Tennessee Valley Authority Government Performance and Results Act Strategic Plan FY 2004 - 2009

Submitted to
Congress
and
The Office of Management and Budget
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Foreword

In January 2004, TVA issued its Strategic Plan outlining the issues that TVA needs to address in order to prepare for a competitive electricity wholesale market in the Tennessee Valley, the region that TVA serves today. That plan considers broad, fundamental questions:

- What will the future competitive environment be like?
- What will TVA need to do to be successful in that environment?
- How do we transition from a monopoly business model to a competitive business model?
- What do we need to do to get ready?

The Strategic Plan is directional, and provides a framework for what TVA needs to do to preserve its core mission and remain financially sound in a more competitive market.

This document is TVA's GPRA Strategic Plan for FY 2004-2009, i.e., it contains the specific information that is required by the Government Performance and Results Act. It is based on TVA's January 2004 Strategic Plan, but describes in more detail how the broad goals in the January 2004 Strategic Plan will be implemented.

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1.0 Introduction

The Tennessee Valley Authority (TVA) is the nation's largest public power provider. Wholly owned by the U. S. government, TVA was established by Congress in 1933 primarily to provide navigation, flood control, and agricultural and industry development, and to promote the use of electric power in the Tennessee Valley region.

TVA is a unique government agency in that it sells a product and the revenues from sales fund all of its operations. While initially funded largely through federal appropriations, TVA's power system has been entirely financed through power revenues for 45 years. In addition, TVA has received no federal appropriations since 1999, and TVA now funds its stewardship and economic development functions entirely from its power system revenues as well.

TVA has been able to finance its operations almost entirely through the debt capital markets due to its strong and stable market positioning. Under current law, which limits competition in the TVA service territory and gives the TVA Board of Directors broad rate-making authority, TVA has enjoyed financial stability sufficient to fund large-scale investments and support all activities related to its broad mission.

In the future, it is likely that the laws restricting competition will be amended, requiring TVA to move from a monopoly to a competitive business model. Increased competition will have a significant impact on how TVA finances and carries out its diverse mission. In the near-term, TVA's strategic challenge is to accelerate its preparation for a more competitive future. At the same time, TVA must continue to supply all energy requirements for our distributors until legislation opening up electricity markets in the Valley is enacted.

TVA has taken meaningful steps toward correcting Strategic Planning deficiencies identified in OMB's 2003 PART Evaluation of TVA. In accordance with PART Section II.2.8 the issuance of TVA's Strategic Plan in January 2004 is a significant improvement in clearly defining the agency's strategy.

2.0 TVA Mission Statement

TVA plays a vital role in improving the quality of life in the Tennessee Valley through the three interrelated parts of its mission:

- Energy Supply TVA is the largest public power provider in the nation and provides reliable, low-cost power for the residents and businesses in the Tennessee Valley
- Environmental Stewardship TVA manages the Tennessee River System, balancing the benefits of navigation, flood control, power production, water supply, water quality, recreation and land use
- Economic Development TVA further promotes economic development by providing technical assistance, research data, and financial assistance to communities and businesses

3.0 Background

By the late 1990s, the nation seemed to be well on its way to restructuring wholesale electricity markets. About half of the states had plans to open their retail markets to competition. In the spring of 2000, it appeared that consensus might be within reach on legislation to achieve a comprehensive restructuring of the nation's electric power industry. Over the next three years, however, several events occurred which raised concerns about the ultimate costs and benefits of restructuring, particularly for low-cost states.

- A serious power supply crisis struck California and the West, which, coupled with a seriously flawed market design, led to unprecedented price spikes and supply shortages.
- The collapse of Enron signaled a weakening of the financial viability of first the marketing and trading sector and then the independent power production (IPP) sector, which was heavily debt-financed.
- In July 2002, the Federal Energy Regulatory Commission (FERC) issued a comprehensive proposal to require standardized changes in the design and structure of electric power markets across all

regions of the U.S. The following year FERC modified that proposal to allow more regional flexibility on the timing and design of wholesale markets.

 In August 2003, the Northeastern U.S. and Southern Canada suffered one of the worst blackouts in recent history. Questions arising from the ongoing investigations surrounding the blackout might delay mandatory wholesale market reforms as the causes of the blackout and needed reforms are determined.

These market and regulatory developments have increased uncertainty about the effectiveness and ultimate outcome of electricity market restructuring in the United States. Despite the current uncertainty, TVA's commitment to its customers to support wholesale competitive markets remains. More specifically, for the purposes of developing this strategic plan, we believe that TVA must prepare for a future that brings four fundamental changes to our business environment:

First, the emerging wholesale electricity markets that surround TVA are expected to have many of the following core features:

- Independent, real-time operation of the regional transmission market, integrated with
- Voluntary day-ahead and real-time energy markets,
- Location marginal pricing to reflect locational differences in generation costs caused by transmission constraints, and
- Financial congestion revenue rights to allow buyers and sellers to hedge the cost of energy delivered to a particular location.

Regardless of whether legislation opening the Tennessee Valley to competition is enacted, TVA must decide whether it should have a different market structure inside the Valley and attempt to integrate with surrounding markets through seams agreements, or whether it should try to integrate more fully into a larger regional market. Either situation would pose special challenges and implementation costs.

Second, current law restricts TVA's ability to sell outside the TVA region and restricts the ability of other suppliers to sell power inside the TVA region. TVA must begin to prepare for a more competitive future where distributors can choose other suppliers to meet their energy needs and TVA can sell surplus wholesale power outside the region. Our

planning must also reflect the possibility that TVA could remain the allrequirements supplier for the distributors in the Valley for an indefinite period of time.

Third, the effective monopoly position with respect to bulk power sales in the Tennessee Valley appears likely to change. If other suppliers can provide services to distributors, our planning, pricing, and financial structure must adapt to the potential reality that investments in long-lived facilities will face market risk.

Fourth, the cyclical and capital-intensive nature of unregulated power generation poses significant financial risk and will require a more liquid and financially secure financial structure. As a result, TVA must reduce its debt and develop an approach to financing that is more flexible than it has needed in the past.

4.0 Long-Term General Goals and Strategic Objectives

The purpose of the Strategic Plan was to identify what TVA needed to do in order to preserve its core mission and remain financially viable in a more competitive market.

TVA's general goals that define how the core mission (described in Section 2.0) is achieved are as follows:

<u>Energy Supply</u> -- Supplying low-cost, reliable power. Meet the changing needs of power distributors and directly served customers for energy products and services in a changing market.

<u>Environmental Stewardship</u> -- 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.

<u>Economic Development</u> -- Stimulating economic growth. Provide services based on core expertise to solve regional problems, support capital investment, create jobs, and build partnerships for the public benefit.

These general goals are supported by the following strategic objectives:

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

In addition to the long-term goals and strategic objectives needed to fulfill TVA's core mission, the Strategic Plan identified four specific areas that TVA needs to concentrate on in order to prepare for a more competitive market:

- 1) <u>Pricing, Services and Products</u> Develop new, more highly differentiated prices, services and contract terms that more closely tie the cost and risk of the product to its terms and pricing.
- 2) <u>Transmission Pricing</u> Address the range of issues related to wholesale market design and transmission pricing, including how TVA will interface with the markets that are expected to surround us, as well as how TVA will price transmission services within the Valley when distributors can choose other suppliers.
- 3) <u>Improved Financial Flexibility</u> Accelerate debt reduction and drive to higher interest coverage ratios in order to provide the financial flexibility needed to tolerate the higher levels of revenue and cost volatility associated with a more competitive market.
- 4) <u>Maintain Assets</u> Maintain and operate its generation and transmission assets so that TVA fulfills its supply obligations in a safe, reliable, and cost-efficient manner.

5.0 Resources and Skills Needed To Achieve Goals

5.1 Financial Resources

The TVA Act gives the TVA Board both the authority and the requirement to set electric rates at a level to cover all power system costs while being responsible to the Act's objective that power be sold at rates as low as feasible. The Energy and Water Development Appropriations Bill of 1998 authorized TVA to use power revenues to pay

for statutory responsibilities previously paid for through federal appropriations.

In FY 2003, the TVA Board approved a 5.9% increase in average wholesale power rates which became effective October 1, 2003. This rate increase is needed to pay for costs associated with reducing emissions at TVA's coal-fired plants, given regulations which were promulgated at that time.

5.2 Physical Resources

TVA's success in carrying out its mission will require that TVA retain management and operational responsibility for the Tennessee River system and other federal assets crucial to its statutory responsibility.

5.3 Management and Human Resources

TVA will need to maintain its existing skills and processes related to power supply, resource stewardship, and economic development. In addition, TVA will need to develop a number of new processes and skills in order to prepare for a competitive environment. The major initiatives include the following:

- Continued efforts across the organization to improve efficiency.
 The activities involved include not only benchmarking best in class
 performers, but also continually raising the bar on TVA's own
 performance related to reliability, forced outage rates, and overall
 cost.
- Continued training to develop a multi-skilled work force to improve labor productivity.
- Developing new tools to support the development of products and services consistent with a competitive market, including new methods for:
 - o determining TVA's cost to provide different types of service
 - o evaluating and quantifying risk, and
 - o modeling the price of competitive alternatives.

- Developing new methods for evaluating future investments in generation and new financial criteria that reflect the uncertainty in future revenue available to recover those investments.
- Developing the processes to provide unbundled transmission service for distributors who want to choose other suppliers, and developing the rules for implementing priority service for native load transmission customers.

6.0 Relationship Between Annual Performance Goals and the Long-Term (General) Goals in the Strategic Plan

6.1 TVA's Mission and TVA's Strategic Plan

TVA's roles are described by its mission. The mission serves as TVA's value proposition to the Tennessee Valley and is best defined through its three interrelated parts - Energy, Environmental and Economy. This is TVA's unique "reason for being" and the primary focus of its core business endeavors. It provides the strategic context within which all internal processes and objectives are defined and prioritized.

The four priority areas identified in the TVA Strategic Plan focus on the general steps TVA must take in order to preserve its core mission and to ensure its financial viability in a more competitive market.

6.2 Translating TVA's Strategic Plan into Operational Terms

The mission and strategic objectives must be translated into operational terms so that the actions of management and employees can be supportive and aligned. TVA's critical success factors are the first step in this translation. They define the key factors and capabilities needed to generate sustainable performance consistent with the business themes implied by the mission and the priorities identified by the Strategic Plan. Performance goals identify specific, tangible objectives against which achievement with respect to the critical success factors can be measured. As illustrated in Exhibit 1, we develop a strategy in the context of the Mission, map the strategy into operational initiatives, and ultimately develop performance plans for each part of the organization, and scorecards for measuring success.

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TVA follows the five Principles of a Strategy Focused Organization¹ to implement its strategy throughout the operations of the organization. The five principles have been successfully used by both public and private sectors and are defined as follows:

- 1. Mobilize the organization through visible, executive leadership. The TVA Board approves the Strategic Plan, performance plans, budgets, and performance targets. Executive leadership endorses the strategic plan and takes responsibility for ensuring its operational implementation.
- Translate the strategy into operational terms. A key vehicle for translating TVA's strategy into operational terms is TVA's Leadership Standard, shown in Exhibit 2. The Leadership Standard translates strategy into operational terms by identifying TVA-level Strategic Objectives and Critical Success factors.
- 3. Align the organization around the strategy. TVA achieves strategy alignment by developing a balanced scorecard, which defines measurable corporate level and ultimate business-unit goals consistent with the Strategic Plan.
- 4. Motivate to make strategy everyone's job. Strategic awareness is created by "line of sight" mapping -- aligning individual performance goals with critical success factors and by TVA's Winning Performance Plan which ties incentive compensation to the achievement of goals.
- 5. <u>Govern to make strategy a continual process</u>. TVA, strategic business unit, and business unit scorecards are updated monthly as described in the following section.

6.3 Annual Goals, Long Term Goals and TVA's Strategic Plan

Developing corporate short-term and long-term plans are key to actually achieving the goals outlined in the Strategic Plan. Consistent with PART Evaluation criteria (Section II.2.1). TVA's Long Term Plans

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¹ Robert S. Kaplan and David P. Norton, <u>The Strategy-Focused Organization</u>, Harvard Business School Press, Cambridge, Massachusetts, 2000.

cover a minimum of 5 years and maximum of 20 years. These plans include:

- Shorter Term (1-3 Year) Plans
 - Power Supply Plan (monthly updates based on revised market forecasts)
 - Strategic Business Unit Performance Plans (3-year outlook with Quarterly reviews)
- Longer Term (5-20 Years) Plans
 - Power Supply Plan (20-year forecast with plan updates twice annually)
 - Financial Outlook and Risk Management Plans (20-year forecast)
 - Capital Project Plans (5-year outlook)

Quarterly Performance Planning meetings are held with the Board of Directors, and senior management. The strategic issues, the scorecard and financial outlook are tracked and reviewed. These reviews include 3-year trending and 3-year forecasts.

The TVA, Strategic Business Unit and Business Unit Scorecards are updated monthly and results are posted on the internal web for TVA-wide employee review.

7.0 Program Evaluations - Tracking Progress Against The Goals

The following section is guided by OMB's description of the relationship of the GPRA to PART:

"The GPRA statute provides a framework under which agencies prepare strategic plans, performance plans and performance reports that set goals and report on the extent to which they are achieved. The PART is a systematic method of assessing performance of the program activities, focusing on their contribution to an agency's achievement of its strategic plan and program performance goals."²

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² OMB Instructions for the Program Assessment Rating Tool for 2006, http://www.whitehouse.gov/omb/part/2006_part_guidance.pdf (page 3)

TVA had several program evaluations in preparing for the issuance of the Strategic Plan, as referred to in OMB Circular A-11. TVA established an internal Strategic Planning Team who reviewed the future competitive environment. There were several other task teams and standing teams that reviewed critical components of TVA's operations as input into the strategic planning process. These included Reservoir Operations Study which reviewed the multiple uses of the river; the Regional Resource Stewardship Council's review of stewardship programs; the Environmental Integration Team looked at current and future environmental regulatory requirements; the Hydro Board of Consultants review of dam safety; INPO reviews of the Nuclear Power Program; and several others. These program level evaluations provided valuable insights into the preparation of TVA's Strategic Plan.

7.1 TVA Inducted into the Scorecard Hall of Fame

As indicated in TVA's 2003 PART Evaluation, OMB expressed a need for TVA to improve its performance measures and complete its strategic plan. Since that time TVA has made tremendous strides in accomplishing these recommendations. Not only has TVA's Strategic Plan been issued, and performance goals aligned to the Plan, but TVA also received international recognition for this initiative.

TVA's efforts to implement its strategy were recognized when TVA was inducted into the Scorecard Hall of Fame in 2003. It is the only power company in the United States and one of three U.S. Government Agencies to receive this honor.³

TVA's strategy and performance management process is called "Winning Performance". It is similar to that described in the Balanced Scorecard Collaborative $^{\rm IM}$.

world have been inducted into the BSC Hall of Fame . . . [they] use the Balanced Scorecard in an exemplary manner to become strategy focused, successfully execute their strategies, and achieve breakthrough performance results . . .Balanced Scorecard Hall of Fame [organizations serve] as a role model to others." "Balanced Scorecard Hall of Fame Report

2004," Harvard Business School Publishing Corp., Cambridge, MA, 2004.

³ "While most organizations fail to execute their strategies, Balanced Scorecard Collaborative Hall of Fame organizations have succeeded To date 37 organizations from around the

⁴ Robert S. Kaplan and David P. Norton, <u>The Balanced Scorecard</u>, Harvard Business School Press, Cambridge, MA, 1996.

7.2 The Winning Performance Process

TVA measures its success in achieving all of its strategic objectives. Therefore, in addition to the Strategic Plan's four areas of emphasis, the Scorecard is balanced with measures that represent other dimensions of performance. The Winning Performance keeps TVA focused on the Strategic Objectives. It identifies the things that must be accomplished to be successful, measures and tracks our performance in these areas, and provides the incentives and feedback to employees to see the direct connection. All employees are involved in Winning Performance and are able to see how his or her day-to-day performance contributes to TVA's performance and success.

Employees can see how their work contributes to the direction set by their organization's performance plan and how that contributes to TVA's overall successful implementation of the agency's strategy ("Lineof-sight"). Additionally, line of sight for employees is from their individual performance objectives, developed as a part of the Integrated Performance Management process, to TVA's Strategic Objectives and Critical Success Factors.

Employees participate in the Winning Performance Team Incentive Plan. This compensation plan (lump sum payment) is tied to performance results based on scorecard measures at the TVA, Strategic Business Unit (SBU) and Business Unit (BU) levels. The payouts are funded through the financial benefits incurred by TVA's improved performance when the targets on the TVA, SBU, and BU scorecards are achieved. All employees are eligible to participate, except those approved by the Board to participate in the Executive Compensation Program. Annual incentive awards provided to executives are based on the same scorecard measures and results used to determine payouts for all employees.

7.3 TVA's Balanced Scorecard

The outcomes of the Strategic Objectives are Critical Success Factors. The critical success factors are defined within the four dimensions of TVA's Balanced Scorecard, which are; (1) Customer, (2) Financial, (3) Operations and (4) People. In turn, the performance measures are also defined within the same four dimensions. The performance measures on the TVA Balanced Scorecard are used to track overall TVA, Strategic Business Unit and Business Unit levels of

performance. (See Exhibit 3.) The 2005 Scorecard measures are the first to be aligned with the 2004 Strategic Plan.

Performance is monitored on each of the measures monthly and the scorecards are updated to reflect the results. These updates are available to employees through their organizations, in the monthly newsletter *Inside TVA*, and on the internal Winning Performance web site.

The Scorecard measures are reviewed and adjusted annually to reflect annual operating plans. Changes to the measures are made to reflect changes in priorities to improve TVA's performance. Additionally, the scorecard is designed to drive behavior that will result in improved performance. If a measure is not driving the right behavior, then it is changed.

TVA's scorecard, with its performance measures, clearly demonstrates that no one single organizational unit has complete responsibility for implementing strategy. The Balanced Scorecard provides a powerful process to formulate comprehensive integrated solutions. The limited number of measures at the TVA level allow TVA to stay focused on keeping the annual (near-term) actions aligned with the long-term goals. (PART Section II.2.3)

7.4 Results

The TVA, Strategic Business Unit and Business Unit Scorecards contain targets at three levels, corresponding to different incentive payouts -- "target", "mid" and "stretch" levels correspond to higher levels of performance and therefore higher levels of payout. (See Section 9.2, glossary of terms for further definition.)

The Scorecard "Basis" sheets contain the year-to-date actual values of the measures, as well as a 3-year trend and 2-year forecast. (See Exhibit 4 for an example.) Adverse trends and improvement plans are discussed during quarterly reviews with Executives and the Board.

As indicated in PART Section II.2.2 and II.2.4 it is important for an agency to have "ambitious" targets and timeframes. TVA's use of "mid" and "stretch" targets, combined with the multiyear basis sheets provides both.

The performance indicators on the TVA Scorecard (shown in Exhibit 3) and excerpts from the Chief Operating Officer (COO) and Strategic Business Unit Report cards (shown in Exhibit 5) will constitute TVA's performance measure reporting requirements for the GPRA Annual Performance Plan. These indicators address the scope of TVA's tri-fold mission to the Valley: Energy, Environment and the Economy.

In order to successfully implement a strategic plan it is important that budgets are explicitly tied to accomplishing Performance Goals (PART Section II.2.7). As indicated in Section 6.3 of this document it was mentioned that TVA conducts Quarterly Performance Plan Reviews. These Performance Plans contain a three year outlook, including the current year, with ties to both budgets and performance indicators. These quarterly reviews are conducted with all Strategic Business Units with the Board of Directors, President and COO, CFO (Chief Financial Officer) and other key executives to ensure that corporate officers keep individual strategic business units aligned with corporate strategy.

The performance measures support multiple goals and strategic objectives, as illustrated graphically in Exhibits 2 and 6. The most challenging aspect of establishing the performance targets, however, is that individual indicators cannot be set in isolation - achieving the right balance of all performance targets is critical to TVA's overall success.

For example, Exhibit 6 illustrates that a number of performance measures support the achievement of the goal to "reduce the delivered cost of power." All else equal, reducing O&M costs will help reduce the cost of power. But if we set the O&M target too low, it could jeopardize our ability to maintain reliability, which would, in turn, reduce customer satisfaction.

A similar example is the goal to provide affordable, reliable power. All else equal, the lower the price of power, the higher customer satisfaction will be. But if we set prices too low, there could be insufficient revenue to cover costs, jeopardizing our ability to achieve two other goals: to reduce debt and to maintain reliability.

Given this general description of how performance targets must be optimized simultaneously, the individual performance measures on the TVA-wide scorecard are calculated as follows:

(1) O&M (Operation and Maintenance) Costs (\$ millions) =

- total expenses minus fuel, purchased power, interest expense and pension/post retirement financing costs.
- (2) Financial Strength (\$ millions) = Change in debt-like instruments including statutory debt, combustion turbine lease obligations, prepaid energy obligations, and QTE (qualified technological equipment) leases.
- (3) Productivity (kWh/\$) = Planned generation unit availability (in kWhs) divided by Total O&M Labor Cost (including both TVA and contract labor) (in dollars)
- (4) Customer Satisfaction (%) = a composite index of several performance indicators affecting customer satisfaction. The index is 100 times the sum of the following indices:

25% x (target/actual power reliability) +

25% x (target/actual billing reliability) +

25% x (target/actual product timeliness) +

25% x (target/actual competitive price)

- (5) Economic Development (index) = a composite index of several measures of economic growth, calculated as the sum of the following:
 - 0.50 x (actual jobs added or retained/target job additions) +
 - 0.25 x (actual capital investment leveraged/target capital investment leveraged) +
 - 0.25 x (actual jobs impact/target jobs impact)
- (6) Asset Availability (%) = (actual GWh of generation available divided by the planned GWh available) x 100
- (7) Environmental Impact (index) = a composite index of 29 indicators grouped into 5 categories that are weighted as follows:

Air Quality	40%
Water Quality	25%
Land Impacts	10%
Waste Production	15%
Energy Consumption	10%
Total Environmental Impact Index	100%

(8) Safe Workplace (all injuries/hours worked) = All Injury Rate, calculated as follows:

 $[Fatal + LT + MT + OCI) \times 200,000]$

Hours worked during time period

Where:

Fatal = number of Fatalities (if any occur, there is no payout on this measure)

LT = number of lost time injuries or illnesses

MT = number of medical treatment only injuries or illnesses

OCI = number of other compensable injuries or illnesses

200,000 = 100 employees working 40 hours/week for 50 weeks/year

7.5 COO and SBU Performance Indicator Definitions

(1) COO Net Generation (billion kWh)

The total electric energy produced by the generating units measured at the generator terminals less energy consumed for the generating station use.

<u>Formula</u> = Gross Electrical Generation - Station Service Use.

(2) TVAN (TVA Nuclear) Contribution to Delivered Cost of Power (mills/kWh)

<u>Formula</u> = All Non-Fuel Expense (less any approved adjustments) + Fuel Expense divided by Net Generation.

(3) TVAN INPO (Institute of Nuclear Power Operations) Performance Index (%)

This indicator is a weighted combination of INPO's nine overall performance indicators. The index is a useful tool for management in trending overall station performance.

(4) FPG (Fossil Power Group) Contribution to Delivered Cost of Power (mills/kWh)

O&M Expense per kilowatthour of fossil (coal fired) generation. Fossil production expense includes plant base & outage, O&M

projects, reagents, yard and central office. Fuel expense includes coal. Excludes combustion turbines.

<u>Formula</u> = Non-outage O&M + Outage O&M + Fuel / Net kWh Generation

(5) FPG Equivalent Forced Outage Rate (EFOR) (%)

This is an indictor of unit reliability. The percentage of generation lost due to forced outages and forced deratings.

Formula = [(FOH x NDC) + MWhL]/[(FOH + SH) x NDC] x 100

Where:

FOH = Forced Outage Hours

SH = Service Hours

NDC = Winter Net Dependable Capacity

MWhL = MWh Losses during to forced derating

(6) TPS (Transmission/Power Supply Group) Customer Interruption(CI) Rate (Interruptions per Delivery Point)

CI measures reliability from our customer's perspective. It tracks interruptions of power, including momentary, at customer connection points caused by the transmission system. <u>Formula</u> = Number of Interruptions / Number of Connection Points

(7) TPS Load Not Served (minutes)

TVA load not served expressed in system minutes.

Formula = (% of Total Load Not Served) X (Number of Minutes in the Period)

(8) TPS Contribution to Delivered Cost of Power (mills/kWh)

Operating cost for the transmission system. Expressed as a year-to-date cost in mills per kWh sold.

Formula = (O&M expense + Net External business {not including settlement income}) /(Total Electricity Sales)

(9) RSOE (River System Operations and Environment) Hydro Equivalent Forced Outage Rate (EFOR) (%)

One of the major functions of the multi purpose assets within River Operations is electric generation. The ability to provide power at the demand of the customer is a prime goal of the employees within River Operations. This indicator is used by TVA Conventional and Pump Storage Production as an aggregate indicator. The data will be analyzed for feedback to plant forces and supervision.

<u>Formula</u> = [Unplanned (Forced) Outage Hours x Maximum Dependable Capacity (MDC)] x 100 [Total x (Unplanned (Forced) + Service Hours x Total MDC]

(10) RSOE Flood Storage Availability (%)

Flood storage availability is determined from storage space above flood guide levels. Allocated storage is predetermined and shown on operating guide curves. Projects are: South Holston, Watuga, Cherokee, Douglas, Fontana, Norris, Chatuge, Nottley, Hiwassee, Blue Ridge, Tims Ford and the eastern composite system.

<u>Formula</u> = % of project days actual reservoir storage is below flood guide levels.

(11) RSOE Days Navigable Waterway is Available from Knoxville, TN to Paducah, KY (days)

The number of days the navigation system is available for commercial navigation. Availability is affected by lock outages and barge accidents that close segments of the river to barge traffic. Days that the U.S. Coast Guard closes the waterway to navigation due to high river flows are not included.

Formula = (Number of days in a year) - (Days river closed to commercial barge traffic)

(12) RSOE Shoreline Management Performance (%)

Measures Watershed Team performance in two areas of TVA's Shoreline Management Process: Shorelines restored and Section 26a Permit Cycle Time. Shoreline restored tracks the actual number of critically impaired shoreline miles which are enhanced by shoreline restoration and re-vegetation activities. Section 26a Permit Cycle Time is calculated as the elapsed number of days from the time the permit application is logged

in until the permit is issued or denied. The performance target is a weighted point system of the combination of a percentage of completed shoreline miles compared to planned shoreline miles and a percentage of applications completed within the applicable cycle time.

8.0 Key Factors, External to TVA, that Could Significantly Affect the Achievement of General Goals

Given the long lead times needed to build new generation and transmission facilities, the electricity business is inherently subject to forecast error, and planning under uncertainty is the norm, not the exception. Normal planning uncertainties include those associated with projections about:

- growth in the regional economy and its impact on electricity demand
- changes in the cost of fuel used to generate electricity
- changes in laws and regulations, particularly those related to environmental compliance, reliability, and security
- technological change
- changes in market interest rates

In addition to these normal uncertainties in electric power planning, the electric utility industry is continuing to evolve in ways that could have wide-ranging impacts on TVA, the way it achieves its mission and its ability to achieve the goals outlined in the Strategic Plan. There is great uncertainty about when legislation will be enacted that amend laws restricting competition in the Tennessee Valley, for example. Given the amount of work to be done to prepare for a more competitive market, the potential magnitude of change in the industry, and the high potential for significant forecast error, TVA will update its Strategic Plan as more information becomes available.

9.0 Miscellaneous

9.1 Consultation with Stakeholders

TVA consulted extensively with key stakeholders during the development of its Strategic Plan. We met regularly with an ad hoc committee of distributors which was formed specifically to discuss issues and analyses that were undertaken to support the development of the plan.

To ensure that there was wide review of the plan, a draft plan was issued on October 1, 2003. The plan was provided to members of the public, employees and the news media. We had numerous meetings discussions with customers, members of Congress and the Administration, and various other stakeholder groups. The plan was also posted on the TVA website www.tva.com, and resulted in 1,300 "hits" from external sources and 7,000 hits from employees.

9.2 Glossary of Terms

Balanced Scorecard - The measures used to track TVA, Strategic Business Unit and Business Unit performance, set levels of expectations and determine financial payouts based on results.

BU - Business Unit. This is a layer below the Strategic Business Unit.

BPT - Bulk Power Trading.

CFO - Chief Financial Officer.

COO - Chief Operating Officer.

Critical Success Factors (CSFs) - The key factors and capabilities needed to generate sustainable performance consistent with the business themes implied by the Mission and the priorities identified by the Strategic Objectives. A 1-3 year look at what must be done to achieve the Strategic Objectives. The CSFs translate the strategy into implementable activities.

FPG - Fossil Power Group.

INPO - Institute of Nuclear Power Operations.

Leadership Standard - The official document that communicates TVA's vision, goals, strategic objectives, and critical success factors.

Line of Sight - Term used to explain how an employee is able to see how he/she can contribute to the Strategic Objectives, Critical Success Factors, and measures on the TVA balanced scorecard through their organization's performance plan and their performance review processes.

Measures - Indicators of performance found on the Balanced Scorecard.

Mid - The level of performance above the Performance Plan Basis on a balanced scorecard. Considered difficult to achieve.

Performance Plans - Action plans which outline each organization's plans, activities, and focus for the next three years.

Report Card - A collection of performance indicators to provide executive/managerial oversight.

RSOE - River System Operations and Environment.

SBU - Strategic Business Unit. Examples are: Nuclear, Fossil, Transmission/Power Supply.

Strategic Objectives - High priority activities on which TVA must focus over the next 2-5 years to continue to fulfill its mission within the business realities in which it operates.

Stretch - The highest performance level on a balanced scorecard, exceptionally difficult to achieve.

Target - The expected norm level of performance on a balanced scorecard, usually reflected in the Performance Plans.

TPS - Transmission/Power Supply Group.

Winning Behaviors - Twenty defined behaviors that TVA employees need to exhibit for TVA to be successful.

Winning Performance - The process we use to manage company performance.

Winning Performance Team Incentive Plan - A compensation plan that is tied to TVA, Strategic Business Unit and Business Unit Scorecard performance (compensation is a lump-sum payment). This compensation is separate from individual level pay-for-performance.

Exhibit 1. Translating Strategy into Operational Terms



Employee Individual Performance Plans



Exhibit 2. TVA's Leadership Standard

Achieve Excellence in Business Performance and Public Service

Shape the culture to model TVA's values

employer of choice

Develop work force capabilities required to be the supplier and

(illustrative: Scorecards are separate documents. Shown here to emphasize alignment.)

Safe Workplace

TVA's TVA's Goals Vision (TVA's value proposition) **Supplying Low**cost Reliable **Power** Generating Supporting a **Thriving River Prosperity** in the Valley **System Stimulating Economic** Growth = Alignment with Strategic Plan TVA is in the continual process of

strengthening strategic alignment and

plan to reflect the revisions to the

Leadership Standard in 2005.

Strategic Objectives (Things that must be focused on to continue to serve the mission) Continue the trend of debt reduction Reduce TVA's delivered cost of power relative to the market Strengthen working relationships with all of TVA's stakeholders Meet customers' needs with affordable, reliable electric power 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

iness Performance and Public Service	Shown here to emphasize alignment.)					
Critical Success Factors (Things that must be done to achieve the Strategic Objectives. Translates Strategy into operational terms)	Balanced S (Scorecards measures and to clarity on the desire of	argets provi				
What must we do financially? • Generate more for less • Invest prudently	Measures •Financial Strength •O&M Costs •Productivity	Targets Diecard	Status 1 1			
 What do our customers and stakeholders want from us? Improve power reliability to meet customer requirements Provide flexible contracts and competitive pricing of products and services Balance competing demands and optimize the river system Promote development through targeted growth initiatives 	Customer Satisfaction Economic Development	shown on the Balanced Scorecard	1			
What must we do to improve operational/business process effectiveness? • Achieve excellence in the asset optimization and production processes • Achieve excellence in the customer value and relationship processes • Achieve excellence in stakeholder relations and communications processes • Manage the environmental and safety impacts TVA's operations have on employees and the region	Asset AvailabilityEnvironmental Impact	and "Stretch" levels are shov	1			
How must we improve the capabilities of our workforce to support our objectives?		"Mid", e				

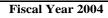
Exhibit 3. TVA's Winning Performance FY 2005 Balanced Scorecard

	<u>Weight</u>	Target*	<u>Mid</u>	<u>Stretch</u>	
Financial State of the Control of th					
O&M Costs (Total Operations and Maintenance Costs)	15%	3,572	3,537	3,465	
Financial Strength (Net Reduction in Total Financing Obligations)	15%	225	300	440	
Productivity (Planned Availability/Total O&M Labor Cost (TVA + Contract \$))	10%	152.5	155.3	159.9	
Customer					
Customer Impact (Power Reliability + Competitive Price)	10%	100	104	108	
Economic Development (Jobs + Capital + Job Impact)	10%	100	110	120	
Operations					
Asset Availability (Actual Availability/Planned Availability)	20%	98	100	102	
Environmental Impact (Index of Environmental Factors)	10%	89	83	77	
People					
Safe Workplace (Number of "All" Injuries and Illnesses/100 employees)	10%	2.28	2.26	2.23	

^{*} Target values reflect roll-up of FY05 Performance Plans and are subject to change based on year-end review of actual performance in FY-2004.

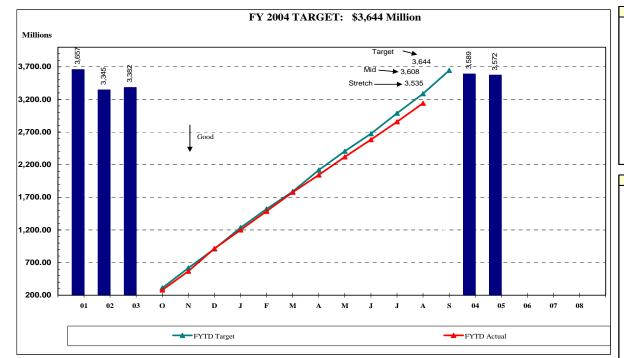


Exhibit 4. Example - TVA FY04 Scorecard Indicator: O&M Costs - Actuals, 2-year Forecast and 3-year Trend



TVA

Indicator: O&M Costs August 2004



		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
I	FYTD Actual	281	569	914	1,200	1,486	1,778	2,043	2,320	2,583	2,857	3,141	1
	FYTD Target	313	617	910	1,235	1,521	1,789	2,118	2,407	2,675	2,989	3,288	3,644

DEFINITION: Controlling O&M expenses is an important measure of competitiveness. O&M expenses drive the rates that we charge customers for power and affects the amount of cash available to reduce obligations.

FORMULA:

Total Expenses less fuel, purchased power, interest and pension/postretirement financing costs.

SPONSOR: Randy Trusley CONTACT: Andrew Holmes

PROBLEM/OPPORTUNITY AREAS

Controlling O&M costs is intended to shift TVA's focus towards reducing expenditures and conserving cash. Controlling costs will increase TVA's competitiveness in the wholesale power market and positioning for future success.

IMPROVEMENT ACTION PLANS	Date

All organizations are taking austerity measures to curb or eliminate discretionary expenses such as travel, hospitality and training.

BASIS

Target is equal to Approved Business Plan. Mid is a 1.0% improvement over Target (reduction of \$36.4 million). Stretch goal is a 3% improvement over target (reduction of \$109.1 million).

Target	Mid	Stretch
3,644	3,608	3,535

Exhibit 5. Excerpts from COO/SBU Report Cards – FY 2005

COO		FY
Organization	PERFORMANCE INDICATORS	Target
COO	1. Net Electrical Generation (billion kWh)	158.35
TVAN	2. Contribution to Delivered Cost of Power (mills/kWh)	14.97
	3. INPO Performance Index (%)	92.1
FPG	4. Contribution to Delivered Cost of Power (mills/kWh) (Excludes CTs)	20.81
	5. Equivalent Forced Outage Rate (EFOR) (%)	7.4
TPS	6. Customer Interruption Rate (Interruptions Per Delivery Point)	0.90
	7. Load Not Served (minutes)	5.40
	8. Contribution to Delivered Cost of Power (mills/kWh)	0.98
RSO&E	9. Hydro EFOR - Total System (%)	1.6
	10. Flood Storage Availability (%)	80.0
	11. Days Navigable Waterway is Available from Knoxville, TN to Paducah, KY (Days)	360
	12. Shoreline Management Performance (%)	78.2
Comments:		
	FY2005 targets are based on FY2004 3rd quarter performance including the July 2004 Power Supply Plan and change based on year end review of actual FY04 performance.	are subject to
	change based on year end review of actual 1 104 performance.	П



Exhibit 6. Relationship Between Performance Targets and Goals and Objectives

Strategic Objectives/Goals	O&M Costs	Financial Strength	Product- ivity	Cust. Satis.	Econ. Develop.	Asset Avail.	Environ Impact	Safe Work Place
1. Improve financial flexibility	✓	✓		√				
2. Reduce cost of power	✓	✓	✓	✓	✓	✓		✓
3. Strengthen stakeholder relations				√	✓	√	✓	✓
4. Provide affordable, reliable power	✓	✓	√	√	✓	✓		✓
5. Support thriving river system				√	✓		✓	
6. Sustain economic development				✓	✓			
7. Develop new pricing		✓		✓	✓			

⁼ indicates an interrelationship between the performance target and the goals/objectives, i.e., the performance target may measure whether a goal is achieved or failure to achieve a particular goal may affect whether a performance target can be attained.