees (30%), Customers (30%), Public Officials (20%), Business and Community Leaders (10%) and General Public (10%)	Baselines have been established on overall favorability with 100 being very good; Public Officials at 72.2, Business and Community Leaders at 83.9 and General Public at 75.2.	Baseline measures in progress for Employees and Customers.

Economic Value Indicator

Delivered Cost of Power

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supplying low-cost, reliable power.

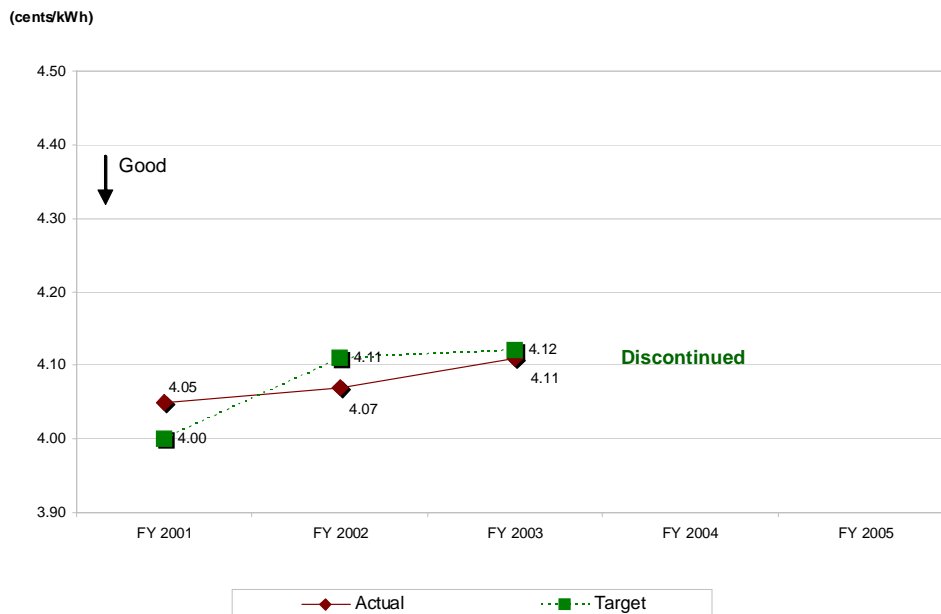
Strategic Objective 1.A: Reduce TVA's delivered cost of power relative to the market.

Critical Success Factor 1.A.1: Generate more for less.

Description

The cost of electric power is crucial to energy customers, who depend on a low-cost, efficient, and dependable source of energy in order to be competitive in their businesses and cost-effective in their household budgets. To determine the cost of providing power to the energy customers, TVA divides its total costs to deliver power (excluding accounting write-offs) by the total amount of power delivered. Over time, reducing its delivered cost of power, relative to the market, enables TVA to remain competitive in a potentially deregulated and openly competitive environment. This assures TVA's customers competitively priced electricity.

Delivered Cost of Power



This indicator was replaced by the O&M Costs indicator in FY 2004.

Economic Value Indicator

O&M Costs

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supplying low-cost reliable power.

Strategic Objective 1.A: Control O&M expenses to allow TVA to focus on competitiveness in a deregulated wholesale power market.

Critical Success Factor 1.A.1: Generate more for less.

Description

Customers view price as a deciding factor in whether to switch suppliers. Continued awareness and emphasis on controlling costs allow TVA to focus on competitiveness in the wholesale power market and positioning for future success. TVA calculates O&M expenses as total expenses less fuel, purchased power, interest expense and pension/postretirement financing costs.



FY 2004 Target: \$3,644
FY 2004 Performance: \$3,581

Targeted performance on this goal was achieved.

Performance Explanation: This favorable result is due to lower than planned O&M base costs and decreased projects, offset by increased outage costs, increased benefits, increased leave accrual, adjustments to inventory, and increased external business income.

This indicator replaced the Delivered Cost of Power indicator in FY 2004.

Economic Value Indicator

Debt/kW of Capacity

Goal/Strategic Objective/Critical Success Factor

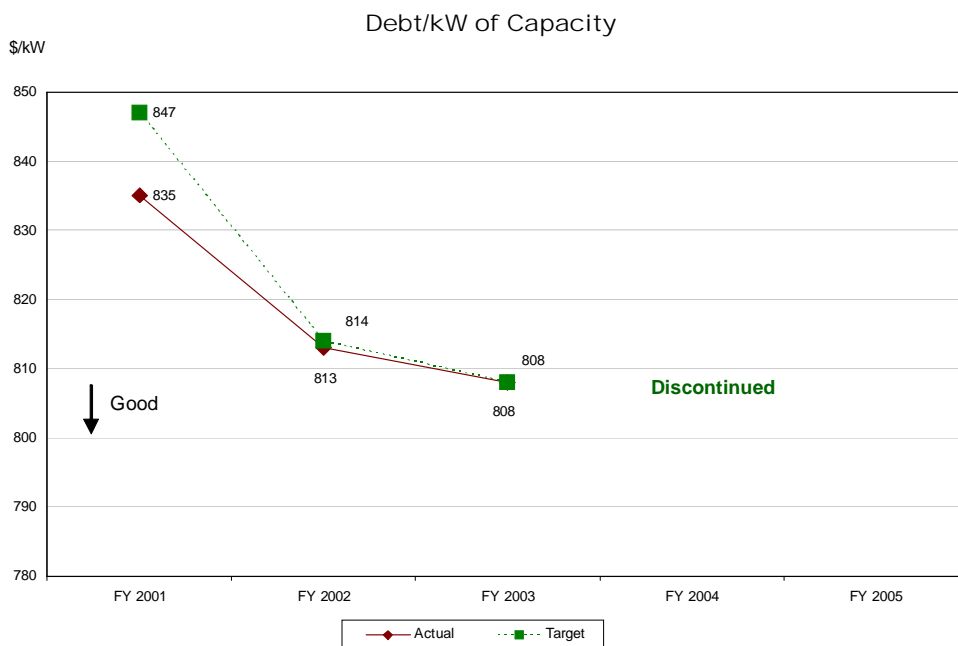
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.B: Continue the trend of debt reduction.

Critical Success Factor 1.B.1: Invest prudently.

Description

TVA will best be able to meet the projected market price for electricity by reducing its high fixed costs for interest (now about 20 percent of TVA's total cost of power). As TVA reduces and manages its outstanding debt, thus reducing its interest costs, it will shift its cost structure to one that is better able to adjust to the increased volatility of a future deregulated energy market. At the same time, TVA is challenged to provide the capital resources required to support the changing demands on its power system (generation and transmission) and to modify its existing plants as necessary to comply with environmental regulations. A good measure for TVA's debt burden, in context with the size of its business, is the amount of "debt per kW of generating capacity." Lowering this measure will produce a more flexible cost structure and a stronger balance sheet.



This indicator was replaced by the Financial Strength indicator in FY 2004.

Economic Value Indicator

Financial Strength

Goal/Strategic Objective/Critical Success Factor

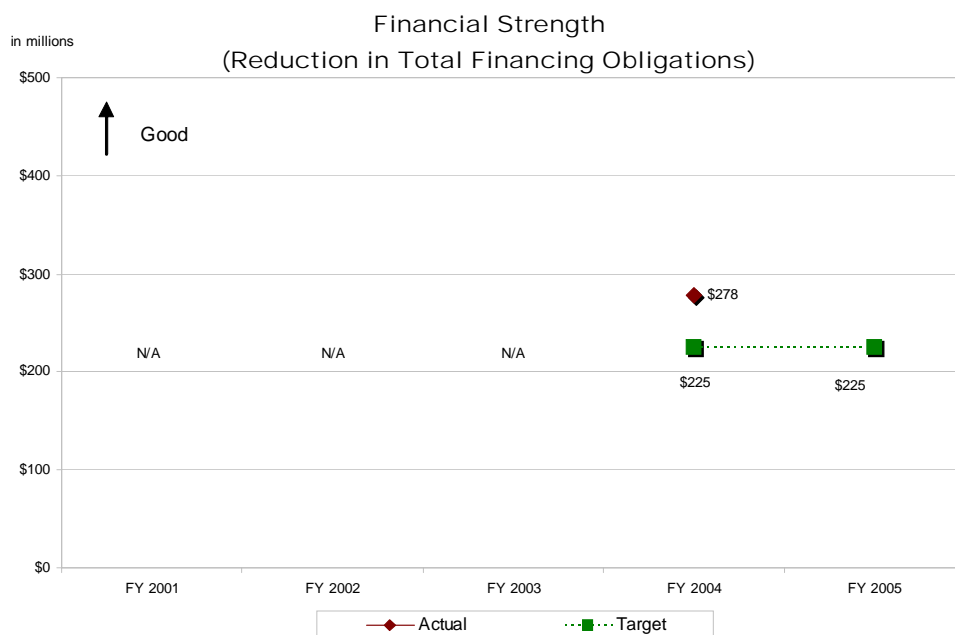
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.B: Continue the trend of debt reduction.

Critical Success Factor 1.B.1: Invest prudently.

Description

Financial Strength is a measure of the reduction in TVA's total financing obligations. The electric utility industry has become increasingly competitive over the last decade. Competition is expected to intensify, and restructuring legislation may dramatically change the way electric utilities do business in the future. TVA needs to improve its financial flexibility so that it can weather the greater volatility of revenues that comes with competition. In order to produce a more flexible cost structure, TVA has expanded its resources for capital by entering in lease-leaseback transactions (for both Combustion Turbine units and certain technological equipment) and arrangements with customers for prepayment of energy. Although these transactions provide favorable financing alternatives for TVA, they are debt-like in nature and are included in this measure of total financing obligations.



FY 2004 Target: \$225
FY 2004 Performance: \$278

Targeted performance on this goal was achieved.

Performance Explanation: This favorable result is due primarily to an increase in cash available for the reduction in total financing obligations driven by lower O&M base costs, lower interest costs, lower capital expenditures including nuclear fuel, lower O&M project costs, and higher external business income.

This indicator replaced the Debt/kW of Capacity indicator in FY 2004.

Economic Value Indicator

Bond Rating

Goal/Strategic Objective/Critical Success Factor

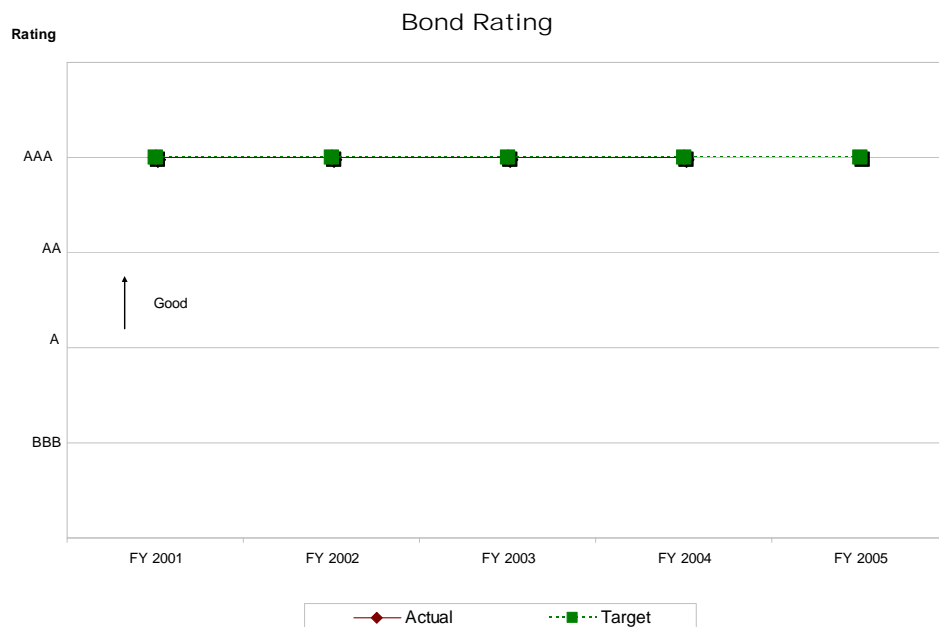
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.B: Continue the trend of debt reduction.

Critical Success Factor 1.B.1: Invest prudently.

Description

This performance measure monitors TVA's success in maintaining its Triple-A rating. According to Moody's Investors Service, "The Aaa ratings on the Tennessee Valley Authority (TVA) power bonds derive from the legislation defining its business charter and authority, its strong operational performance and its status as a wholly-owned corporate agency of the U.S. Government although TVA's bonds are not guaranteed by the U.S. Government."



FY 2004 Target: AAA
FY 2004 Performance: AAA

Targeted performance on this goal was achieved.

Performance Explanation: Independent bond ratings issued by Moody's Investors Service, Standard and Poors, and Fitch Ratings during FY 2004 documented TVA's continuing triple-A rating.

Economic Value Indicator

System Reliability (Load Not Served)

Goal/Strategic Objective/Critical Success Factor

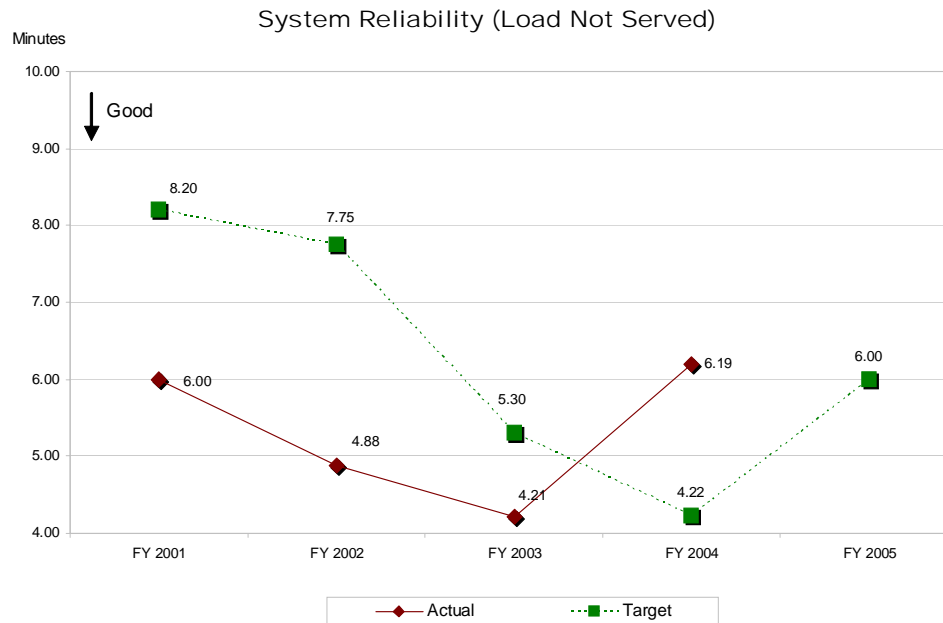
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.1: Improve power reliability to meet customer requirements.

Description

Energy customers require a reliable power supply in order to remain competitive and to maintain consumers' safety and convenience. Load Not Served (LNS) measures the reliability of TVA's power supply in terms of the number of minutes the average customer is without power each year.



FY 2004 Target: 4.22 minutes

FY 2004 Performance: 6.19 minutes

Targeted performance on this goal was not achieved.

Performance Explanation: During 2004, TVA experienced its lowest number of LNS interruption events ever. However, some of these events occurred at locations with large power loads which resulted in higher overall LNS. Five percent of the events (7 events) in FY04 accounted for about 50 percent of the LNS.

Corrective Action: Individual events were investigated and appropriate corrective action taken.

Economic Value Indicator

Fossil Plant Equivalent Availability Factor (EAF)

Goal/Strategic Objective/Critical Success Factor

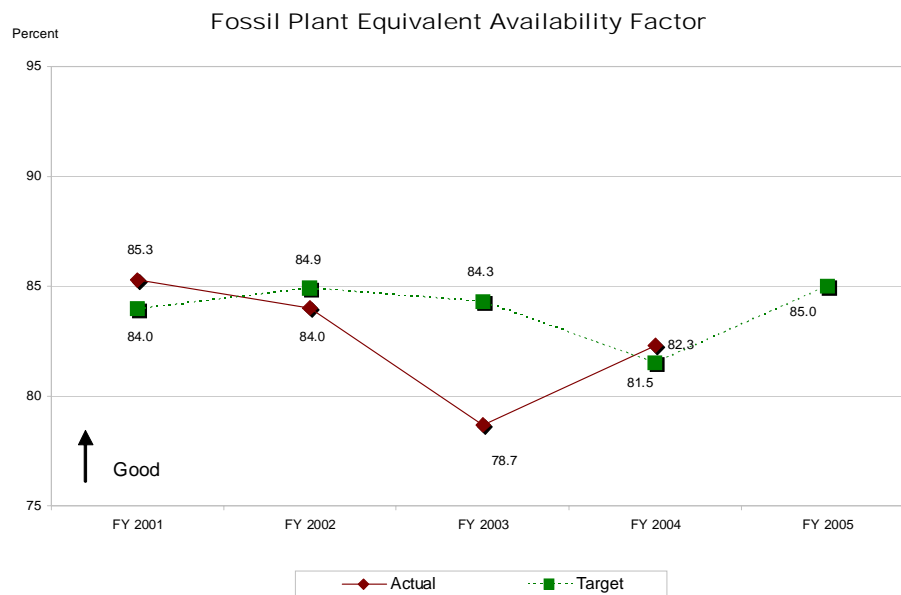
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.2: Achieve excellence in the asset optimization and production processes.

Description

The retail distributors and industries that buy power from TVA require an adequate supply of electricity at the lowest price in order to add value to their customers. To ensure that TVA can meet this demand, TVA's coal-fired plants must operate at optimum availability, defined as the ratio of the amount of energy that can be provided divided by the maximum amount of energy that could be produced over a given period of time.



FY 2004 Target: 81.5%

FY 2004 Performance: 82.3%

Targeted performance on this goal was achieved.

Performance Explanation: Several factors contributed to meeting this target. These include improved condition of critical plant equipment as a result of prior year repairs, more focused preventive maintenance, and fewer unplanned outages and deratings. The summer unplanned outage rate for TVA's system of fossil plants in 2004 was the lowest in history.

Economic Value Indicator

Hydro Equivalent Availability Factor (EAF)

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.2: Achieve excellence in the asset optimization and production processes.

Description

TVA's hydroelectric plants work to achieve high performance in plant availability. The hydroelectric plants help to satisfy energy customers' requirements for reliable, available electric power. Hydro electric plant availability is calculated as the amount of energy available for generation divided by the maximum amount of energy that could be produced over a set period of time.

Hydro Equivalent Availability Factor



FY 2004 Target: 94.5%

FY 2004 Performance: 92.8%

Targeted performance on this goal was not achieved.

Performance Explanation: The EAF target in FY 2004 was adversely impacted by three significant forced outages and additional maintenance outages taken for asset improvement.

Corrective Action: TVA is continuing an aggressive program of rehabilitating and maintaining its aging hydro assets with a major power train and mechanical water barrier (gates, guides, and seals) rehabilitation program. This multi-year maintenance program will improve the reliability of the hydro systems resulting in long term improvement of Hydro EAF. Projects include 26 units at 11 hydro plants. This is a continuation of a major program initiated in FY 1992 for the long term reliability improvement of TVA's hydro generation assets. The program will extend to 2015. Major water barrier rehabilitation projects will take place at Wheeler, Blue Ridge and Great Falls dams.

Economic Value Indicator

Nuclear Plant Net Capacity Factor

Goal/Strategic Objective/Critical Success Factor

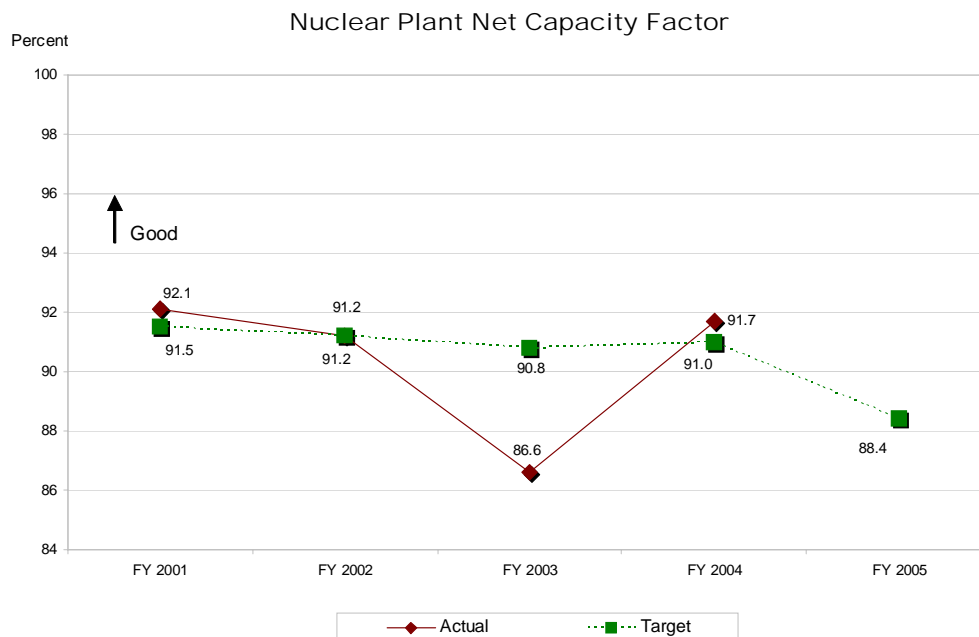
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.2: Achieve excellence in the asset optimization and production processes.

Description

To ensure that all nuclear power plants are operating at needed capacity, TVA monitors the "net capacity factor," which is the ratio of the amount of electricity generated to the maximum amount of energy that could have been produced by the plant over a specified period of time.



FY 2004 Target: 91.0%
FY 2004 Performance: 91.7%

Targeted performance on this goal was achieved.

Performance Explanation: The improvement in performance between 2003 and 2004 was due to fewer refueling outage days and reductions in forced losses. FY 2004 performance exceeded target because there were fewer refueling outage days during the year than originally planned.

Economic Value Indicator

Energy Sales (kWh)

Goal/Strategic Objective/Critical Success Factor

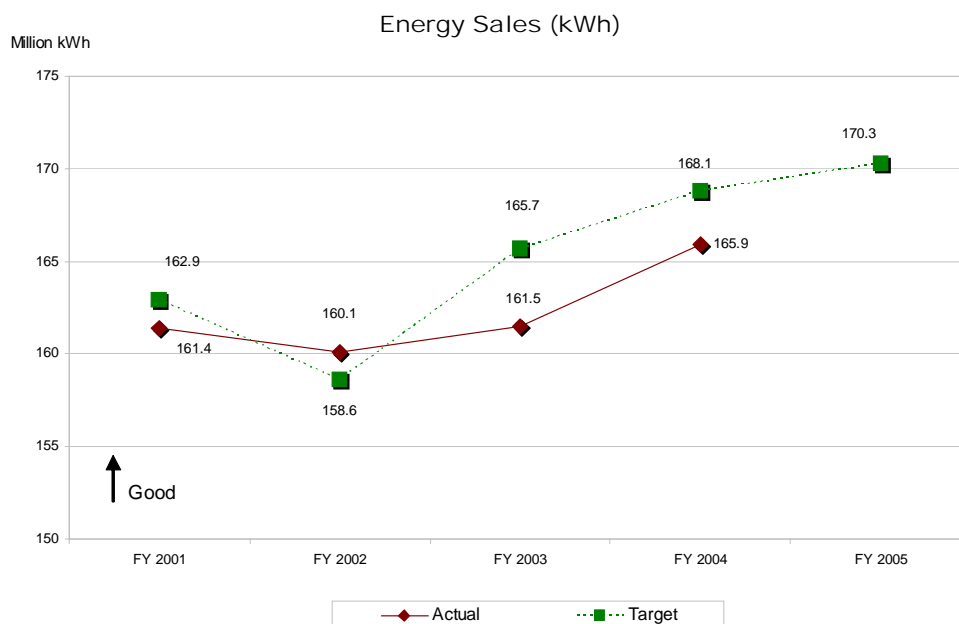
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.3: Provide flexible contracts and competitive pricing of products and services.

Description

TVA takes very seriously its obligation to ensure that reliable generating and transmission capacity is available to meet its customers' needs. The ability to accurately forecast customers' energy needs is an important component of the job of optimizing the use of TVA's assets. Additionally, a trend of *increasing* sales provides a broader base over which to spread TVA's fixed costs and thereby reduce the average cost of power delivered.



FY 2004 Target: 168.1 million kWh

FY 2004 Performance: 165.9 million kWh

Targeted performance on this goal was not achieved.

Performance Explanation: Energy sales were slightly lower than target; however, the variance between target and actual of 1 percent is within a ± 3 percent forecast margin of error.

Corrective Action: No corrective action is necessary as target and actual were within the forecasted margin of error.

Economic Value Indicator

Wholesale Customers with Continuing Contracts

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supply low-cost reliable power.

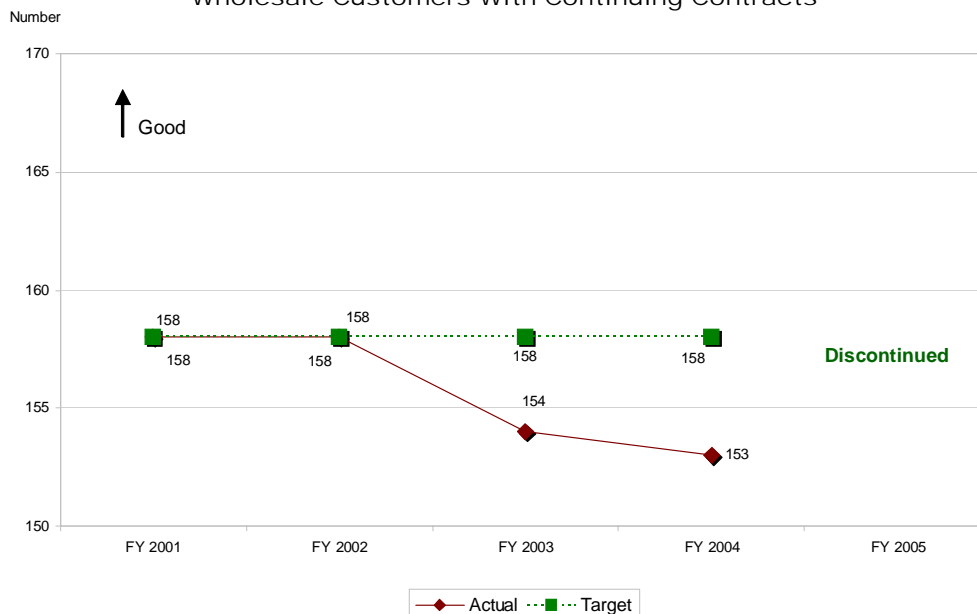
Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.3: Provide flexible contracts and competitive pricing of products and services.

Description

TVA's existing power contracts with its distributors have rolling 5, 10, or 15 year terms. In order to end its commitment to purchase TVA power, a distributor must give notice either 5, 10, or 15 years (as applicable) prior to the desired contract termination date. In anticipation of utility industry restructuring, many of TVA's customers are seeking a more flexible position from which to respond to competitive challenges. TVA is working to address issues of distributors that want more contract flexibility to meet their needs, while not shifting the cost obligations of these arrangements to other customers. These new contracting alternatives, in combination with TVA's continued emphasis on providing low-cost reliable power, will help TVA retain its present customer base.

Wholesale Customers With Continuing Contracts



FY 2004 Target: 158

FY 2004 Performance: 153

Targeted performance on this goal was not achieved.

Performance Explanation: As of the end of FY 2004, 5 of TVA's 158 distributors have given notice to terminate their contract. Warren RECC has contracted with a supplier other than TVA. Meriwether-Lewis EC, which had given notice in FY 2003, rescinded its notice in FY 2004 and will continue to use TVA as its power supplier. TVA is continuing to work with distributors to address their needs for contract flexibility and to assure them that TVA will meet their needs for reliable, low cost electricity in the future.

This indicator will be discontinued after FY 2004.

Environmental Value Indicator

Reportable Environmental Events

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supplying low-cost, reliable power.

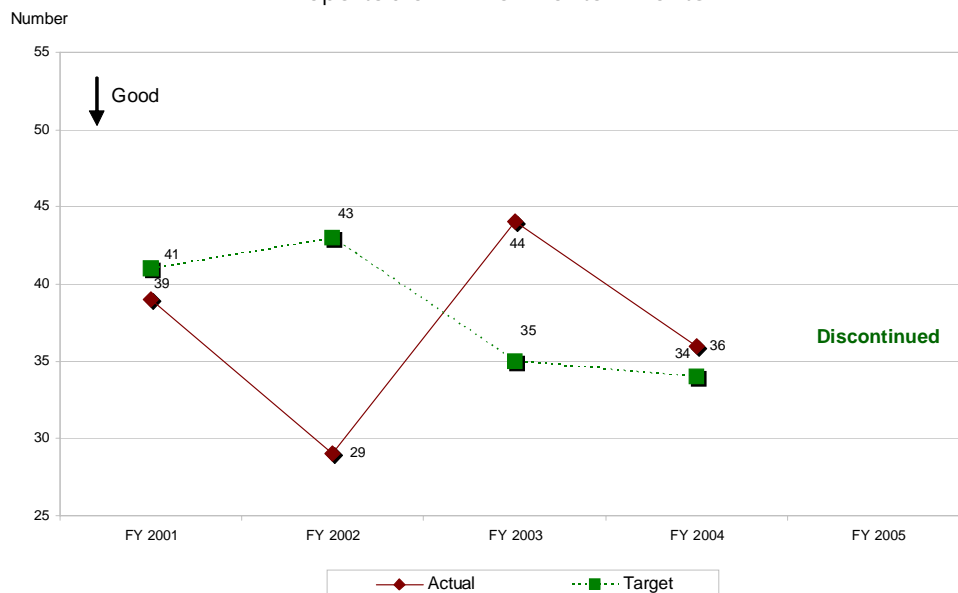
Strategic Objective 1.C: Meet our customers' needs with affordable, reliable electric power.

Critical Success Factor 1.C.4: Manage the environmental and safety impacts TVA's operations have on employees and the region.

Description

Energy customers and the general public expect TVA to be environmentally responsible in conducting operations in order to protect public health, natural resources, and environmental quality. TVA measures the performance of its operations in meeting environmental regulatory compliance requirements by monitoring occurrences of violations at TVA facilities that trigger notifications to, or enforcement actions by, a regulatory agency.

Reportable Environmental Events



FY 2004 Target: 34

FY 2004 Performance: 36

Targeted performance on this goal was not achieved.

Performance Explanation: Actual performance was worse than target. A fossil system-wide analysis has not revealed a common cause among events. Actions taken during the year to meet target included focusing on attention to detail and event failure analysis reinforcement to fix the root cause.

The REE indicator will not be used after FY 2004. It has been replaced by the Environmental Impact Index which is now part of the GPRA Plan.

Environmental Value Indicator

Environmental Impact Index

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supplying low-cost, reliable power.

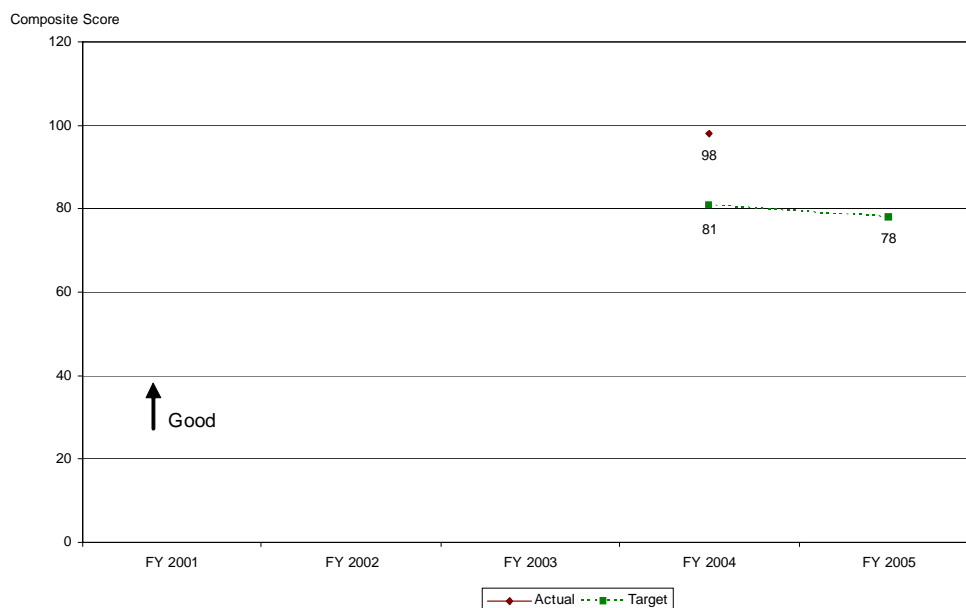
Strategic Objective 1.C: Meet customers' needs with affordable, reliable electric power.

Critical Success Factor 1.C.4: Manage the environmental and safety impacts TVA's operations have on employees and the region.

Description

Environmental impacts, both positive and negative, come from many facets of TVA's operations. The Environmental Impact Index is a composite of 26 elements in 5 categories in terms of beneficial and detrimental impacts (or precursors) on Air Quality, Water Quality, Land, Waste Production, and Energy Consumption compared to a baseline of FY 2002. The elements allow a greater "line of sight" for more employees and demonstrates the balance between the different types of impacts. Tradeoffs and mitigation are also visible in the index providing a comprehensive view of TVA's overall environmental performance.

Environmental Impact Index



FY 2004 Target: 81

FY 2004 Performance: 98

Targeted performance on this goal was achieved.

Performance Explanation: Performance was primarily driven by preventing harmful water discharges and spills.

This is a new indicator for FY 2004. It replaces the Reportable Environmental Events indicator and includes components of the Watershed Water Quality indicator.

Environmental Value Indicator

Sulfur Dioxide Emissions

Goal/Strategic Objective/Critical Success Factor

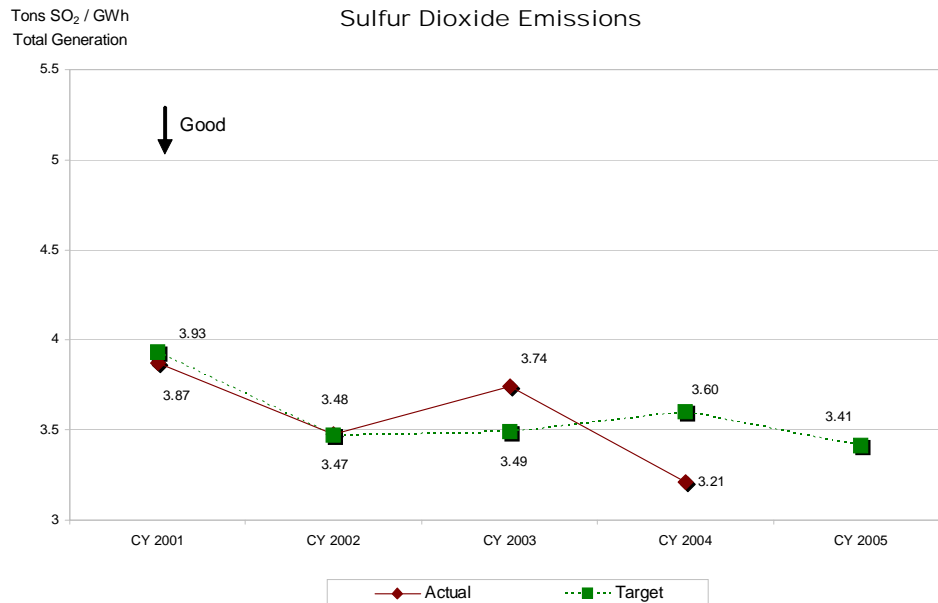
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs with affordable, reliable electric power.

Critical Success Factor 1.C.4: Manage the environmental and safety impacts TVA's operations have on employees and the region.

Description

Energy customers and the general public expect TVA to be environmentally responsible while conducting operations in order to protect public health and natural resource quality. TVA reduces its SO₂ emissions by using scrubbers and switching to lower sulfur fuels. TVA monitors its emissions to verify compliance with the Clean Air Act.



CY 2004 Target: 3.60 tons SO₂ / GWh

CY 2004 Performance: 3.21 tons SO₂ / GWh

Targeted performance on this goal was achieved.

Performance Explanation: Performance was better than target due primarily to the use of lower-sulfur coal.

Environmental Value Indicator

Nitrogen Oxide Emissions

Goal/Strategic Objective/Critical Success Factor

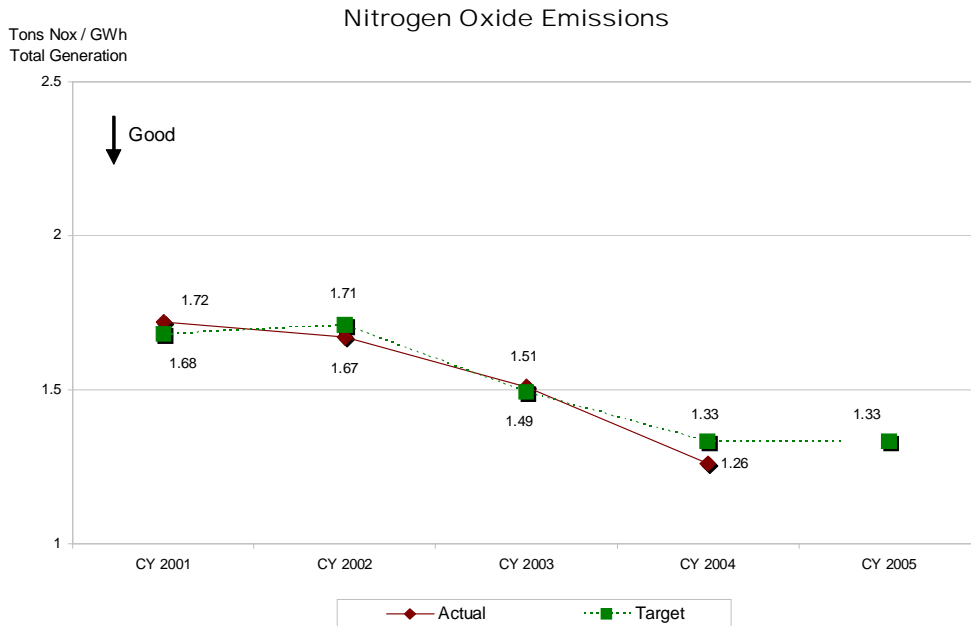
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs with affordable, reliable electric power.

Critical Success Factor 1.C.4: Manage the environmental and safety impacts TVA's operations have on employees and the region.

Description

Energy customers and the general public expect TVA to be environmentally responsible while conducting operations in order to protect public health and natural resource quality. TVA reduces its nitrogen oxide emissions using technology and operational improvements to maintain compliance with the Clean Air Act and to help achieve attainment of local ambient air quality standards in the valley. TVA monitors its emissions to verify compliance with the Clean Air Act.



CY 2004 Target: 1.33 tons NO_x / GWh
CY 2004 Performance: 1.26 tons NO_x / GWh

Targeted performance on this goal was achieved.

Performance Explanation: Actual performance was better than target due to lower than planned emission rates.

Economic Value Indicator

Institute of Nuclear Power Operators (INPO) Index

Goal/Strategic Objective/Critical Success Factor

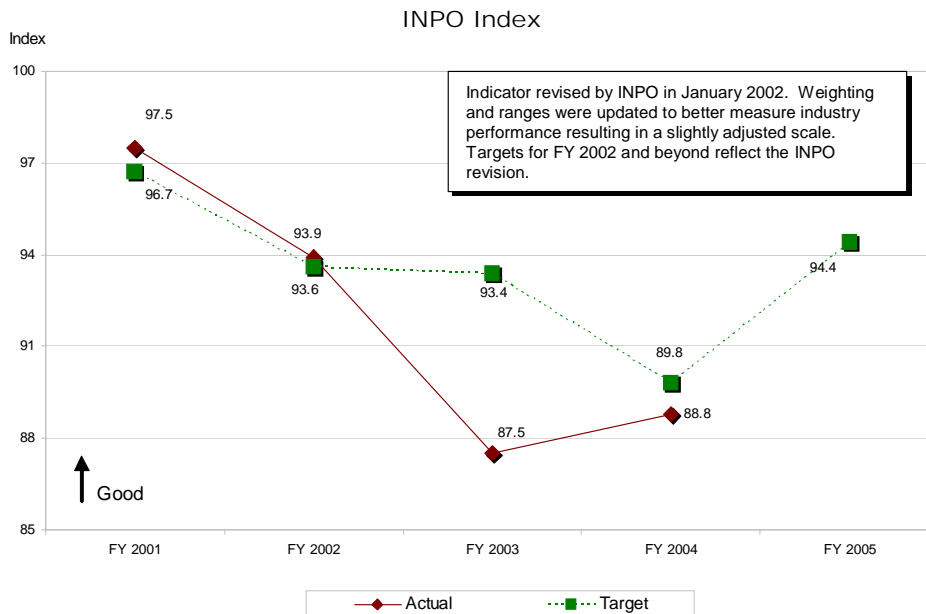
TVA Goal: Supplying low-cost, reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.4: Manage the environmental and safety impacts TVA's operations have on employees and the region.

Description

To ensure that all the nuclear power plants are operating safely and reliably, each unit is monitored by a calculated INPO Index. This is a weighting of a variety of performance parameters that measure performance and safety. It is measured as a percent between zero and 100.



FY 2004 Target: 89.8

FY 2004 Performance: 88.8

Targeted performance on this goal was not achieved.

Performance Explanation: TVA nuclear plant INPO index is based on being in the top quartile among multi-site nuclear plant operating companies. The 2004 actual was impacted by failed fuel in two reactors and the effects of replacing steam generators at the Sequoyah Nuclear Plant in 2003.

Corrective Action: Implement actions to achieve full points on each INPO Index component. The FY 2005 target is impacted by failed fuel in one reactor that is not scheduled to be replaced until FY 2006. Progress will be monitored and reported each month.

Environmental Value Indicator

Environmental Research Center RCRA Cleanup

Goal/Strategic Objective/Critical Success Factor

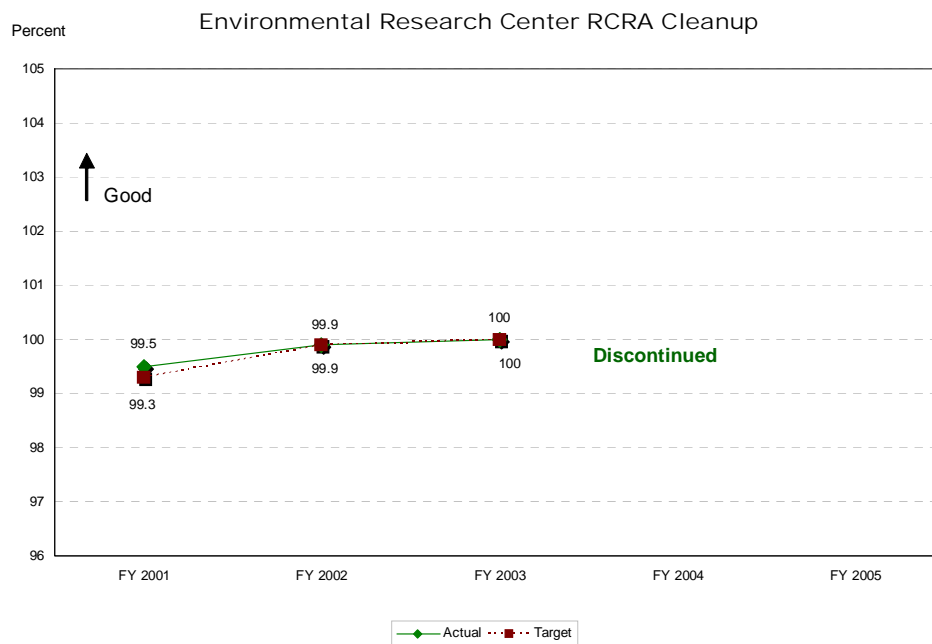
TVA Goal: Supporting a thriving river system

Strategic Objective 2.A: Enhance the quality of life in the Tennessee Valley through environmental stewardship and balanced, integrated management of the Tennessee River System.

Critical Success Factor 2.A.1: Manage the environmental and safety impacts TVA's operations have on employees.

Description

TVA is mandated by federal law to complete the cleanup of contaminated sites at the Environmental Research Center (ERC) reservation in Muscle Shoals, Alabama. The Resource Conservation and Recovery Act (RCRA) Corrective Action Program supports the safe cleanup of contamination caused by decades of federally funded munitions and fertilizer research and development activities at the ERC.



Cleanup activities were completed in FY 2003; therefore, this indicator was discontinued in FY 2004.

Economic Value Indicator

Customer Satisfaction

Goal/Strategic Objective/Critical Success Factor

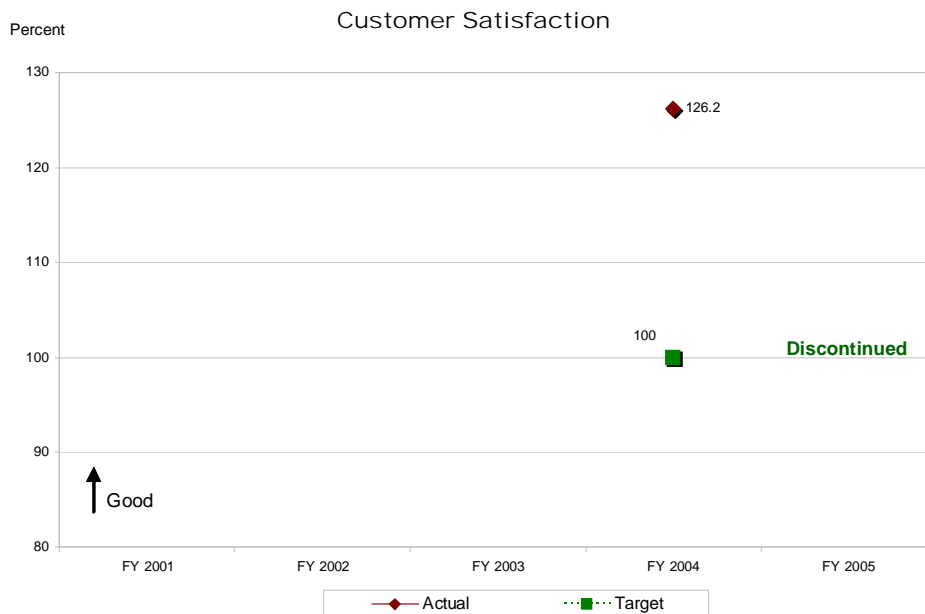
TVA Goal: Supplying low-cost reliable power.

Strategic Objective 1.C: Meet our customers' needs by providing affordable, reliable electric power.

Critical Success Factor 1.C.5: Achieve excellence in the customer value and relationship process.

Description

This indicator is a monthly measure of key TVA performance elements that impact TVA's long-term relationship with its customers. The purpose is to allow TVA employees to compare their actual performance against target measures to evaluate how the work they perform contributes to TVA's overall success in achieving customer satisfaction.



FY 2004 Target: 100
FY 2004 Performance: 126.2

Targeted performance on this goal was achieved.

Performance Explanation: Outstanding performance was due to the Billing Reliability component performance 67.4 percent above target, Power Reliability component performance 2.4 percent above target, Product Timeliness Component performance 25.4 percent above target, and Competitive Price component performance 9.6 percent above target.

Customer Satisfaction index will be discontinued after FY04. It will be replaced in FY05 by the Customer Impact indicator.

Environmental Value Indicator

Flood Storage Availability

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supporting a thriving river system.

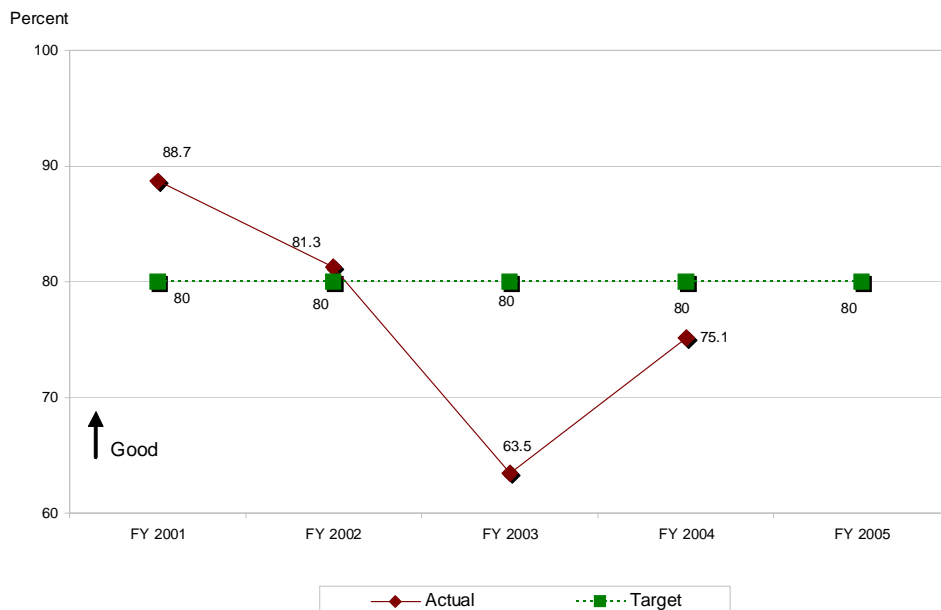
Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.1: Minimize flood damage by operating the river system according to best management practices with flood control as a priority.

Description

Flood storage availability indicates TVA's readiness to control damaging floods. The reservoir system is operated based on mandates of the TVA Act and broad policy last reviewed as part of the Reservoir Operations Study in 2004. Based on these guidelines, monthly flood storage availability targets were established. Operation of the system in accordance with these targets ensures that the priority placed on flood damage avoidance is maintained.

Flood Storage Availability



FY 2004 Target: 80.0%
FY 2004 Performance: 75.1%

Targeted performance on this goal was not achieved.

Performance Explanation: Rainfall and runoff above Chattanooga, Tennessee were above normal for the year, making it necessary to more frequently use flood storage space on the tributary and mainstream reservoirs. Heavy rainfall and resulting flows caused tributary pool levels to be above flood guide levels for extended periods in June and September.

Corrective Action: Performance targets are established based on normal hydrology. It is expected that rainfall and runoff will return to normal ranges in FY05.

Environmental Value Indicator

Days Navigable Waterway is Available from Knoxville to Paducah

Goal/Strategic Objective/Critical Success Factor

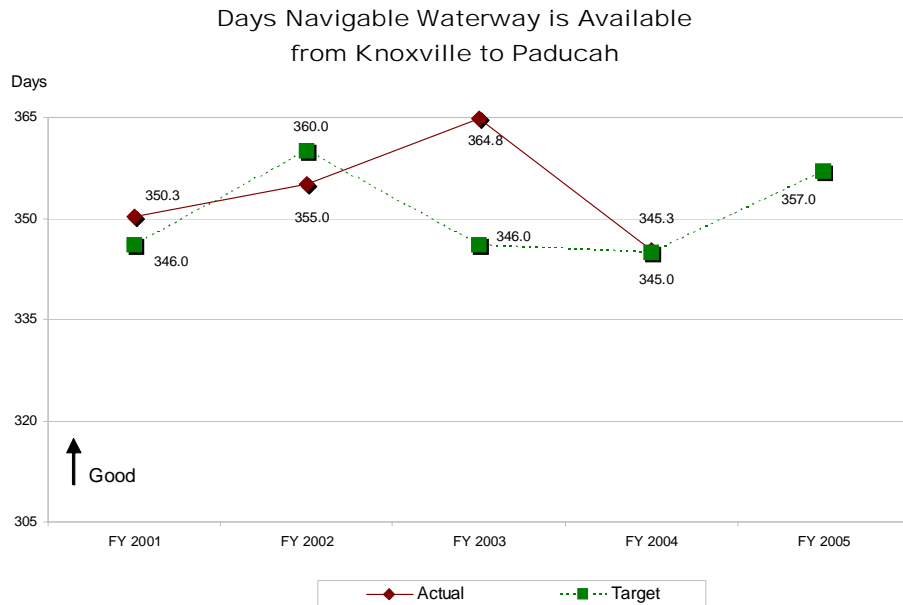
TVA Goal: Supporting a thriving river system.

Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.2: Maintain a navigable commercial waterway from Knoxville to Paducah.

Description

Commercial shippers rely on TVA to maintain locks and other navigation system components in operable condition and to operate the river system to minimize disruptions to navigation. This metric monitors TVA's effectiveness in keeping the navigation channel and locks available for use.



FY 2004 Target: 345.0 days

FY 2004 Performance: 345.3 days

Targeted performance on this goal was achieved.

Performance Explanation: This indicator was achieved due to an effective preventive maintenance program.

Environmental Value Indicator

Shipper Savings

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supporting a thriving river system.

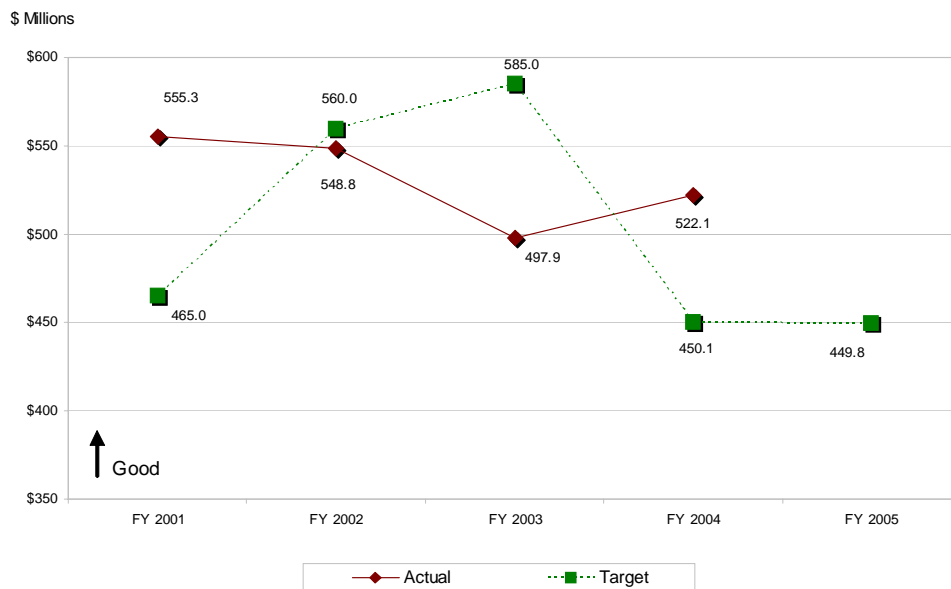
Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.2: Maintain a navigable commercial waterway from Knoxville to Paducah.

Description

Commercial shippers rely on TVA to maintain locks and other navigation system components in operable condition and to operate the river system to minimize disruptions to navigation. TVA has a statutory responsibility to maintain a navigable channel along the Tennessee River from Knoxville to Paducah. Shipper savings include reductions in costs accruing to those shipping by barge. If the navigation system is not operable for extended periods of time, shipper savings are reduced.

Shipper Savings



FY 2004 Target: \$450.1 million

FY 2004 Performance: \$522.1 million

Targeted performance on this goal was achieved.

Performance Explanation: This indicator value is up from target because Barkley Lock is closed on the Cumberland River and all of the waterway traffic that would normally use Barkley is now diverted through the Kentucky Lock on the Tennessee River to enter the Cumberland River. When Barkley reopens, the traffic count should return to normal levels on the Tennessee River.

Environmental Value Indicator

Dissolved Oxygen Deficit Due to Forced Outages

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supporting a thriving river system.

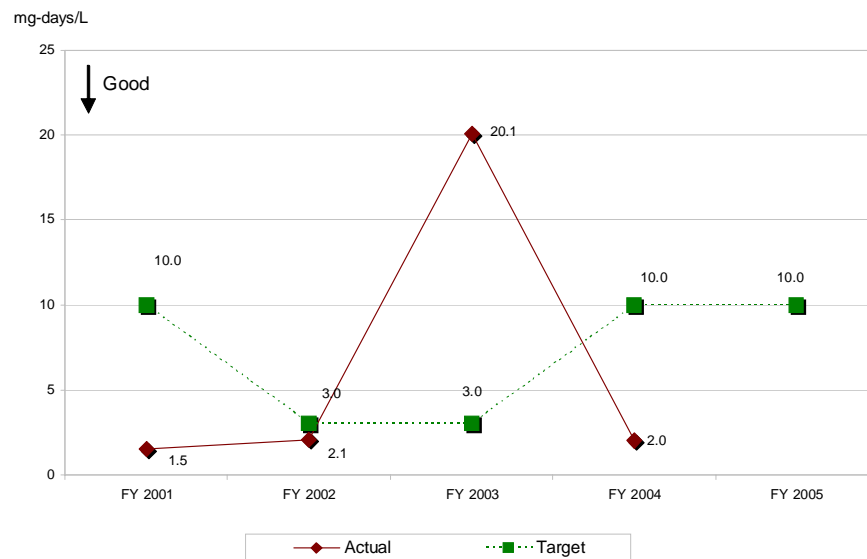
Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.3: Provide acceptable water quality.

Description

Dissolved oxygen is an important component of water quality and vital to aquatic health. Dams have a detrimental impact on dissolved oxygen. The Reservoir Releases Improvement program initiated in the 1990's involved the installation of 15 aeration systems to reduce the negative impacts of TVA dams on tailwaters. These aeration systems are operated to help meet dissolved oxygen (DO) targets in 16 tailwaters. The DO target concentrations are 6 mg/L for cold water tailwaters and 4 mg/L for cool and warm tailwaters. The period of aeration equipment operation is site specific, but can range from mid-April through December.

Dissolved Oxygen Deficit Due to Forced Outages



FY 2004 Target: 10.0 mg-days/L
FY 2004 Performance: 2.0 mg-days/L

Targeted performance on this goal was achieved.

Performance Explanation: This indicator was achieved because aeration systems operated as expected with minimal down time due to forced outages.

Environmental Value Indicator

Minimum Flow Achievement

Goal/Strategic Objective/Critical Success Factor

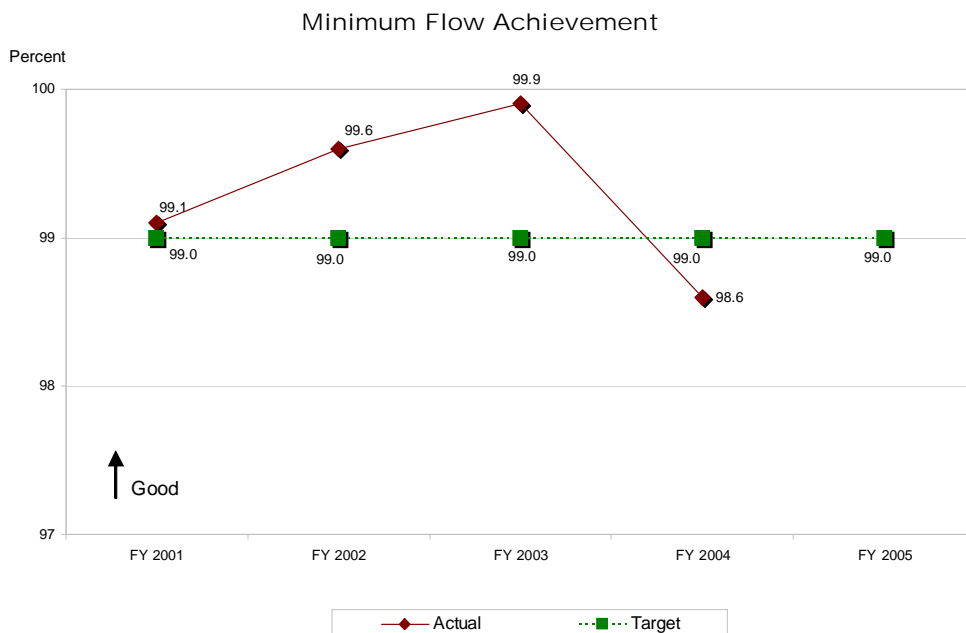
TVA Goal: Supporting a thriving river system.

Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.3: Provide acceptable water quality.

Description

Dissolved oxygen levels, water temperature, and water flow rates are drastically altered by the vacillating effects of water storage and hydro generation processes. Fisheries, aquatic habitat, and potable water quality bear the most stress. TVA maintains minimum flows at 29 locations to improve the quality of water. Sustaining these minimum flows helps TVA minimize adverse environmental impacts to aquatic habitats and potable water quality associated with dam operations.



FY 2004 Target: 99.0%

FY 2004 Performance: 98.6%

Targeted performance on this goal was not achieved.

Performance Explanation: Unit outages at Blue Ridge and Chatuge resulted in not meeting the target for minimum flow in FY04. Although the Emergency Minimum Flow System (EMFS) was being used to provide flow downstream, the flow operated by the pumps was not enough to meet the minimum flow requirement.

Corrective Action: No extended unit outages at projects with no auxiliary outlet works are planned for FY05. Therefore, TVA expects to meet the targeted minimum flow requirements.

Environmental Value Indicator

Watershed Water Quality

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supporting a thriving river system

Strategic Objective 2.A: Enhance the quality of life in the Tennessee Valley through environmental stewardship and balanced, integrated management of the Tennessee River System.

Critical Success Factor 2.A.3: Provide acceptable water quality.

Description

There are 611 watershed units that make up the Tennessee River system. TVA participates in cooperative efforts involving local and regional public and private partners to improve water quality and natural resource conditions. Annual assessments identify watershed unit status by evaluating stream and reservoir ecological health and shoreline conditions.



This indicator was discontinued at the end of FY 2003. Components of this measure are now captured in the Environmental Impact Index indicator (p. 18).

Environmental Value Indicator

Discretionary Zone Attainment

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supporting a thriving river system.

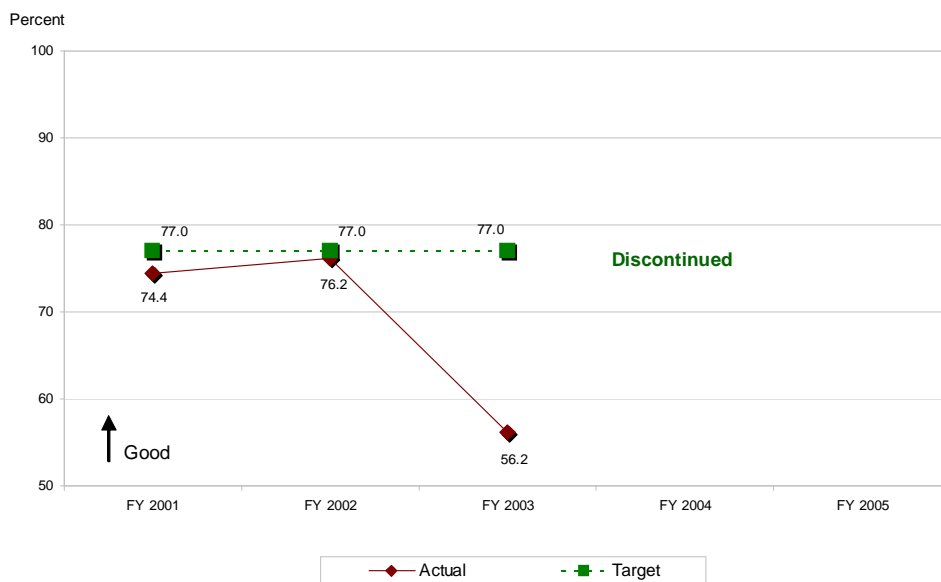
Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.4: Optimize the value of hydro generation subject to flood control, navigation, water quality, and summer reservoir-level constraints.

Description

Valley residents expect TVA to operate the Tennessee River system of reservoirs for multiple benefits, including flood control, navigation, water quality, recreation, water supply, and hydroelectric generation. To satisfy these requirements, TVA monitors a performance goal that tracks the ability to maximize the flexibility and value of hydropower generation after meeting higher priority objectives. This “discretionary zone” is a region of operation bounded by the flood guide on the top and the minimum operating guide (MOG) on the bottom. Under TVA’s river system operation methodology, power value is optimized by operating tributary storage reservoir levels within the discretionary operating zone whenever possible.

Discretionary Zone Attainment



This target was discontinued in June 2004 due to the implementation of the Reservoir Operations Study.

Environmental Value Indicator

Summer Reservoir Level Attainment

Goal/Strategic Objective/Critical Success Factor

TVA Goal: Supporting a thriving river system.

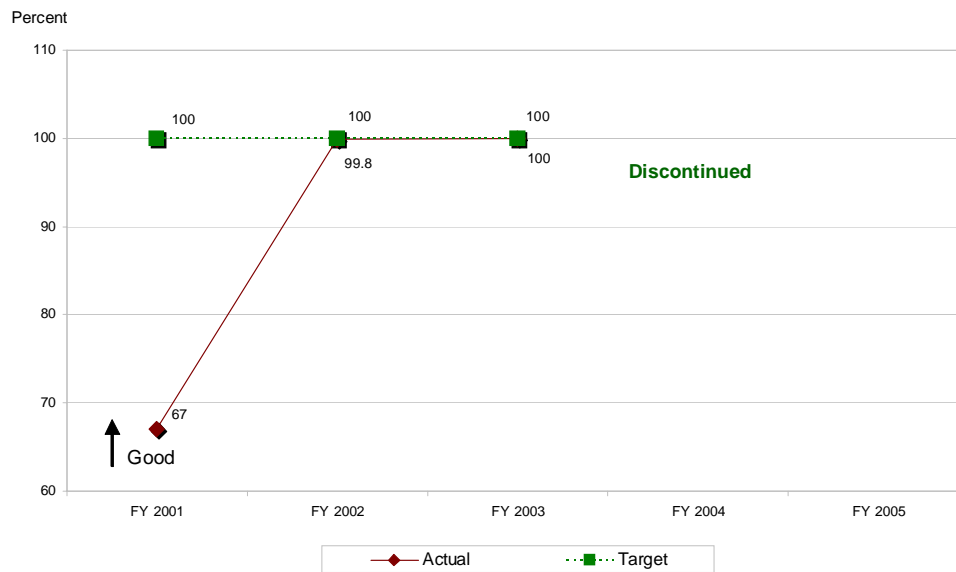
Strategic Objective 2.A: Improve life in the Tennessee Valley through integrated management of the river system and environmental stewardship.

Critical Success Factor 2.A.5: Support recreational uses of the river system and associated federal lands.

Description

Recreational reservoir users want TVA to maintain high water levels during the summer. These customers provide regional economic benefits through increased expenditures for recreational activities. In its 1991 Lake Improvement Plan, TVA made commitments to the user public to maintain tributary reservoirs at specified levels during June and July to support recreational uses that have significant economic impacts for the Tennessee Valley. TVA measures its commitment to these customers by monitoring achievement of targeted minimum water levels during June and July in ten tributary storage reservoirs.

Summer Reservoir Attainment Level



FY 2004 Target:

FY 2004 Performance:

This measure was discontinued in June 2004 due to the implementation of the Reservoir Operations Study.

Environmental Value Indicator

Completed Comprehensive Reservoir Plans

Goal/Strategic Objective/Critical Success Factor

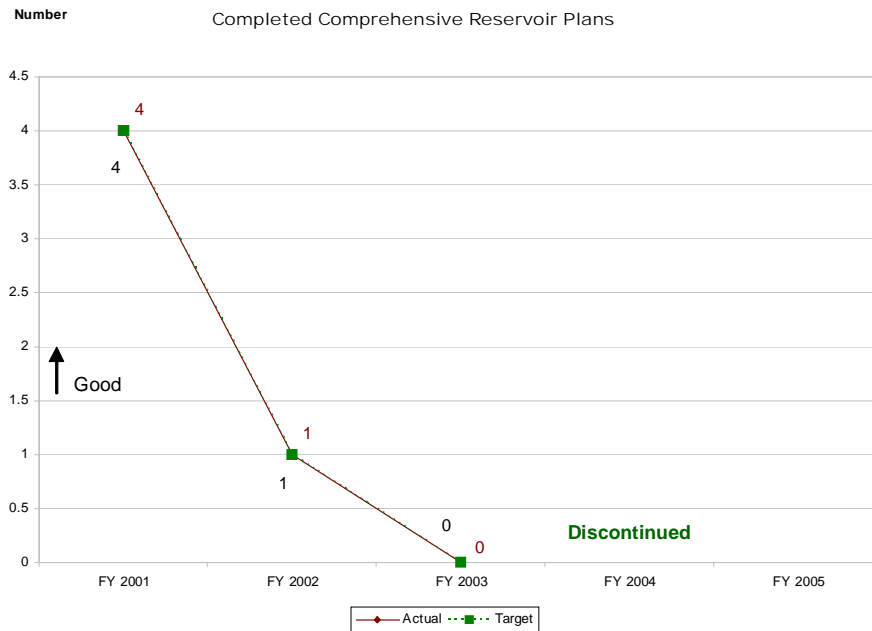
TVA Goal: Supporting a thriving river system

Strategic Objective 2.A: Enhance the quality of life in the Tennessee Valley through environmental stewardship and balanced, integrated management of the Tennessee River System.

Critical Success Factor 2.A.5: Support recreational uses of the river system and associated federal lands.

Description

TVA manages 293,000 acres of public land around reservoir projects spanning seven states. The reservoir system is a nationally important recreation and tourism resource that attracts millions of visits per year from residents and tourists who enjoy water-based sports and contribute to a \$1 billion industry. Waterfront properties are highly valued and generate demands for growth that often conflict with the protection of public resources and wildlife habitat. TVA manages these potential conflicts with the use of land management plans that establish allowable uses for TVA property. TVA will develop comprehensive plans for 27 reservoirs.



After management review, it was determined that this indicator does not impact TVA's core business. This indicator was discontinued in FY 2004.

Economic Growth

Economic Development Index

Goal/Strategic Objective/Critical Success Factor

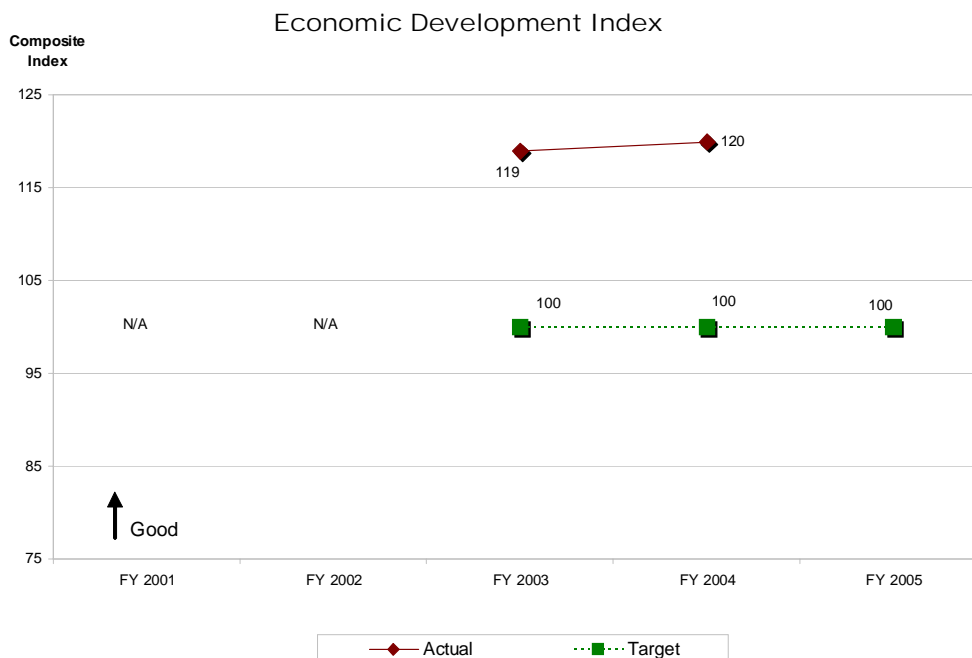
TVA Goal: Stimulating economic growth.

Strategic Objective 3.A: Demonstrate leadership in sustainable economic development in the valley.

Critical Success Factor 3.A.1: Promote development through targeted, growth initiatives.

Description

Since 1933, TVA has played a significant role in economic and community development in the Tennessee Valley. Energy customers are interested in the economic vitality of their communities resulting from projects which focus on business growth and industrial development. In this performance goal, TVA is measuring the overall impact of employment opportunities, financial investment, and quality of life improvements for Valley residents.



FY 2004 Target: 100
FY 2004 Performance: 120

Targeted performance on this goal was achieved.

Performance Explanation: The target index consists of three components: jobs added and/or retained, capital investment leveraged, and jobs impact. While jobs impact (jobs added/retained in high unemployment counties or jobs added/retained with higher than average wages) was at 77 percent versus the target of 80 percent, the jobs added and /or retained achieved 105 percent of the target goal and capital investment leveraged achieved 173 percent of the target goal. Overall, the Economic Development Index performed higher than the target.

Societal Value Indicator

Capital Investment Leveraged

Goal/Strategic Objective/Critical Success Factor

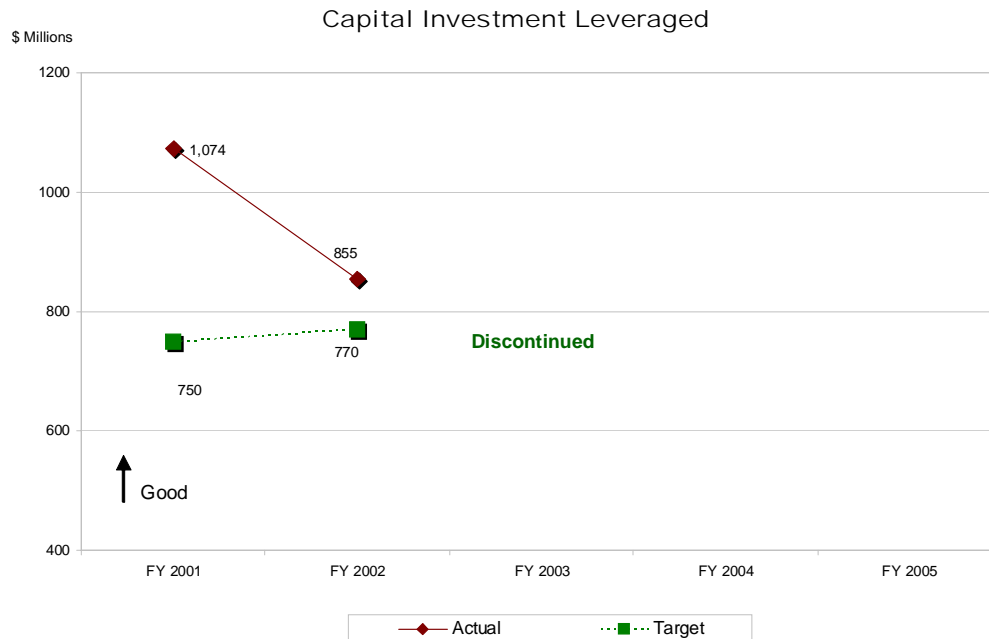
TVA Goal: Stimulate economic growth.

Strategic Objective 3.A: Demonstrate leadership in sustainable economic development in the Valley.

Critical Success Factor 3.A.1: Promote development through targeted growth initiatives.

Description

TVA plays a significant role in economic and community development of the Tennessee Valley. Energy customers are interested in the economic development and vitality of their communities resulting from TVA's Economic Development projects, which focus on expanding and attracting industrial and commercial development with low-cost, reliable electric power. In this performance goal, TVA is measuring the capital investment by key public and private partners of projects in which TVA participates. The capital investment supports the generation of commerce in the distributor customer's market areas.



This indicator was discontinued in FY 2003 and was incorporated into the Economic Development indicator.

Societal Value Indicator

Jobs Added or Retained

Goal/Strategic Objective/Critical Success Factor

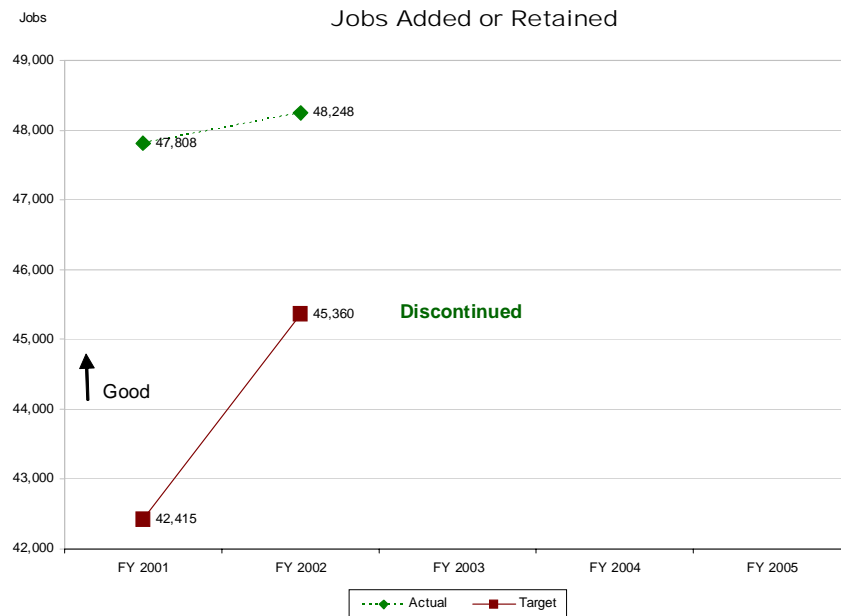
TVA Goal: Stimulate economic growth.

Strategic Objective 3.A: Demonstrate leadership in sustainable economic development in the Valley.

Critical Success Factor 3.A.1: Promote development through targeted, growth initiatives.

Description

Business investment commitments precede growth in employment opportunities. TVA energy customers are interested in TVA's contribution to the economic development and vitality of their communities as it relates to hiring and jobs created. This performance goal measures the number of jobs added or retained by firms that receive technical or financial assistance from TVA, as well as jobs added or retained with Regional Industrial Development Association (RIDA) assistance, in recognition of TVA's reimbursement to distributors of 50% of their support to RIDAs. (Note: the title of this indicator was changed from "Jobs Created" to more accurately represent the focus of TVA's Economic Development efforts in this area.)



This indicator was discontinued in FY 2003 and was incorporated into the Economic Development indicator.

Descriptions of Means to Verify and Validate Values Of Performance Goals

Delivered Cost of Power

Measurement and Validation: The electric power industry standard for measuring total cost is expressed in cents per kilowatt hours produced. TVA sums its total costs from its income statement and divides them by the total kWh sold. Delivered Cost of Power was replaced by the O&M Costs indicator in FY 2004.

O&M Costs

Measurement and Validation: This indicator is measured as total expenses less fuel, purchased power, interest expense and pension/postretirement financing costs.

Debt/kW of Capacity

Measurement and Validation: TVA will report both its outstanding debt and the amount of generating capacity (owned and leased) in its annual report, which is audited by an independent accounting firm. The Debt Burden indicator was replaced by the Financial Strength Indicator in FY 2004.

Financial Strength

Measurement and Validation: This indicator is measured as the change in total financing obligations including statutory debt, CT lease obligations, prepaid energy obligations, and QTE's (Qualified Technological Equipment).

Bond Rating

Measurement and Validation: TVA will report its bond rating as reported by the major bond rating agencies as of the end of September each year.

System Reliability (Load Not Served)

Measurement and Validation: This indicator shows the amount of time an average customer could expect to be interrupted if its load was constant throughout the year. The calculation uses current billing data to estimate the amount of load which was interrupted, the actual clock time of the interruption as related to TVA problems, the load actually served during the time period being examined, knowledge of load cycles for the customer, and the number of minutes in the interruption period.

The formula is:

$$\frac{((LNS \text{ in MWh}) / (LS + LNS \text{ in MWh})) * \text{the number of minutes in the period. For example, a 10 MW load is interrupted for 1 hour, resulting in 10 MWh of LNS. If the year long load served is 600,000 MWh, the LNS in minutes is: } (10 / (10 + 600,000)) * 525,600 (\text{minutes in a year}) = 8.76 \text{ minutes of LNS. The result is a normalized LNS in minutes that is calculated regardless of the load size.}}$$

Fossil Plant Equivalent Availability Factor

Measurement and Validation: TVA records the energy that can be provided by each fossil unit and divides it by the product of the unit's capacity and number of hours in the measurement period (nominally 8,760). The availability of all units is combined to determine the annual fossil system equivalent availability factor.

Hydro Equivalent Availability Factor

Measurement and Validation: TVA calculates the energy that can be produced by the hydro system based on individual unit capacity and availability and divides that sum by the product of the total system capacity at 100 percent availability and the number of hours in the measurement period (nominally 8,760). This provides a weighted average (equivalent availability factor) for all units in the hydro system.

Nuclear Plant Net Capacity Factor

Measurement and Validation: TVA records the energy produced by each nuclear plant and divides it by the product of the unit's capacity and number of hours in the measurement period (nominally 8,760). The availability of all units is combined to determine the annual net capacity factor.

Energy Sales (kWh)

Measurement and Validation: TVA's annual sales figures are published in its annual report, which is audited by an independent accounting firm.

Wholesale Customers with Continuing Contracts

Measurement and Validation: On the last day of the fiscal year, TVA will identify the number of its distributors that have continuing contracts (that have not provided notice of intent to terminate their contract).

Reportable Environmental Events

Measurement and Validation: Each organization is responsible for reporting occurrences of violations that trigger notifications to, or enforcement actions by, a regulatory agency. Data are reported monthly and accumulated throughout the year to determine annual performance.

Environmental Impact Index

Measurement and Validation: The Environmental Impact Index is a composite of environmental performance factors in terms of beneficial and detrimental impacts (or precursors) on Air Quality, Water Quality, Land, Waste Production, and Energy Consumption compared to a baseline of FY 02. The 29 elements forming the index are dispersed throughout the agency, and data is provided by the owners on a quarterly basis. Measurements are made using a variety of methods: monitors, meters, scales, calculation, direct observation, utility bills, number of contracts, project planning, billing, and more.

Sulfur Dioxide Emissions

Measurement and Validation: SO₂ is measured using certified stack Continuous Emissions Monitors and reported on an annual calendar year basis to the public through an EPA emissions database. Total tons of SO₂ emitted are divided by total TVA system (calendar year) generation to determine the tons emitted per GWH of generation.

Nitrogen Oxide Emissions

Measurement and Validation: NO_x is measured via certified stack Continuous Emissions Monitors and reported on an annual calendar year basis to the public through the EPA database. Total tons of NO_x emitted are divided by total TVA system (calendar year) generation to determine the tons emitted per GWH of generation.

INPO Index

Measurement and Validation: The individual parameters measure performance in Unit Capability and Losses, Safety System Availability and Reliability, Fuel Reliability, Water Chemistry, Radiation Exposure, and Industrial Safety. These individual parameters are weighted and combined into a single measurement Index. This index provides an indication of overall plant performance, as well as a benchmark measurement to other plants' performance. The INPO index is tracked monthly and the targets are determined based on industry top quartile performance. Each year's September calculation will be reported as the annual performance on this measure.

Environmental Research Center (ERC) Resource Conservation and Recovery Act (RCRA) Cleanup (Percent Complete)

Measurement and Validation: TVA has developed a plan for achieving cleanup and remediation of the ERC site based on regulator requirements. This indicator tracks completion of these planned cleanup activities. Performance is reported based on the following formula:

ERC Site Cleanup (percent Complete) = Percent Complete ERC RCRA Corrective Action project (times 0.5) plus Percent of Designated ERC Structures Demolished (times 0.45) plus Percent of Surplus Chemical Disposal (times 0.5).

Customer Satisfaction

Measurement and Validation: This indicator is a monthly measure of key TVA performance elements that impact TVA's long-term relationship with its customers. It measures actual performance against target in four key areas: power reliability, billing reliability, product timeliness, and competitive pricing. Customer satisfaction is equal to 100 percent * [25% * (target/actual power reliability) + 25% * (target/actual billing reliability) + 25% * (target/actual product timeliness) + 25% * (target/actual competitive price)].

Flood Storage Availability

Measurement and Validation: This performance measure is defined as the percent of project days when actual storage availability is greater than allocated storage. Eleven tributary storage projects are included in this measure; in addition, a measure of the composite eastern system is also included. TVA measures reservoir levels at midnight each day for each of the projects. In a 30-day month, each storage project has a maximum of 30 project days when actual reservoir storage can be equal to or greater than the allocated storage. TVA sums the days when storage meets or exceeds the guideline. For example, if all 11 projects and the eastern composite had reservoir storage levels above those required for 20 of the 30 days, monthly performance would be 240/360=66.7%. Data are reported monthly and are accumulated over the entire year to determine the annual performance on this measure.

Days Navigable Waterway is Available from Knoxville to Paducah

Measurement and Validation: This indicator measures instances when any segment of the Tennessee River is closed to navigation traffic. Lock operation and maintenance reports are the source of this information.

Shipper Savings

Measurement and Validation: Shipper savings is calculated as the product of the tons being shipped on the Tennessee River and the savings per ton attributed to barge transportation. Barge transportation is the cheapest mode for movement of certain commodities. Thus, barge transportation is compared in the indicator to the next least expensive mode, which is generally rail carriage. In the indicator, average savings per ton is estimated by TVA to be \$9.24 (\$2000 data – 1st quarter 2000 rates). This number was a product of a TVA study undertaken for the U.S. Army Corps of Engineers (USACE), Huntington District, in 1995 as a component of USACE's update of the Kentucky Lock study. These modal transportation rates are a combination of survey data and estimates from TVA's Barge Costing Model and the Rebee Rail Costing model. The rates are estimated by component (line haul cost, transfer cost, loading and unloading cost) and do not include any "water compelled" rate effect, that is, what the rail rate would be expected to be without barge competition. Assumptions in the calculation reflect an estimated margin for carrier profit. The data used to estimate total current tonnage transported on the Tennessee River are a combination of river and lock data. The river data is published annually by the USACE Waterborne Commerce Statistical Center (WCSC) in New Orleans, Louisiana, with about a two-year lag. The lock data are published by the USACE Water Resources Support Center in Fort Belvoir, Virginia, with a two-month lag. In the shipper savings indicator TVA navigation economists forecast Tennessee River traffic by year.

Dissolved Oxygen Deficit Due to Forced Outages

Measurement and Validation: Of the 16 tailwaters monitored, nine sites have continuous sampling systems. Additionally, all 16 tailwaters are sampled on a weekly or biweekly schedule at designated compliance points. The measure is calculated by subtracting the actual DO concentration during aeration system forced outages from the targeted DO concentration and multiplying this value by the number of days the actual concentration is below the target because of equipment forced outages.

Minimum Flow Achievement

Measurement and Validation: The performance measure is defined as the percentage of location days actual flow met the minimum flow target. Locations included in this measure include both TVA dams and other river sites where minimum flow criteria have been established. Criteria may be hourly, daily, or bi-weekly average flow. Flow measurement devices are provided at dams and other locations. Operational records are checked daily for compliance. TVA sums the days when a violation occurred at each of the 29 locations and divides by 29 locations times the days/month. Data are reported monthly and accumulated over the entire year to determine annual performance of this measure.

Watershed Water Quality

Measurement and Validation: TVA periodically assesses water resource and shoreline conditions of watershed units. These assessments measure how well waters in these units support beneficial uses (fishing, swimming, support of fish and wildlife, water supply) and sensitive natural resource areas as desired by the various stakeholders. Quality of watershed condition is generally measured using ecological health indicators of streams and reservoirs, state water quality assessments, and indices of shoreline/streambank riparian conditions. Watershed unit ratings (Good, Fair, or Poor) are updated annually based on current information.

Discretionary Zone Attainment

Measurement and Validation: The performance measure is defined as the percent of project days actual reservoir storage is within the discretionary operating zone. Projects included in this measure are the ten tributary storage projects with minimum operating guide (MOG) curves. TVA measures reservoir levels at midnight each day for each of the ten storage projects. In a 30-day month, each storage project has a maximum of 30 project days when actual reservoir storage can be within the discretionary operating zone. TVA sums the days when storage was within the zone and divides by the total number of project days. For example, if all ten projects had reservoir levels within the discretionary operating zone for 25 of the 30 days, monthly performance would be $250/300=83.3\%$. Data are reported monthly and are accumulated over the entire year to determine the annual performance on this measure.

Summer Reservoir Level Attainment

Measurement and Validation: Reservoir levels for ten tributary storage projects are measured at midnight from June 1 to July 31 and checked against August 1 levels specified in the Lake Improvement Plan. There is the potential of maintaining summer reservoir levels for 61 days at each of the ten reservoirs (610 days total) per the Lake Improvement Plan. If one reservoir's level missed its target for ten of the 61 days, the indicator calculation would be $600/610=98.4\%$.

Completed Comprehensive Reservoir Land Management Plans

Measurement and Validation: TVA will report each reservoir land plan completed when it is published and made available to the public.

Economic Development Index

Measurement and Validation: Data are reported based on commitments with strategic partners to support job growth, leverage project investments, and enhance job quality in the region.

Capital Investment Leveraged

Measurement and Validation: Data are reported based on agreements reached and commitments made to establish or expand industrial capacity in the Tennessee Valley.

Jobs Added and Retained

Measurement and Validation: Data are reported based on announcements of new jobs created/retained by firms that receive technical or financial assistance from TVA, as well as jobs created/retained with Regional Industrial Development Association (RIDA) assistance (Note: Previously this indicator included only one half of the jobs created/retained through RIDAs. The indicator was modified to reflect the increased focus TVA is placing on its business relationships with the RIDAs. Actuals and targets have been restated to include 100% of RIDA jobs created/retained).

Program Assessment Rating Tool (PART) — Status Update

Power Program

TVA's power program is entirely self-financed and does not receive any federal appropriations. The power program budget is, however, included in the consolidated Budget of the United States Government. TVA is the fifth largest electric utility in the country, generating power utilizing a diverse mix of coal-fired, hydro-electric, nuclear, combustion-turbine, and renewable energy sources to meet the electricity needs of 8.5 million people.

In the 2003 PART assessment, TVA received solid ratings for its operational performance; however, the power program scored less well in terms of strategic planning and debt reduction. The specific findings of OMB from the 2003 PART Assessment were as follows:

1. *“TVA does an excellent job generating power at its existing power plants. A decade ago TVA’s nuclear power plants posed serious technical and safety problems. TVA has overcome these problems and today TVA’s nuclear power plants set industry standards.”*
2. *“TVA lacks a strategic plan. This makes it hard to assess TVA’s plans to spend billions of dollars on additional power plants and transmission lines.”*
3. *“TVA lacks a debt reduction plan, and has a high level of debt compared to many of its potential competitors in the electricity industry. ‘Debt’ includes both traditional notes and bonds and equivalent long-term liabilities such as lease/leaseback arrangements. The high level of debt increases TVA’s financial risk and compromises its competitive position in a restructured electricity market.”*

TVA's response and actions related to these findings are as follows:

1. TVA continues to strive for, and achieve, operational excellence in the three areas of (a) supplying reliable, affordable power to customers, (b) supporting a thriving river system, and (c) stimulating economic growth. Specific strategies, action plans, goals, and performance measures related to these three areas of operational performance are contained in TVA's FY 2006 Performance Budget.
2. In July 2002, TVA began an extensive strategic planning effort designed to identify how existing and proposed changes in the electricity sector business environment could impact its ability to carry out its core mission of power supply, integrated resource management, and economic development. The results of this effort are reflected in TVA's Strategic Plan that was included in its FY 2005 Performance Budget. The TVA strategic planning process will continue as an iterative and adaptive process as market conditions and customer needs change.
3. The purpose of TVA's strategic planning effort is to address, in the context of larger changes in the market, how TVA can continue to balance (1) TVA's current mission of providing low-cost power, promoting economic prosperity in the Valley, and serving as steward of the Tennessee River system, and (2) its financial goal of continuing the trend of debt reduction. It is extremely difficult to predict the ultimate market structure that will evolve, the timing of its evolution, and its likely impact on TVA. Thus, while reducing TVA's total financing obligations is a primary strategic objective for TVA, these uncertainties mean that annual targets for debt reduction will need to be updated each year, as business conditions and legal mandates change.

Non-Power Program - Water and Land Stewardship

TVA serves the seven-state Tennessee Valley region through its management of the nation's largest public power system and the nation's fifth-largest river system, the Tennessee River. TVA dams and locks are operated as a fully integrated system to deliver multipurpose outputs. Navigation, flood control, and electric power generation are achieved while sustaining a balance between economic progress and protection of the environment. Public lands are managed to provide flood control, wildlife habitat, and recreation benefits.

In FY 2003, OMB gave TVA's stewardship program the highest rating awarded to any federal program and stated that TVA does an effective job in managing these activities at a reasonable cost. The Administration encouraged TVA to "continue to make a good program better and to continue to be responsible to the constituencies TVA serves."

TVA will continue to meet its obligation to operate and maintain its system of dams, reservoirs, and adjacent lands. Based on the authority provided in the Energy and Water Development Appropriations Act of 1998, TVA will fund its traditional essential water and land stewardship activities with power revenues, user fees, and sources other than appropriations. No appropriations have been requested or received by TVA since FY 1999.

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