

A report on BPA efficiency initiatives

BPA embarked on a journey to improve its efficiency in 2003. The program we created to manage our efficiency initiatives is the BPA Enterprise Process Improvement Program. EPIP reflects our core values: trustworthy stewardship, collaborative relationships and operational excellence.

Operational excellence is a cornerstone of delivering on the four pillars of our strategic objectives (system reliability, low rates, environmental stewardship and regional accountability) and will place us among the best electric utilities in the nation. Operational excellence requires:

- Continual review and improvement of standardized systems, processes and controls.
- Measurement of our accomplishments against clearly-defined and benchmarked performance standards.
- Investment in our people.
- Focus on ease of doing business with our external customers and internally.

These requirements are being translated into observable behavior and results through EPIP.

In this document we review the promises we made in EPIP, our fulfillment of those promises to date and our plans to continue to fulfill those promises. We also will cover some of the challenges we have faced, some of the surprises along the way and what remains still to be done.

Making the commitment

"We are stewards of the resources entrusted to us. We must strive to efficiently and reliably deliver value to the region."

Steve Wright, BPA Administrator

In a progress report on BPA's efficiency initiatives issued in February 2007, we stated that BPA was taking a long-term strategic focus in its EPIP efforts. We knew that attaining operational excellence through more effective and efficient processes was a journey, not a destination. We realized that the initial effort alone would be long and challenging, and we knew that we would have to make process improvement a central part of everyone's job.

We are realizing two BPA strategic objectives through EPIP. They are:

- I1: Standardized systems and processes are fully capable of meeting complex operational demands through an emphasis on best practices and strong cost management.
- I2: One BPA consistent with Federal Energy Regulatory Commission Standards of Conduct.

The first objective is aimed at ensuring our systems and processes are highly efficient and effective at achieving results. In addition to improving our systems and processes, we seek to ensure our systems and processes are documented and repeatable. This is particularly important in light of the fact that we have an aging work force, with about 25 percent of our current staff eligible to retire in 2008 and a cumulative 36 percent by 2010. Those expected to retire are among our most experienced employees with the greatest institutional knowledge. We need standardized processes in place so new people coming in behind retirees can ensure that BPA seamlessly continues its critical functions.

The second objective reflects our intent to provide an organizational structure and alignment that is best suited to serving our customers and stakeholders today as one agency with one voice.



The goals of these two strategic objectives include:

- Continued open nondiscriminatory access to transmission.
- Streamlined internal systems and processes to increase cost efficiency and improve effectiveness.
- Improved internal and external communications.
- Simplified customer interactions.
- More efficient use of capital funding across the agency.
- More integrated policy decision-making processes.
- Improved succession planning.

In September 2003, the BPA administrator sent a letter to the agency's customers committing to:

- Aggressively pursue and implement process improvement.
- Use outside expertise to define opportunities for improvement.
- Provide customers with a prominent role in defining scope and contractor selection related to this effort.
- Work with customers to develop a work plan to secure improvements recommended by the study.
- Provide regular updates.

We selected KEMA, a global electric utility consulting firm, to pursue and implement the process improvements that had been identified. This was the birth of EPIP.

EPIP is rolled out

"We knew from the start that this effort was large, would take a long time and would be difficult. When we got into it we realized it was larger, would take longer and was more difficult than we ever imagined. Despite the difficulty, everyone associated with this program should be very proud of the remarkable success we are creating together."

Pam Marshall, EPIP Program Manager

To implement maximum efficiency, we realized we needed to reinvent key business processes to reduce our costs and increase effectiveness and efficiencies. This meant:

- Refinement and standardization of processes to eliminate redundancies and inefficiencies.
- Documentation of processes so they could be replicated and continuously improved.
- Consolidation and reduced staffing in targeted areas.

The goal was to identify and implement those efficiencies and savings that made business sense as opposed to across-the-board budget reductions that do not take business needs into consideration. In terms of scope, magnitude and impact, EPIP is the largest efficiency initiative ever undertaken by BPA. More than 600 of our employees have participated in EPIP's functional review teams.

Although EPIP has multiple goals, all were designed to achieve the two strategic objectives discussed earlier. Specific goals were to:

- Perform more efficiently.
- Provide greater value without increased costs.
- Ensure repeatable processes and capture of knowledge.
- Reduce risks and errors.
- Clarify roles and responsibilities.
- Reduce costs while maintaining or enhancing performance.
- Take measures aimed at restoring regional confidence.

EPIP is a significant multiyear effort and investment aimed at producing benefits that will continue to provide value well into the future. Nine functional areas were chosen as the focus of EPIP:

- Energy Efficiency
- Marketing & Sales
- Human Capital Management
- Public Affairs
- Information Technology

- Transmission Plan, Design, Build
- Supply Chain Services
- Asset Management
- Transmission Operations & Maintenance

The EPIP initiative is especially notable for its inclusion of outside expertise. We responded to our customers' recommendation not to "go it alone" but, rather, to use an outside consultant firm and active customer involvement.

Results and status: EPIP as a whole

"Our biggest accomplishment is tearing down the silo walls between organizational units and building understanding of processes and functions beyond our own organizations. We had a lot of depth, but we did not have a lot of breadth where people understood what was going on beyond their own organizations."

Jim Hallar, Plan, Design, Build EPIP Project Manager

The program is a success. As of Oct. 1, 2008, four of the nine EPIP projects have transitioned to continuous improvement. The remaining five will make the transition in the next year.

The transition to continuous improvement does not mean that the work is done. On the contrary, in some ways it is just beginning. Transition means that new processes, performance metrics and recommendations are in place. Refining the processes and metrics is itself a multi-year effort. Process improvement needs to be a part of how we do business going forward. The 600 or so employees who have served on EPIP teams have learned the tools and techniques to do this.

The results show clearly on the bottom line with \$112.4 million in savings for FY 2006 and 2007 and an average \$65 million in savings per year expected in fiscal years 2008–2011. Without EPIP, the budgets would have been \$65 million higher each year.

Actual savings for FY 06 and 07 and savings reflected in IPR budgets¹ (\$ millions)

EPIP Project Name	2006	2007	2008	2009	2010	2011
	Actuals		On Track	IPR Budgets		
Energy Efficiency	\$0.3	\$1	\$0.7	\$0.3	-\$0.2	-\$0.4
Public Affairs	2.2	3	2.8	2.9	2.8	3.1
Transmission O&M	<i>Optimized spending and asset performance</i>					
Transmission Plan, Design, Build ²	11.2	15	32	15	16	17
Asset Management	<i>Optimized spending and asset performance</i>					
Information Technology	31.8	37.0	38.5	42.7	34.7	39.9
Supply Chain	1.2	1	0.2	0.2	-1.8	-0.8
Human Capital Management	2.7	3	3.9	4.6	4.6	6.0
Marketing and Sales		3	0.7	0.1	-0.2	0.4
Totals	\$49.4	\$49.4	\$78.8	\$65.8	\$55.9	\$65.2

¹ Transmission PDB savings are capital only. IT savings are capital and expense. Other savings are expense.

² Transmission savings depend on the final size of capital program. The capital program is subject to large changes annually. PDB actual results are for hard savings only.

Results and status: Energy Efficiency

“EPIP gave us the organization, processes and tools we need to meet the ever-increasing need to deliver sustainable energy savings in the region.”

Mike Weedall, VP, Energy Efficiency

A number of factors make greater energy efficiency more important than ever. The Energy Efficiency EPIP successfully implemented:

- Standardized contracts.
- Web-based contract management.
- Standard criteria for new program development.
- Annual plans for demand-side technologies.
- A more efficient organizational structure.
- Elimination of out-of-region reimbursed contract work for other agencies.

The Energy Efficiency EPIP transitioned to continuous improvement in October 2007 and is scheduled for a follow-up assessment of its continuing implementation in FY 2009.

Results and status: Public Affairs

“Consolidating public affairs in one work group was central to speaking consistently as one BPA.”

Paul Majkut, Public Affairs EPIP Project Manager

Public Affairs was one of the first areas addressed by EPIP. Because of the relatively small staff, it was not an area with a large potential for savings, but it is an important area for assuring a clear and consistent “One BPA” voice to customers and stakeholders. Outreach activities that had been spread throughout the agency were consolidated under a Chief Public Affairs Officer. These functions included national relations, regional relations, tribal affairs, public involvement, media, employee communications, community relations, events management, Web design and communications support services such as writing and graphics. The Public Affairs EPIP achieved:

- A single, clear and consistent BPA voice.
- Messaging strategically aligned with agency objectives.
- Consolidation of all public affairs functions in one work group.
- A coordinated “look and feel” in BPA publications and communications.

Results and status: Marketing and Sales

“Marketing and Sales is the arm of BPA through which we directly communicate with our customers. I am more confident than ever that we will deliver superior customer service through our new processes and improved tools. It is vital that we stay the course, carefully measure our progress and never rest in this effort.”

Paul Norman, Senior VP, Power Services

Marketing and Sales is the only customer-facing function addressed by the EPIP. It also involves functional organizations in all three major BPA structural elements: Corporate, Transmission and Power.

In addition to delivering superior customer service while creating greater efficiency, the M&S EPIP was responsible for ensuring adherence to FERC Standards of Conduct and compliance with Office of Management and Budget Circular A-123 (the federal government’s equivalent to the Sarbanes-Oxley Act), as well as maintaining the separation of duties between front and back office functions.

This EPIP has successfully achieved all of its EPIP objectives and is in transition to continuous improvement.

The M&S EPIP objectives are:

- Superior customer service.
- One BPA/one voice.
- Customer-focused culture.
- Efficiency and cost effectiveness.
- Improved customer contract management.

- One billing system for both power and transmission.
- Improved succession planning.
- Effective internal controls and segregation of duties.
- FERC Standards of Conduct compliance.

New software with improved functionality is under development to replace multiple old systems that were becoming difficult and costly to maintain. The new systems will enable processes that reduce the risk of errors while improving customer service.

Results and status: Information Technology

“Improving our IT organization and improving our systems are essential ingredients in improving the agency’s ability to deliver on its mission. We are doing both simultaneously, which has proven to be very challenging. We have made a lot of progress and we still have much to do.”

Kim Leathley, Executive VP,
Internal Business Services

Information Technology or IT was consolidated and streamlined early in the EPIP process. While this has produced large dollar savings, fundamental process improvements have been slower and more difficult to achieve. A number of breakthroughs in the last year have set the stage for major improvements.

- A comprehensive IT strategy is in place.
- A detailed systems development life-cycle manual was produced, rolled out and is currently undergoing revision based on user experience.
- A Project Manager Handbook has been revised and is being distributed.
- Numerous IT Project Management Office enhancements have been made and others are under way.
- A methodology for prioritization and governance of IT projects was established, implemented and improved. It provides a consistent, transparent method for focusing IT resources on the projects of highest strategic importance to BPA and the region.

- All of the original EPIP objectives have either been completed or will be completed in early 2009.

Results and status: Human Capital Management

“HCM is excited and energized about its new service delivery model and the value it will bring to the organization.”

Roy Fox, Chief Human Capital Officer

Human Capital Management was charged with the largest percentage savings target as well as aggressive performance targets. This EPIP has faced serious setbacks but now appears to be on a course that will produce success.

- A new service delivery model has been developed and is being implemented with a greater emphasis on a strategic contribution to the agency’s goals and objectives. A new organization aligned with this model is being implemented.
- Workforce plans have been developed and are being implemented.
- Processes have been redesigned and deployed to create greater efficiency and effectiveness.
- Highly automated self-service for routine transactions is one of the stated objectives of the HCM EPIP and is expected to be largely implemented by the end of FY 2009.

Results and status: Asset Management

“BPA first presented its asset management strategy and plans to customers in the Integrated Program Review this summer. Customer and public response indicated considerable support for the strategy and the greater clarity it provided about BPA’s capital investments.”

Mike DeWolf, BPA Asset Manager

Trustworthy stewardship demands that we excel at managing our assets. The science and practice of asset management are maturing worldwide as developed nations everywhere address aging

infrastructure and growth. We have implemented the following leading practices in asset management:

- An enterprise-wide asset strategy is in place.
- Asset plans are in place for transmission, power, non-electric facilities and IT assets.
- A rigorous and systematic methodology for prioritizing and allocating capital is in place.
- Transmission is pursuing a number of initiatives that will culminate in seeking Publicly Available Specification 55 certification. PAS 55 is the global leading practice for managing large infrastructure assets.
- Tools for tracking all assets, their location, condition and maintenance history are being put in place.

Results and status: Transmission Plan, Design, Build

“The improvements we are making to our processes, tools and organization through EPIP are already beginning to pay big dividends. Over the next few years, we will be expanding, upgrading, repairing and replacing portions of the grid at an unprecedented pace to meet growing demands. The improvements we are making through EPIP will greatly enhance our ability to accomplish this work.”

Vickie VanZandt, Senior VP, Transmission Services

This team’s 139 recommendations fall under four broad categories.

- Applying standards throughout all Plan, Design, Build functions.
- Conducting work in the right order to enhance performance.
- Leveling workload through better planning and scheduling procedures.
- Intensifying the use of risk management in a formal asset management program.

Over 100 of the recommendations have been successfully completed. The project is on track to transition to the Transmission Enterprise Process Improvement Program by the second quarter of FY 2009. (TEPIP is described on pages 7–8.)

Results and status: Transmission Operations and Maintenance

“Our rapid and effective response to a recent WECC directive was made possible by EPIP improvements in our organizational structure and tools.”

Steve Goins, O&M EPIP Manager

This EPIP is pursuing the goal of optimizing operations and maintenance while assuring the safe and reliable operation of the system by addressing six challenges:

- Effectively responding to an aging workforce.
- System-wide coordinated allocation of maintenance resources.
- Better data management and field connectivity for data-driven decision making.
- Improving availability and reliability of transmission capacity.
- Responding efficiently to increased regulatory oversight.
- Facilitating sustainable cost controls.

All of the initiatives that are not dependent on automation are now complete. The remaining initiatives have been transitioned to TEPIP.

Results and status: Supply Chain Services

“EPIP forced us to implement uncomfortable but valuable process changes by bringing rigor through the project management process.”

Scott Hampton, Supply Chain EPIP Project Manager

The Supply Chain EPIP is focused on the processes internal to supply chain and the upstream processes that enable supply chain to function more effectively and efficiently. For example, achieving the Plan, Design, Build goal of an 80-percent-stable two-year work plan is an essential ingredient in aggregating purchases of materials and services with sufficient lead time. Standards issued by the transmission standards group established under the Plan, Design, Build EPIP will ultimately streamline inventory on

hand and shrink the catalog of items that need to be purchased.

The Supply Chain EPIP has been focused on four major goals:

- Assure consistency and appropriateness of enterprise-wide supply chain policies and guiding principles.
- Identify opportunities to reduce costs and improve processes and resource efficiencies.
- Develop a supply chain model that meets internal customer expectations while optimizing resources.
- Construct a strategic direction plan as a high-level roadmap for achieving project goals.

These goals are being achieved by implementing 84 recommendations.

The Supply Chain EPIP has implemented 41 of the 84 recommendations established in its approved future-state report. It has made significant progress in institutionalizing strategic sourcing, analyzing and calculating the optimal inventory levels, reducing inventory through elimination of obsolete and excess inventory and reorganizing to facilitate improved knowledge and specialization in categories of spend.

In addition, a thorough review of contracting has resulted in several new procedures to improve quality and reduce risk. Going forward, Supply Chain Services will be reviewing warehousing procedures and logistics services to improve efficiency, as well as continuing to monitor inventories and improve purchasing and the flow of goods from vendor to user.

EPIP concluding as an agency-wide program

“We’re dependent on automation to deliver our process improvements, and we’re looking to common, enterprise solutions to meet multiple needs with less overhead, more horsepower and much better synergy.”

Steve Westmoreland, IT EPIP Project Manager

With the conclusion of 2008, BPA is phasing out EPIP as an agency-wide program. Key agency targets, managers’ performance contracts and metrics are being used to ensure that residual work is embedded in the business. The formal transition process provides a clear audit trail and continuous chain of responsibility as the various EPIP teams move to continuous improvement.

Major remaining recommendations largely involve automation and are being pursued in concert with IT. Most of these are located in Transmission Services and will be implemented through the Transmission Enterprise Process Improvement Program or TEPIP.

Critical automation in support of TEPIP process improvements and customer service is a theme in the slate of Key Agency Targets for FY 2009. The Customer Billing and Contract Management IT project, a Marketing and Sales EPIP recommendation, is also moving toward completion as a Key Agency Target.

Transmission improvement efforts evolve

“We underestimated the need for automation that would be created by the EPIP projects. Every EPIP required one or more automation solutions to enable and maximize the efficiency of the redesigned processes. The prioritization process designed in our IT EPIP is being put to good use to focus our resources on the most vital business needs.”

Larry Buttress, CIO

Major process improvements in the O&M, PDB, Supply Chain and Asset Management projects await the completion of enabling technology before they may be implemented. Some processes span several functional areas and must be managed holistically. Many of the technology initiatives require systems that are inextricably interwoven and interdependent. A grass-roots effort emerged out of recognition of the interdependencies. Project managers met and collaborated, and the result is a fully integrated program called the Transmission Enterprise Process Improvement Program or TEPIP.

TEPIP encompasses the automation of:

- The Transmission Asset System.
- The Work Planning and Scheduling System.
- Microsoft Project Server 2007 implementation.
- Field connectivity, deployment of greater bandwidth and videoconferencing in field locations.
- eGIS, a portal for access to a multitude of data sources needed by field personnel.
- Mobile computing solutions to enable field personnel to efficiently employ all of the automation being implemented.
- The Supplemental Labor Information System, a solution to more efficiently and effectively manage supplemental labor resources.
- e-Commerce initiative, which is a way to speed purchases through electronic means.

These automation initiatives have companion process design, training and change management efforts that are essential to the success of the automation implementation.

TEPIP is also the vehicle for managing interdependent initiatives that can be better managed centrally than in siloed EPIP projects. The importance of TEPIP has been underscored by the creation of a FY 2009 Key Agency Target tied to its success.

Continuous improvement

“EPIP is arguably the most successful program of its kind in BPA history. We have redesigned many processes and generated significant improvements. We now have an opportunity to embrace continuous improvement as part of the way we express our values of trustworthy stewardship and operational excellence.”

Anita Decker, COO and EPIP Executive Sponsor

Implementation of new processes is in many ways just a beginning. New processes must mature and refined for their full value to be realized.

Performance metrics have been developed in all process improvement areas. Maturation of the metrics also will require ongoing work and refinement. Some metrics will prove to be highly useful and others less so. The winnowing of the slate of metrics to a handful of those most meaningful to managing the business will be an important mission as we continuously improve. Metrics will also serve to disclose unintended consequences of changes early to allow corrective action. Metrics that can be benchmarked will provide comparisons that will help us to determine how we are performing against peer organizations. As an EPIP is transitioned, process owners are identified who have the responsibility for monitoring and continuously improving their respective processes.

While some process improvements are quickly and readily apparent, some processes must be in place for a relatively long time before the benefits they produce become visible. The standards group in transmission is deploying standards for assets with lives of up to a half century or more. Benefits accrue as new lines and substations are built and old equipment is retired, but this is a slow, gradual process.

One significant benefit of EPIP is the exposure and training it has provided the BPA workforce. Hundreds of employees have served EPIP teams, learning about process improvement. These individuals will have a major role in continuously improving new processes and identifying opportunities for BPA to be more effective and efficient. They are well equipped to do this because of the hands-on experience they have gained.

Follow up audits

“Inspect what you expect” is an age-old management maxim. The EPIP teams know that there will be an audit approximately one year after transitioning to continuous improvement status. The purpose of these reviews is to ensure that process improvements made during EPIP are still in place and viable.