

number of scrubbers

number of scrubbers built on coal units between 2003 & 2011 413.8 billi

cubic meters of total annual plant water d

## tititi 5.3 million

approximate number of AEP customers



energy economy environment

Sustainability at American Electric Power

Historical & Projected Environmen

2008

2009

2010 **|** 

Estimated

)12 Estim

Fetimated





## Statement GRI Application Level Check

GRI hereby states that **American Electrical Power** has presented its report "2011 Corporate Accountability Report" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

 $Application \ Levels \ do \ not \ provide \ an opinion \ on \ the \ sustainability \ performance \ of \ the \ reporter \ nor \ the \ quality \ of \ the \ information \ in \ the \ report.$ 

31 March 2011, Amsterdam

Global Reporting Initiative





The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance, www.nalphalorenortina.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 21 March 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

## **Audit Review of This Report**

AEP Audit Services performed a review of the information included in this 2011 AEP Corporate Accountability Report. Financial information was reconciled with AEP's audited financial statements, if applicable, or to such other sources as deemed appropriate. Processes used in accumulating the significant nonfinancial data were reviewed and the data were reconciled to the source(s). The appropriateness of the context in which data are presented was also reviewed. Finally, the forwardlooking information presented was verified as consistent with other public information disclosed by AEP. Based upon our review, we believe the information contained in the report is appropriately stated, and that the processes followed in accumulating both the financial and nonfinancial information are reasonable.

## **Contact Information**

For information about this report, the content of our website or AEP's sustainability initiatives, or to provide feedback, please contact Sandy Nessing at *smnessing@AEP.com* or Jerra Thomas at *jmthomas2@AEP.com*.

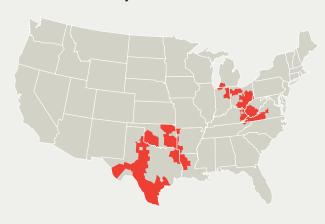
## **About This Report**

This is AEP's second integrated report combining the Annual Report to Shareholders with the Corporate Sustainability Report. This is our fifth year of reporting our sustainability performance. This printed report is supported by a website—*www.AEPsustainability.com*—that includes significant additional data and information about AEP's performance. This report is based largely on calendar year 2010 with exceptions for early 2011 data as noted. For more information about AEP, visit *www.AEP.com*.

## **Global Reporting Initiative**

We follow the GRI guidelines for reporting our performance. A complete index of performance indicators begins on page 48. All of the data supporting these indicators can be found on our website—*www.AEPsustainability.com*. We also report on electric utility industry-specific indicators.

## **AEP Service Territory**



## **Company Overview 2010**

American Electric Power has been providing electric service for more than 100 years and is one of the nation's largest electric utilities, serving 5.3 million customers in portions of 11 states.

| Revenues (in billions)                  | \$14.4                        |
|---|-------------------------------|
| Net Income (in millions)                | \$1,211 <sup>1</sup>          |
| Earnings Per Share                      | \$2.53 <sup>1</sup>           |
| Cash Dividends Per Share                | \$1.71                        |
| Service Territory                       | 200,000 square miles          |
| Transmission                            | 39,000 miles                  |
| Distribution                            | 220,000 miles                 |
| Generating Capacity                     | <b>39,000 MW</b> <sup>2</sup> |
| Generating Stations                     | 69                            |
| Renewable Portfolio (hydro)             | <b>364 MW</b> <sup>3</sup>    |
| Pumped Storage                          | 586 MW <sup>4</sup>           |
| Renewable Portfolio (wind, solar)       | <b>1,504 MW</b> <sup>5</sup>  |
| Total Kilowatt-hour Sales (in millions) | 206,000                       |
| Total Assets (in billions)              | \$50.5                        |
| U.S. Customers (year-end, in millions)  | 5.3                           |
|   |                               |

- Generally Accepted Accounting Principles.
- <sup>2</sup> Represents nominal capacity; includes 270 MW of mothballed/decommissioned generation, AEP's interest in Ohio Valley Electric Corp., purchased power agreements and renewables.
- <sup>3</sup> Excludes pumped storage; includes owned capacity and purchased power. Nameplate capacity.
- <sup>4</sup> Nominal capacity.
- <sup>5</sup> Regulated wind and solar capacity online or under contract. Name-plate capacity.

AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Co. (in Arkansas, Louisiana and east Texas).

The company is based in Columbus, Ohio.





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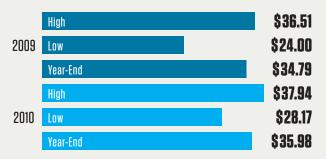
© 2011 American Electric Power Co., Inc.

## **AEP Economic Impact 2010**

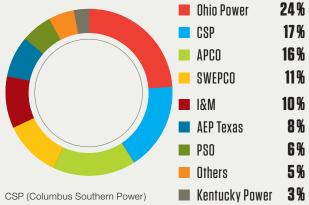
| Employees (year-end)                     | 18,712                      |
|--|-----------------------------|
| Wages                                    | \$1.8 billion               |
| Construction Expenditures                | \$2.3 billion 1             |
| Local Taxes                              | \$489 million               |
| State Taxes                              | \$361 million               |
| Federal Taxes                            | \$326 million               |
| Goods & Services (does not include fuel) | \$3.6 billion               |
| Goods & Services from Diverse Suppliers  | \$340 million               |
| Remaining Value of All Contracts         | \$1.04 billion <sup>2</sup> |
| Coal Purchased (tons)                    | 64.6 million                |
| Coal Average Purchase Price (per ton)    | \$44.82                     |
| Corporate Giving                         | \$23.7 million <sup>3</sup> |
| Economic Development Contributions       | \$2.7 million <sup>4</sup>  |

<sup>&</sup>lt;sup>1</sup> Construction expenditures include those expenses listed in the Cash Flow Statement.

## Market Price-Common Stock



## 2010 Ongoing Earnings Contribution



CSP (Columbus Southern Power)

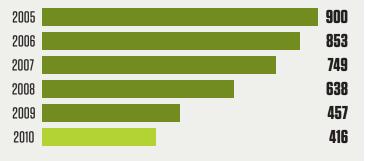
APCO (Appalachian Power Co.)

I&M (Indiana Michigan Power)

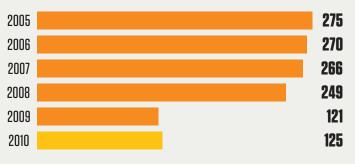
PSO (Public Service Company of Oklahoma)

SWEPCO (Southwestern Electric Power Co.)

## Total System-Annual SO<sub>2</sub> Emissions (in thousand U.S. tons)



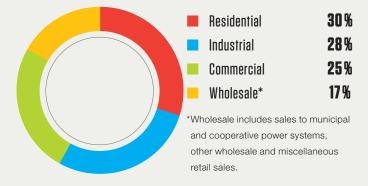
## Total System-Annual NOx Emissions (in thousand U.S. tons)



## Total System-Annual CO<sub>2</sub> Emissions (in million metric tons)



## 2010 Energy Sales



<sup>&</sup>lt;sup>2</sup> Supply chain purchased contracts and inventory system.

<sup>&</sup>lt;sup>3</sup> Includes \$11.8 million of AEP Foundation grants.

<sup>&</sup>lt;sup>4</sup> Includes all grants and contributions by utility units to support economic development.

## **Index of Topics**

- A Message from the Chairman & CEO
- Leadership, Management & Strategy
- Business Performance: Financial
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## Statement of the AEP Board of Directors

The AEP Board of Directors has assigned the responsibility for monitoring and overseeing the company's sustainability initiatives to the Board's Committee on Directors and Corporate Governance. Last year, the Committee supported the integration of sustainability reporting with financial reporting and provided management with guidance for the proposed approach to the corporate accountability report. Stakeholders expressed approval and appreciation for AEP's leadership with this integrated approach to corporate reporting and we continue it this year.

The Committee and AEP management thoroughly reviewed the company's sustainability objectives, challenges, targets and progress and reported the results of the reviews to the full Board. The Committee reviewed and discussed the final text of this report before recommending its approval by the full Board of Directors.

from management and from the Committee on Directors and Corporate Governance about the company's sustainability initiatives and from management and Board committees about the company's financial reporting and economic performance. Topics in this report have been the subject of active discussion at the Board and Committee meetings. All members of the Board reviewed the report in detail and at the conclusion of this review process the Board of Directors adopted a formal resolution approving the report.

The Board believes this document is a reasonable and transparent presentation of the company's plans and of its environmental, social and financial performance. The Board has emphasized to management that it will continue to be evaluated by its success in executing the company's strategic plan to meet stakeholders' and the Board's expectations, including being agile in responding to changing circumstances while respecting the commitments made

Lester A. Hudson, Jr.

Cake Mudson

## A Message from the Chairman & CEO

## **Dear Friends:**

To grow, prosper and remain sustainable, we must embrace change and transformation. Change requires leadership, courage and an open culture. Transformation demands candor, trust and collaboration as we engage with many different stakeholders to find the best solutions. Above all, sustainability requires shared commitment, clear intent and a solid plan of action. The changes under way at AEP will transform our operations, reduce our environmental impacts and ensure our long-term financial health.

Our sustainability journey has already carried us far. Our accomplishments include significant reductions in air emissions; improved employee safety and health;

improved system reliability; investments in technologies that will shape the future of energy production, transmission, distribution and use; the growth of our modern transmission business; reductions in our own energy use; increases in our fuel diversity, including the use of renewable resources; sustainable dividends for our shareholders; a stronger balance sheet; new partnerships with many stakeholders; and improved service to our customers. We are proud of these achievements.

But the future looks much different than before. The road ahead is paved with significant challenges for our company and our customers that were not on the radar even three years ago. A combination of factors is forcing us to look at our business in a new light. Key drivers include eroding tolerance by customers for rate increases; denial by state regulators to recover our investments in carbon capture and renewable energy; slow economic recovery in most of our states; more complex and stringent environmental regulations that will push customer rates still higher; the rising cost to operate older, less efficient coal units; the cost-competitiveness of natural gas compared with other fuels; a dramatically different political landscape; and new concerns about the future of nuclear power in the wake of the Japanese nuclear crisis.

We are developing a transition plan that addresses grid reliability, customer bill impacts, sustainable job creation and the need for a more diverse fuel portfolio in the future. It will also transform



the way in which we interact with our customers. All options are being analyzed and when our plan is complete, we will share it.

We expect natural gas will play a larger role as shale reserves are developed. We expect gas suppliers to responsibly address environmental and safety issues. Other energy sources also will play a bigger role, including renewable resources where they are accepted, nuclear power, hydro power, demand response programs and energy efficiency. Transmission will be a more critical resource, too. Consequently, our capital investments will shift as we build natural gas plants, continue to invest in transmission and update aging equipment. This strategy will benefit our customers, our investors, the environment and our

other stakeholders. But it will come at a cost.

## **Energy Policy Lacking**

We are in desperate need of a comprehensive federal energy policy that addresses environmental concerns and energy security and establishes a long-term energy strategy for the nation. Only a coordinated national plan can ensure our energy security and reliability. Without it, energy-related decisions will, out of necessity, be more tactical than strategic.

If the U.S. Environmental Protection Agency's (EPA) proposed rule to control mercury and other emissions is a harbinger of the agency's plans for several other regulations, our transformation may be accelerated, but with serious financial consequences. It most certainly will increase our costs to comply as well as what our customers pay for electricity.

Let me be clear: We support the Clean Air Act. But the EPA's process and timelines are not realistic, and that is what we take issue with. We support rational environmental regulation that provides significant public health and environmental benefits. But compliance requirements must be affordable and at an achievable pace. Already, we know that compliance with the proposed new hazardous air pollutants rule on the prescribed timeline will be extremely difficult and will prompt premature retirements of some coal units across the country.

## We are in desperate need of a comprehensive federal energy policy that addresses environmental concerns and energy security and establishes a long-term energy strategy for the nation.

The price tag could be staggering; we won't know the final cost until all of the regulations are finalized, but we estimate the cost of compliance under the EPA's timeline could be more than double what we have spent so far for environmental controls. Our concern is the failure to consider all of the regulations in total, rather than one-by-one. This impedes our ability to determine which coal units have to be closed and which will remain in service. This uncertainty complicates our resource planning. We also are deeply concerned that the EPA's process does not consider the loss of jobs and community tax revenues and the impact of higher electric rates, especially on low-income customers and electric-intensive industries.

We hope the EPA will listen to our feedback. A few changes to the combined rules would bring tremendous value, allowing us to achieve compliance without harming local and national economies.

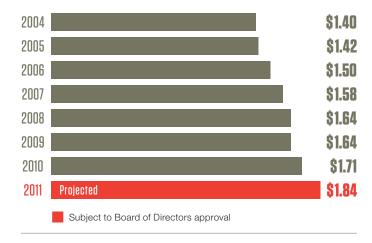
Global warming continues to be a concern and one that must be addressed internationally. Our position on this issue has not changed. No single country or company can solve it. It is our fundamental belief that the best way to address this issue is through international collaboration. That's why in 2011 we signed agreements with two of China's largest energy companies to support knowledge and technology exchanges related to carbon capture and grid developments. We also believe that, here in the United States, the best way to address climate change is through legislation.

The lack of a strategic energy policy also hampers the development and deployment of new and expensive technologies that we need to address climate change. Without a legislative mandate, regulators are telling us loud and clear that they are not willing to pay for them. AEP took the global lead and the financial risk to advance carbon capture and storage (CCS) because this technology is critical if we are serious about reducing carbon dioxide emissions. But regulators in Virginia rejected our request to recover costs associated with the project. We are still evaluating a regulatory decision on the project from West Virginia. We learned a lot from our 20-megawatt (MW) CCS validation project at the Mountaineer Plant in West Virginia, enhancing our knowledge of the process and technology. But substantial financial challenges remain.

Through a joint funding effort with the U.S. Department of Energy's Clean Coal Power Initiative Round 3, we have begun geologic, engineering and design work for a commercial-scale 235-MW project that could be operational by 2015. We also recently received \$4 million from the Global Carbon Capture & Storage Institute in Australia to support engineering work. It is essential that this

## **AEP Dividend History**

Compound Annual Growth Rate = 4.0% (\$/share)



technology be brought to maturity and demonstrated on a commercial scale if we want to maintain coal as an option in a carbon-constrained world. When there is a federal requirement and/or adequate funding to support CCS, AEP is up to the challenge. But without these assurances, the future of our project is very unclear.

We need other options for coal, too. That's why the John W. Turk, Jr., ultra-supercritical coal plant under construction in southwest Arkansas is important. Once complete, this will be one of the most efficient coal plants in the United States. It is also the first application of this technology in this country.

## **Balancing All Stakeholder Needs**

We are engaged in candid, ongoing discussions with regulators, legislators and many other stakeholders about our concerns. These are difficult and complicated issues, and there are no easy solutions. If we work together, we think the outcome can be positive for stakeholders, customers, the environment and society. We believe sensible regulation and policy can be crafted that balances the costs and benefits. If done right, it would create jobs and economic opportunity, achieve the long-term environmental goals, and spread the costs over time to avoid unnecessary financial hardship for customers. We will continue to connect with our stakeholders and seek their input as we move forward.

We are preparing to undergo a transformation that will significantly change our business. Our responsibility is to manage and reduce our environmental impacts as we deliver reliable electricity

# Our 2010 earnings of \$3.03 per share on an ongoing basis were at the upper end of our projected range and exceeded 2009 ongoing earnings per share of \$2.97. Our total shareholder return was nearly 9 percent for 2010.



AEP Chairman & CEO Mike Morris addresses the U.S.-China Strategic Forum on Clean Energy Cooperation in Washington, D.C., in January 2011.

to customers. We will increase our earnings potential as we invest in our existing distribution and generation infrastructure and expand the transmission grid inside and outside of our service territory. We will do it by developing our work force to build, operate and maintain new technologies essential to our success. We also are committed to engaging our stakeholders in honest and open dialogue about our plans while doing a better job of informing our customers about the cost and value of electricity.

Our business transformation touches every one of our operating companies, customers, shareholders, employees, communities, legislators and regulators. To be successful, we must continue to deliver strong earnings this decade and beyond; we cannot meet our commitments unless we have the resources to do so.

## 2010 Financial Performance

We achieved strong financial results last year, in part due to aggressive cost cutting and favorable weather. We also rewarded our shareholders with higher dividends. Our continued financial health and ability to create long-term value for shareholders depends upon our ability to transform our earnings as we transform our company.

As we shift our focus from coal generation to resource diversity and the efficient delivery of energy through transmission and grid investments, we also will transform the earnings stream of the company. That is our integrated plan for growth.

The actions we took during the past two years put us on the road to slow and steady growth this year. Revenue increased to \$14.4 billion from \$13.5 billion in 2009, largely due to successful rate cases, which allowed for recovery of capital already invested and for incremental costs such as fuel. Weather and a 5 percent rebound in industrial sales also helped revenues.

Operations and maintenance (O&M) expenditures for the entire system, on a Generally Accepted Accounting Principles basis, increased \$449 million in 2010. The increase primarily related to \$293 million (pretax) of severance costs due to our cost reduction initiatives and \$114 million (pretax) of expenses associated with dollar-for-dollar rate recovery. Our capital investments of \$2.2 billion were down from almost \$2.5 billion in 2009 as we responded to regulator and customer concerns about rate increases.

Our 2010 earnings of \$3.03 per share on an ongoing basis were at the upper end of our projected range and exceeded 2009 ongoing earnings per share of \$2.97. Our total shareholder return was nearly 9 percent for 2010, providing investors in AEP with a

steady, solid, competitive return in today's marketplace.

I am delighted that, twice last year, our board of directors voted to increase the quarterly dividend to shareholders. The total quarterly dividend increase of 12 percent helped to keep our total shareholder return competitive and allowed us to reward our shareholders until our earnings growth can accelerate from increased capital investment and sales growth. It was a thrill to ring the closing bell at the New York Stock Exchange in June 2010 in celebration of AEP's 400th consecutive quarterly dividend payment, a rare occurrence indeed. On March 10, 2011, we paid our 403rd consecutive quarterly dividend to our shareholders.

## **Operational Performance**

Operating more efficiently and adapting to the changing economic and regulatory environment requires our work force to change, too. We reduced our work force by more than 2,400 employees in 2010 in a realignment of our cost structure with a slow but steady economic recovery. Most of those who left did so voluntarily.

I am pleased to report that, despite this restructuring and associated distractions, our overall safety performance was excellent. AEP employees share a deep commitment to safety and health and strive to live up to that commitment every day. I am profoundly grateful to our employees and our leadership for their dedication to safety and health. No employee lost his or her life while working for AEP in 2010, fewer employees were harmed on the job and the severity of injuries was at a near-record low. Our board of directors passed a resolution commending employees for performing at a level that was among the best in our company's history.

We have made significant progress, but we can and will do better to improve our safety and health record. Three employees lost their lives on the job during the past five years. We will not tolerate any compromise of safety standards, and we will continue to work hard to achieve and maintain zero harm.

Our environmental performance is excellent: We are a top performer in our industry by almost every measure. We are proud that this performance is outstanding for a utility of our size and scope. However, we fell short of our goal of zero environmental violations. In 2010, we had three violations and paid minimal fines of less than \$10,000. As we learn from these events and take steps to prevent recurrences, our goal continues to be zero violations.

Our distribution system reliability improved in 2010. The average length of time that customers were without power and the fre-



AEP Chairman & CEO Mike Morris and other AEP leaders ring the NYSE's closing bell on June 3, 2010, in celebration of the company's 400th consecutive dividend.



quency of interruptions improved significantly, helping us to achieve our best performance in five years. Our gridSMART® initiative, under way in four states, will transform our relationship with our customers from one in which the customer uses power and gets a bill to one in which we work together to save electricity, lower energy demand and consumption, and reduce customer costs.

Our transmission strategy to expand inside and outside of our service territory also moved forward. Among our successes were the establishment of transmission companies in Ohio, Michigan and Oklahoma. Applications are pending in West Virginia, Kentucky and Indiana.

## **Preparing for the Future**

We all have a role in ensuring the quality of our energy future. We believe that our customers want to use energy more efficiently, and in most of our service territories, programs and technology are helping them to accomplish this goal. Moving forward, we want to operate our system more efficiently; diversify our fuel generation; develop a more robust grid to enable the utilization of cleaner, more efficient and economic energy; and prepare for the electrification of the transportation sector.

We have many initiatives under way that position us to achieve these goals. We will also work to prepare our regulators, employees, customers and communities for the full impact of coal unit closings, new environmental mandates and the true cost of clean energy. We are ready to listen to ideas they may have for solutions to these complex problems. We will continue to communicate these issues with our stakeholders and collaborate with them to find common ground and pursue common sense solutions.

We are saddened by the terrible loss of life and destruction associated with the earthquake and tsunami that hit Japan in March. We are also concerned about the events at the Fukushima Daiichi Nuclear Station in northeastern Japan. Although all the lessons to be learned are not yet known, AEP remains committed to learn from these events and to operate our Cook Nuclear Plant to one standard – "Excellence." We also believe that it would be unfortunate and inappropriate to discount nuclear energy as a viable and

critical global energy resource for the future.

Finally, a few personal notes. I have tried to prepare for the future since my first day here in 2004. We created an extensive succession planning initiative to broaden the knowledge and skills of our executives and to ensure that the most qualified candidate takes the helm when I step down as CEO. I am very proud that this process resulted in the board having external candidates and four strong internal candidates from which to choose. The board named Nick Akins as president of AEP, and he will work closely with me this year as I continue in the roles of chairman and CEO. If the succession plan continues according to schedule, Nick will also become CEO later this year.

Two long-time board members will retire this year, bringing yet more change to our leadership team. We are most grateful for the dedicated service of Donald M. Carlton and E.R. "Dick" Brooks, both of whom have served since 2000. Prior to the 2000 merger of AEP and Central and South West Corp. (CSW), Dick was CEO of CSW for nearly 10 years. Both board members have been passionate advocates for employee safety, our nuclear program and our company's tradition of excellence in governance.

We are in a time of great transformation. Our vision for cleaner, more affordable and more reliable electricity is central to America's economic recovery and growth. As a nation, we must embrace energy as a powerful engine for our country's economic future; as a company, we must strive continually to balance the needs of our customers and shareholders with measurable benefits to the environment and society. The men and women of AEP are making bold changes that will lead us toward a more secure energy future; I invite you to join us in leading this exciting transformation.

Sincerely,

Michael G. Morris

Chairman & Chief Executive Officer

April 2011

## **Leadership, Management & Strategy**

## An Integrated, Stakeholder-Informed Strategy

The connections between our environmental, financial and social performance are central to our strategy and to our thinking about who we are and what we do. The more we align and integrate our activities in these three areas, the more successful we will be.

For more than 100 years, AEP has provided affordable, reliable electricity for our customers; steady, competitive returns for our shareholders; and safe, rewarding jobs for our employees. While doing so, we have worked to protect the environment and to support the communities in which we operate.

The link between our environmental and financial performance has become much stronger and clearer to us during the past several years. Environmental issues became a larger part of our risk portfolio, and our performance as a company began to be seen, at least in part, in terms of our ability to address global climate change. We have made major investments in environmental controls at many of our coal-fired plants, which have resulted in reductions in sulfur dioxide and nitrogen oxide emissions by about 80 percent since 1980. While there is a clear environmental benefit, these investments have also led to major rate increases for our customers. At the same time, we have led the way in testing and deploying new technologies that will make us more efficient, give customers more control over energy use, enable modernization of the grid and further reduce our environmental impacts.

AEP was presented with a new challenge in 2010. In Ohio, customers have had a choice for generation service since 2001, but 2010 was the first year in which we have seen active retail marketing that targets our commercial customers. While we expect this

Construction continues on the John W. Turk, Jr., coal plant, which is scheduled to begin operations in 2012.



trend to continue in 2011, we are taking steps through the regulatory process to address this while entering the competitive market ourselves. Our new AEP Retail Energy business has initiated retail marketing efforts in our service territory as well as other service territories in Ohio. Read more about this in *Public Policy*.

Employee and other human-resource issues remain vitally important. We are focused on a strategy that ensures we can attract and retain the talent we will need to build, operate and maintain new technologies and interactive energy supply-and-demand systems, such as our gridSMART® initiative.

Our extensive stakeholder engagement process has helped to inform our business strategy, and it has begun to produce synergies and business opportunities for us. We are discovering that many of the lines we had drawn separating financial from nonfinancial strategies, activities and reporting are no longer relevant and, in some cases, are counterproductive.

In response, we have worked to embed and integrate environmental and societal issues and performance into our strategy, our operations and our measurement and reporting systems. For example, in our Engineering, Projects & Field Services organization, the annual business plan is based on our sustainability strategy, and we've designed goal-setting and performance systems that emphasize the connection between each employee's job and our company's overall environmental, social and financial performance.

## **Strategic Transformation**

The ancient Greek philosopher Heraclitus said, "The only constant is change." He could have been describing the electric utility industry and AEP in particular. We are in the midst of a fundamental transformation, including:

Our operations are increasingly integrated: Our operating company presidents are responsible for business performance across generation, transmission and distribution. Consequently, these business units are working more closely and sharing goals and accountability for overall performance at the operating company level. The company presidents are actively involved with resource planning, cash flow, balance sheets, income statements and stakeholder relationships. This business model allows the company presidents to align investment decisions with financial, regulatory and operational priorities and to manage our social and environmental performance in an integrated fashion.

Our fuel mix is changing: We are a coal-centric electric utility, but

## The ancient Greek philosopher Heraclitus said, "The only constant is change." He could have been describing the electric utility industry and AEP in particular. We are in the midst of a fundamental transformation.

that is changing. We plan to invest in cost-effective environmental retrofits of larger, newer coal-burning units and retire older, smaller units. We eventually will build more natural gas generation, similar to the 508-megawatt (MW) J. Lamar Stall combined-cycle gas unit in Louisiana, which began operating in 2010, and the 580-MW Dresden combined-cycle gas plant under construction in Ohio. We are completing the ultra-supercritical John W. Turk, Jr., Plant in Arkansas.

Technology is changing: We continue to explore different and new technologies that could play a pivotal role in how electricity is produced, distributed and used. Our gridSMART® projects in Ohio, Texas, Oklahoma and Indiana are giving us practical experience in smart grid technologies, from energy storage and distributed generation to smart meters and voltage control. While we are learning a lot about these technologies, customers have yet to fully understand how to take advantage of them. We will pursue the deployment of smart grid technologies where regulators are supportive.

Our culture is changing: We strive for openness, candor and trust in all areas, especially as they relate to safety and health. For example, when job conditions change, employees know they must stop and re-evaluate the risk. We have not yet achieved the level of openness we strive for, but the change in our culture has been significant. Read more about this in *Stakeholder Engagement*.

Our values continue to guide us: Our values of safety, fairness, trustworthiness, responsibility, citizenship, respect and caring continue to commit us to high standards of ethics and quality. Even as our strategies and operations evolve in order to help us remain successful, our core business mission and objectives are the same as they have always been.

## Changes in Leadership, Governance & Management

Our leadership and management structure also is in transition. Leadership takes many forms. One of them is the ability to deal effectively with change by having vision, setting a clear direction, aligning human and financial resources, and motivating people to move forward. We believe that AEP is fortunate to have a leadership team that is prepared to deal with today's enormous changes.

Our conduct is guided by our Principles of Business Conduct, which require us to operate with integrity, fairness, respect and care. We seek to foster an environment in which employees know their concerns are addressed respectfully, confidentially and in a timely manner. Our "24/7" confidential ethics hotline is an important

employee tool for providing that assurance. We also communicate with employees regularly about ethics and compliance via e-mails, videos, the company's intranet and a dedicated ethics and compliance blog for employees. Read more about the culture of ethics and compliance in *Work Force*.

We have a deep commitment to succession planning and during the past five years, several senior executives were given different assignments to expose them to all aspects of the company's operations. This process resulted in four internal executives being considered by the board of directors as potential candidates to succeed Mike Morris as president and CEO of AEP.

In late December, after reviewing internal and external candidates, the board appointed Nick Akins, who previously led our Generation business, as president of AEP. If the succession plan continues on schedule, the board will name Nick CEO later this year. Until then, he will work closely with Mike and with Vice Chairman Carl English.

The board's Committee on Directors & Corporate Governance has oversight over this report and provides input and guidance to management on selected issues. The board holds management accountable for sustainability and financial performance, as described in a board statement that is published every year in this report. The board receives semiannual updates on our progress, although discussion occurs throughout the year.

Our efforts to make AEP a leader in corporate governance were recognized in 2010 when AEP was named one of the 20 "Most Responsible Corporations" in the United States by GovernanceMetrics International. The ranking was based on board

accountability, internal controls, shareholder rights, remuneration, and other corporate governance codes and principles. AEP was specifically cited for its extensive reporting on environmental and social performance.

## **Risk Management**

AEP faces a variety of risks related to environmental and other public policy issues, safety in the workplace, grid security, financial and operational performance, and

AEP President Nick Akins



other matters that could affect the company's competitiveness or reputation. Effective risk management enables us to respond and adapt quickly and effectively in the rapidly changing environment described in this report.

We continuously examine our levels of acceptable risk based on changes in the internal and external operating environment and on specific circumstances. We weigh the potential impact of various risks on our financial health and reputation and on our ability to comply with legal and regulatory requirements. Our management team and board of directors discuss these issues and weigh our risk management options on an ongoing basis.

Our Enterprise Risk Oversight group develops and applies enterprisewide risk management tools. It gathers and analyzes risk-related information from business units and reports to the Risk Executive Committee and the Audit Committee of the board of directors. This enables management and the board to understand, evaluate and respond to the significant risks facing the company.

Our Risk Executive Committee meets regularly to monitor the material and emerging risks facing the company. It reviews and evaluates the response to these risks and will request risk mitigation from business unit leaders, if necessary.

Risk management occurs at all levels of AEP. Individual business units are responsible for identifying, analyzing and assessing their risks and for implementing appropriate risk management controls. For example, we manage fuel inventory and purchases to balance supply needs with the ability to secure regulatory recovery of fuel costs at each power plant. This localized approach to risk management reduces the likelihood that a power plant will run short of fuel and reduces risk to our shareholders and customers.

In 2010, we began to track our sustainability commitments in relation to the company's material risks. When reporting progress, business units are asked to identify actions that may create risks for the company. This ensures alignment of goals and actions and helps to identify emerging issues and trends. It also helps to inform goal setting and decision making.

Business readiness for high impact/low probability events has always been important, but it came under increased scrutiny in the wake of the Deepwater Horizon oil leak in the Gulf of Mexico, the Upper Big Branch mining disaster in West Virginia and the nuclear crisis in Japan.

AEP has business continuity and disaster recovery plans in place. Every business unit has a business continuity plan specific to its needs that addresses people, processes, property and other factors. For example, we have plans to respond if a pandemic were to cause widespread employee absences and supply disruptions, which would affect our ability to serve our customers.

In our Fossil/Hydro unit, we use predictive maintenance technologies such as vibration analysis and infrared thermography to help identify the potential for equipment failure in our power plants. In addition, we monitor industry experience to develop proactive approaches to minimizing our risks. For instance, following

the Kleen Energy Plant natural gas explosion in Connecticut, we reviewed the startup procedure for the new J. Lamar Stall natural gas plant to ensure that safety zones were properly established. We developed a template for this review that we will use to conduct similar inspections at all of our gas plants.

We benchmark our business continuity plans against those of our peers, recently using the Edison Electric Institute Business Continuity Benchmark survey. This year, we plan to focus on improving our business leaders' understanding of their roles in business continuity activities, refreshing existing plans, improving communication capabilities and setting a five-year road map for continuous improvement.

We are also taking a closer look at our disaster recovery systems, which emphasize recovery of technology systems if we were to experience a catastrophic failure. AEP maintains a 24/7 IT Disaster Recovery Center that makes it possible for us to continue operations in the event of a disaster. Although our disaster recovery infrastructure is continuously monitored and is in a state of readiness, we will analyze the recovery prioritization of business processes to ensure those priorities reflect today's business environment and needs.

## Stakeholder Engagement & Material Issues

A sustainable business strategy is one that is informed, engaged and forward looking. The dialogues that inform our decision making and long-term strategic view often result in collaborative efforts that are good for people, the environment, the economy and shareholders. We conducted or participated in nine stakeholder meetings during 2010 that provided us with insights about a wide range of issues that are important to us, our customers and our industry. These meetings helped shape this report. For a description of our material issues, visit www.AEPsustainability.com.

## Scope of This Report

This is our second integrated report, combining information about our financial performance with data on our environmental, social and governance performance. It also is the fifth year we are reporting on our sustainability performance. We are committed to an integrated reporting approach because it gives a complete picture of how we operate, the decisions we make, the positions we take, our engagement with stakeholders and the consequences of our actions.

Information contained herein is largely based on calendar year 2010, with exceptions for some early 2011 data as noted. Supporting information can be found on our dedicated sustainability website at www.AEPsustainability.com or on our corporate website at www.AEP.com.

## **AEP Board of Directors**

## Michael G. Morris

Age 64; Elected 2004 Chairman & Chief Executive Officer F. P

## E.R. Brooks

Granbury, Texas
Age 73; Elected 2000
Retired Chairman &
Chief Executive Officer,
Central and South West Corp.
A, F, P

## Dr. Donald M. Carlton

Austin, Texas
Age 73; Elected 2000
Retired President &
Chief Executive Officer,
Radian International, LLC
H, N, P

## James F. Cordes

The Woodlands, Texas
Age 70; Elected 2009
Retired Executive Vice President,
The Coastal Corp.
D, H, P

## Ralph D. Crosby, Jr.

McLean, Va.

Age 63; Elected 2006

Chairman & retired

Chief Executive Officer,

EADS North America, Inc.

H, N, P

## Linda A. Goodspeed

Franklin, Tenn.
Age 49; Elected 2005
Vice President,
Information Systems,
Nissan North America
A, N, P

## Thomas E. Hoaglin

Columbus, Ohio Age 61; Elected 2007 Retired Chairman & Chief Executive Officer, Huntington Bancshares, Inc. D, E, H, P

## Dr. Lester A. Hudson, Jr.

Charlotte, N.C.
Age 71; Elected 1987
Professor, McColl School
of Business, Queens
University of Charlotte
D, E, H, P

## Lionel L. Nowell III

Cos Cob, Conn.
Age 56; Elected 2004
Retired Senior Vice President
& Treasurer,
PepsiCo, Inc.
A, D, E, F, P

## Dr. Richard L. Sandor

Chicago, III.

Age 69; Elected 2000

Former Chairman, Chicago
Climate Exchange, Inc.
E, F, P

## Dr. Kathryn D. Sullivan

Columbus, Ohio
Age 59; Elected 1997
Director, Battelle Center for
Mathematics & Science
Education Policy, John Glenn
School of Public Affairs,
The Ohio State University
F, N, P

## Sara Martinez Tucker

San Francisco, Calif.
Age 56; Elected 2009
Former Undersecretary,
U.S. Department of Education,
and former President &
Chief Executive Officer,
Hispanic Scholarship Fund
A, D, P

## John F. Turner

Moose, Wyo.
Age 69; Elected 2008
Managing Partner,
Triangle X Ranch, and
former Assistant Secretary,
U.S. State Department
A, N, P

## **Committees of The Board:**

The chairman is listed in ( ).

A-Audit (Nowell)

D-Directors and Corporate
Governance (Hoaglin)

E-Executive (Morris)

F-Finance (Sandor)

H-Human Resources (Hudson)

N-Nuclear Oversight (Sullivan)

P-Policy (Carlton)



Left to right: Lionel L. Nowell III, Dr. Richard L. Sandor, James F. Cordes, Sara Martinez Tucker, E.R. Brooks, Dr. Donald M. Carlton, Linda A. Goodspeed, Thomas E. Hoaglin, Michael G. Morris, Ralph D. Crosby, Jr., Dr. Kathryn D. Sullivan, Dr. Lester A. Hudson, Jr., and John F. Turner.

## The Business of Sustainability

## A View from Two Members of AEP's Board of Directors

A company's governance and its environmental and social performance are increasingly linked to the bottom line. In fact, in many instances the distinction between financial and nonfinancial information is disappearing. A wide variety of stakeholders, including shareholders, financial analysts and rating agencies, are working to understand the potential impacts of environmental and social issues on core business functions. Many consider the distinction between financial and nonfinancial information to be artificial and counterproductive in this effort.

AEP is very familiar with this evolution. Electricity is vital to quality of life and is the nexus of societal needs and considerations that include public policy, environmental performance, financial health, operational reliability and economic prosperity. We take these responsibilities very seriously and know that they are interdependent.

The convergence of financial and nonfinancial performance has created a dynamic and more complex portfolio of risks and opportunities that is getting closer scrutiny throughout the company, including in the board room. We asked two AEP board members to share their views on these issues. Read the full interview online at www.AEPsustainability.com/ourissues/ strategymgmntgov.aspx.

Tom Hoaglin is chairman of the board's Committee on Directors and Corporate Governance, which has oversight of AEP's Corporate Accountability Report. He is the retired chief executive of Huntington Bancshares in Columbus, Ohio, and has served on AEP's board since 2007.

Lionel Nowell is chairman of the board's Audit Committee. He is the retired senior vice president and treasurer of PepsiCo Inc., of Purchase, New York. He has served on AEP's board since 2004.

## How is sustainability discussed and considered at the board level?

Tom Hoaglin: It is important that our board – any board – under-Thomas E. Hoaglin

stands what it takes for a company to have sustainable success. In our case that includes financial performance because that's what our investors demand. At the board level, it starts by selecting the right CEO, making sure the organization has a good succession plan, ensuring the organization has a strategy that can yield, over time, success that is sustainable, and overseeing the company's risk management processes. Increasingly, however, factors such as adherence to environmental needs and regulations, safety issues and the reliability of operations contribute to the financial success of the organization. Without focus on those issues that are so important to sustainable results, you only have half a loaf. And I think that's why our board is so fundamentally aware of and committed to the importance of sustainability. These topics are discussed regularly in full board meetings and in most committee meetings.

Lionel Nowell: Without question, the board is committed to AEP being a responsible corporate citizen and embraces sustainability as a core value and operating principle. We believe that having a self-regulating mechanism helps the company ensure that its business practices reflect responsibility for, and are in compliance with, environmental, social and economic standards, which is the right thing to do and a prerequisite for success. Through discussions held at the Committee on Directors and Corporate Governance and subsequent full board meetings, we address actions being taken by the company relative to our sustainability commitments, and review appropriate data to ensure those actions have a positive impact on our shareholders, our customers, our employees, the environment and other stakeholders.

Recent studies suggest equity analysts are starting to issue more favorable ratings to companies that exhibit exemplary corporate social responsibility practices in the same manner as financial performance. Furthermore, the board promotes the inclusion of public interest into our decision-making process by voluntarily eliminating business practices that are not consistent with our sustainability objectives. As a result, concern about sustainability influences our thinking and helps to shape our actions.

















Lionel L. Nowell III

## AEP invests significant time and energy engaging with shareholders and many other stakeholders. What's the board's perspective on this process?

**Tom Hoaglin:** Within our industry there is an instinctive aversion by some company executives to working with stakeholders such as environmental groups. Yet, I have been so impressed with AEP's approach, as I think the whole board has, that we recognize the importance of this engagement. We encourage and support management's efforts to reach out to these constituencies, make themselves accessible, keep lines of communication open and listen to their viewpoints and consider them in decision making. We may not always agree, but their point of view is important to us. I think we are all aware that our generation fleet will migrate, over time, to being less coal-centric, but we have to do it at a pace that is digestible for regulators and our customers. The way to get the optimal pace and plan includes making sure we hear the points of view from all of our stakeholders.

Lionel Nowell: I agree with Tom. The common thread is having constructive, open and honest communication. We want to collaborate and have a dialogue because that helps us to come up with solutions that can be mutually beneficial to all concerned parties. And I believe the effectiveness of our approach is suggested by our success in the regulatory arena and the fact that we received no shareholder resolutions this year. Ultimately, our ongoing challenge is to help all of our stakeholders, including our shareholders, understand that we have to work together and respect each other's goals and objectives if we are going to be effective in delivering safe, reliable and affordable electricity to customers and fair returns to our shareholders while meeting our social responsibilities.

## Risk assessment and risk mitigation have become increasingly high priorities for many companies, including AEP. What is the board's role in risk management?

Lionel Nowell: Risk oversight is one of the top priorities for both the board and AEP management. While we have always focused on risk, we've taken additional steps to improve the process by developing a framework for constructively examining our risk assumptions so we can better understand how unexpected events could affect AEP. We also evaluate whether potential unanticipated events are real threats, potential opportunities, or both. Our overall objective is to avoid blind spots by being more proactive. So we have put in place a dynamic risk review process, stewarded by the Audit Committee but owned by the full board, which allows us to create a portfolio of strategic options that prepares the company to be both resilient and responsive to threats and open and agile enough to seize upon opportunities.

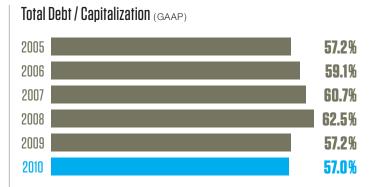
The board is fully and fundamentally aware of AEP's responsibility to comply with laws and regulations and to deliver energy to our customers in the most efficient manner. We are always looking to develop a competitive advantage in managing and operating the company. Although this is a company with growth potential, our ongoing risk will be our ability to achieve everything we have to do in a way that will meet the desires of our stakeholders while creating value for our shareholders.

Tom Hoaglin: AEP has a very organized, disciplined approach within its executive ranks to manage risk, which has served us very well. The board itself is not directly involved in managing the company's risks; our role is to oversee the processes management uses to manage risks. The management team is responsible for identifying short- and long-term risks facing the organization and for assigning responsibility and accountability for managing and mitigating those risks. Each of the board's committees is assigned the appropriate risks to oversee in concert with management. We receive regular updates to ensure that the risks we all agreed upon are getting the right attention and are being mitigated. And that's what our investors would expect and require, and I think all stakeholders would expect that. After all, a company that manages risk successfully is likely to have fewer blips along the way and deliver a much higher level of performance.

Read more about the board's view of ethics, compliance and board independence online at www.AEPsustainability.com.

## Earnings Per Share (GAAP) \$3.43 2008 \$2.96 2009 \$2.53





## **Business Performance:**

## **Financial**

financially strong and responsible company is one that delivers profits to its shareholders, meets its commitments to its lenders and provides benefits to society. The actions we have taken during the past two years put AEP in a position to do all three. Being financially strong allows us to deliver on our social and environmental commitments. Improving our environmental and social performance helps us to increase our financial strength. We believe that our strategy and approach provide value for shareholders, stakeholders and society.

The sluggish economy was a factor in both business and politics. Decreased demand for electricity from the highs of 2007 and 2008, regulatory delays and environmental challenges compelled us to rethink how we manage our operations and where we make our investments. Regulators also demonstrated that they are unwilling to approve rate increases for some renewable and environmental initiatives without a legal mandate to do so. Virginia and Kentucky regulators did not allow us to include renewable energy contracts in our rates, for example, citing cost as the main factor.

Our actions to bolster our financial health during the past two years helped to pave the way for long-term sustainable growth. Our goal is always to efficiently convert the capital investments we make to better serve our customers and to deliver earnings for our investors. Throughout AEP, we reduced our cost structure and brought more discipline to operations and maintenance (O&M) and capital spending. Through this discipline, we were able to improve our balance sheet and maintain adequate liquidity through the renewal and extension of a \$1.5 billion bank facility.

Our credit ratings are at the investment grade level (BBB/Baa2/ BBB), which provides adequate access to debt capital at a reasonable cost. This allows us to continue to invest low-cost debt capital into our critical electric infrastructure to better serve our customers. We must prioritize our spending to secure solid investment-grade ratings by striking the right balance between the cost of operations and these financial objectives.

Our board of directors approved two shareholder dividend increases in 2010, which resulted in a total quarterly dividend increase of 12 percent. This provided shareholders additional cash return on their invested capital during a period when the company was experiencing lower sales and earnings growth than in pre-recession periods. This improvement in the dividend increased our payout ratio to nearly 60 percent, which is at the upper end of our targeted payout ratio of 50 percent to 60 percent.

AEP reached a milestone in June 2010 when it paid its 400th consecutive quarterly dividend. We are proud to have paid a dividend every quarter since mid-1910, which, according to our research, is an achievement only a few U.S. companies can claim. Our record shows that management and the board of directors are committed to providing shareholders an important part of their total return proposition through a cash dividend.

Total shareholder return is an important performance metric. For 2010, our total return was approximately 8.7 percent, exceeding the S&P 500 Utilities Index by more than 3 percentage points and making an investment in AEP a stable and competitive return proposition accompanied by a low risk profile and steady performance.

## 2010 Consolidated Results

AEP's ongoing earnings for 2010 amounted to \$1.45 billion, an increase of nearly \$90 million over our 2009 results. On a per-share

# number of consecutive quarterly dividends paid through March 2011



We expect our earnings to grow at a rate of 4 percent to 6 percent over the 2012 to 2014 time frame, underpinned by capital investments in our utilities leading to rate base growth, continued increases in sales and the ability to earn competitive returns on equity in our operating companies.

basis, 2010 ongoing earnings were \$3.03, up \$0.06 from 2009 results of \$2.97.1 At the end of 2010, AEP had 481 million common shares outstanding, an increase of 3 million shares from 2009.

Our balance sheet showed continued strength in 2010, as our debt-to-total-capitalization ratio decreased to 57 percent, the lowest debt-to-total-capitalization ratio that we have recorded for several years. During the year, we accessed the capital markets for nearly \$1.6 billion in debt, both short- and long-term, and in June 2010, we renewed one of our \$1.5 billion credit facilities for a three-year term that is supported by a strong, diverse bank group. Our liquidity position remains strong and our credit metrics showed improvement during the year as well. AEP and its subsidiaries have stable outlooks from the rating agencies, with the exception of actions taken with respect to the merger of Ohio Power and Columbus Southern Power.

In 2010, we voluntarily contributed \$500 million to our qualified pension plan, increasing the funding level to about 80 percent. This contribution reduced our underfunded pension liability by approximately 10 percent. We plan to voluntarily contribute an additional \$158 million to the plan in 2011 and continue to examine ways to reduce risks through asset allocation and risk management.

Investing capital at levels that exceed our annual rate of depreciation increases our earnings potential. Our capital investments in 2010 totaled \$2.2 billion, down from nearly \$2.5 billion in 2009. This exceeded our annual depreciation of \$1.29 billion but was lower than our capital improvements in 2009 by nearly \$250 mil-

The ongoing recession made AEP's contribution to local economies more important than ever in 2010. We are among the largest employers in the communities where we operate, and the taxes we generate are a major source of revenue to those communities. AEP paid almost \$1.2 billion in federal, state and local taxes in 2010 and employed nearly 19,000 people. Our annual payroll is more than \$1.8 billion and positively impacts families, communities and economies in our service area.

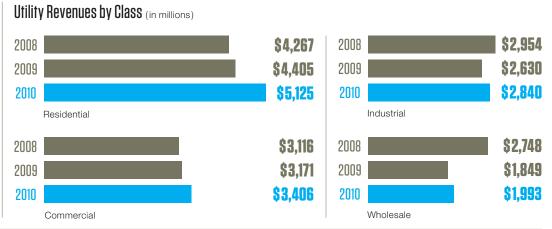
| Liquidity Summary (in millions) |         |            |
|---------------------------------|---------|------------|
|                                 | Amount* | Maturity   |
| Revolving Credit Facility       | \$1,454 | April 2012 |
| Revolving Credit Facility       | \$1,500 | June 2013  |
| Revolving Credit Facility       | \$478   | April 2011 |
| Total Credit Facilities         | \$3,432 |            |
| Plus                            |         |            |
| Cash and Cash Equivalents       | \$294   |            |
| Less                            |         |            |
| Commercial Paper Outstanding    | (\$650) |            |
| Letters of Credit Issued        | (\$601) |            |
| Net Available Liquidity         | \$2,475 |            |

<sup>\*</sup>Actual Dec. 31, 2010

lion. This was due in part to the winding down of our initial program of mandated environmental retrofits at our power plants related to the Clean Air Act Amendments of 1990 and the Clean Air Interstate Rule. Environmental expenditures were still substantial, at \$303 million in 2010. The biggest area of capital spending was in our Distribution business unit, where \$808 million was invested in projects related to customer service and reliability.

<sup>&</sup>lt;sup>1</sup> 2010 GAAP Net Income of \$1.21 billion (\$2.53 per share) compared with 2009 GAAP Net Income of \$1.36 billion (\$2.96 per share).





## **Utility Operations**

Utility Operations represents the generation, transmission and distribution of electricity for U.S. retail and wholesale sales and accounted for 98.5 percent of AEP's ongoing earnings in 2010. The subsidiaries within utility operations earned a respectable 10.76 percent return on equity (ROE) in 2010.

The Utility Operations' ongoing earnings increased \$110 million, from \$1.32 billion in 2009 to \$1.43 billion in 2010. Favorable rate changes and hotter and colder weather throughout our service territory, as well as cost reduction efforts, were largely responsible for the increase.

Rate changes contributed favorably to 2010 ongoing earnings by \$222 million (pretax), net of offsets. These rate changes came from multiple jurisdictions in our service territory and primarily represent rate increases from capital investments made in generation, transmission and distribution across our 11 states.

Weather, which can have a positive or negative impact on results in any given year, helped us in 2010. Throughout our service territory, we benefited from a colder winter and a hotter summer than in 2009. Favorable weather contributed about \$229 million (pretax) from the prior year to our ongoing earnings.

Last year was a period of steady economic recovery for our service territory, primarily in the industrial sector. Industrial customers were hit the hardest in late 2008 and 2009 but provided the biggest sales volume boost in 2010, recovering 5 percent. The rebound occurred across all of our top 10 industrial sectors, with primary metal manufacturing leading the way. This suggests that the effects of the recession are starting to loosen, and we are optimistic that recovery will continue in 2011. Residential and commercial sales volumes for 2010 were essentially unchanged from the prior year on a weather-normalized basis. We hope that as we see continued improvement in the industrial sectors, including the creation of new jobs, we also will see increased growth in residential and commercial demand.

Ongoing O&M expenses for the Utility Operations segment in 2010 were essentially flat with 2009, up just \$17 million to \$3.43 billion. Increased expenses associated with dollar-for-dollar rate re-

covery of \$114 million (pretax) were primarily offset by last year's work force reductions and other cost-cutting efforts as well as lower storm restoration expenses. This flat O&M clearly demonstrated our commitment to financial discipline and efficient spending.

## **AEP River Operations**

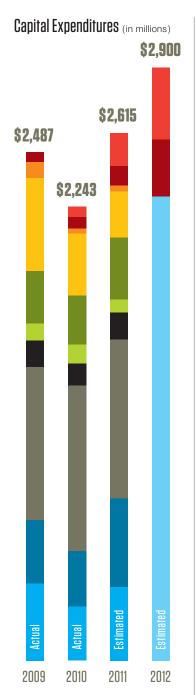
The AEP River Operations segment of our business ships coal and dry bulk commodities mainly on the Ohio, Illinois and lower Mississippi rivers and is one of the largest full-service dry-bulk carriers in the nation. We own or lease 2,581 barges, 45 towboats and 26 harbor boats to support this business. This does not include the 672 barges and 17 towboats dedicated exclusively to transporting coal to our power plants. In 2010, we delivered nearly 72 million tons of cargo, including more than 33 million tons of coal for our own power plants.

Competition within the barge industry for major commodity contracts is strong; there are a number of other companies operating on the same waterways. Ongoing net income decreased to \$40 million in 2010 from \$47 million in 2009 primarily due to the continued weakness in the import market, which lowered freight demand and rates.

## **Generation & Marketing**

Our Generation and Marketing segment includes a competitive power supply and energy trading and marketing business and no regulated assets. This business unit operates primarily in the Electric Reliability Council of Texas region and, to a lesser extent, in the PJM and MISO transmission regions<sup>2</sup>. Ongoing net income declined to \$25 million in 2010 from \$41 million in 2009, primarily due to reduced power prices and trading margins. In 2010, we began operating a retail energy business in Ohio to sell competitive power in the deregulated areas. Read about this in *Public Policy*.

<sup>&</sup>lt;sup>2</sup> PJM Interconnection is the regional transmission operator that coordinates the movement of wholesale power in all or parts of 13 states and the District of Columbia. The Midwest Independent System Operator (MISO) serves 13 states in the Midwest and the Canadian province of Manitoba.



Investment levels greater than depreciation of \$1.3 billion per year cause rate base growth in 2011 and 2012

- AEP Transco
- JV Equity Contributions (net)
- AEP River Ops & Other Non-Utility
- Environmental
- New Generation
- Corporate / Other
- Nuclear Generation
- Distribution
- Transmission
- Fossil & Hydro Generation
- Unallocated

## federal, state and local taxes paid in 2010

## **Other Business Operations**

All other business operations recorded a loss of \$43 million on an ongoing basis for 2010 compared with a \$47 million loss for 2009. Favorable tax adjustments helped to offset a contribution to the AEP Foundation and a fleet lease buyout.

## 2011 Outlook & Beyond

The nation's economic recovery has been more sluggish than expected, but we see signs of improvement in the slow but steady increase in electricity demand. We forecast a 1.7 percent retail sales increase in 2011, led by continued recovery in the residential and industrial segments, even as commercial sales continue to struggle. Our ongoing earnings guidance for 2011 has been set at \$3.00 to \$3.20 per share. The midpoint of this range is an increase of roughly 2 percent from 2010 results. We have also set a midpoint estimate of 2012 earnings at \$3.25 per share, an increase of 4.8 percent from the midpoint of our 2011 guidance.

We expect our earnings to grow at a rate of 4 percent to 6 percent over the 2012 to 2014 time frame, underpinned by capital investments in our utilities leading to rate base growth, continued increases in sales and the ability to earn competitive returns on equity in our operating companies. After 2014, we expect slightly increased growth prospects due to our plan to grow our transmission business through the addition of wholly owned transmission companies within our service territory and joint venture opportunities outside of our territory.

We will continue to be disciplined about O&M spending despite increases in labor and employee-related benefit costs, projecting 2011

expenses about \$34 million less than in 2010. We expect employment to remain near 19,000.

We increased our 2011 capital budget to \$2.6 billion, about \$370 million more than our capital spending in 2010, reflecting our confidence in the continued economic recovery and the need to invest in our utility platform. Transmission expansion is a key component of our growth strategy: We plan to invest almost twice as much capital in transmission growth and enhancements as we did in 2010, an estimated \$707 million (including equity contributions to our joint ventures) compared with \$378 million in 2010. We expect that 2011 is the year we start "putting steel in the ground" through our regulated transmission companies in some of the states we serve.

In addition to transmission growth, investors want certainty around our operations in Ohio, which recently contributed approximately 40 percent of AEP's earnings. In January 2011, we filed a 29-month Electric Security Plan for our Ohio companies along with a plan to merge Ohio Power and Columbus Southern Power. We are confident in our plan for Ohio, which is centered on jobs, economic benefits and investments in the state. We believe the end result of this critical proceeding will be positive for the state, our customers and our company. Read more about the issues in Ohio in Public Policy.

In the face of significant changes in our operating environment, we are prepared to conduct business differently and continue our transformation. Our plan is to seek the regulatory, legislative, customer and investor support that such a transformation requires. Our goal is to maintain O&M cost discipline to keep customer costs low. For the capital we invest for improved customer service, including mandated environmental investments, we seek to efficiently convert these investments into earnings, which will provide competitive returns to our investors. We also plan to allocate additional capital to transmission, which allows for higher growth opportunities and cash flow. We are committed to a plan that allows for steady growth alongside a solid, reliable dividend.

For the complete audited, consolidated financial statements, see Appendix A to the Proxy Statement at www.AEP.com/investors

## 284 miles \*\*

of transmission lines already approved for Texas CREZ project

## ititi 5.3 million

# mėgawatts

of nominal natural gas capacity added to the AEP system since 2005

approximate number of AEP customers

**Business Performance:** 

## **Energy Security, Reliability & Growth**

eliability, security and the ability to meet increased demand for energy are critical issues for us, our industry, our stakeholders and society. Our ability to meet growing demand and to deliver energy reliably from secure sources depends on a mix of economic, environmental and social factors.

We are dealing with aging infrastructure, enhanced grid security concerns, the need to develop and pay for new technology, new environmental regulations that threaten the viability of older generation assets, and community concerns about siting new facilities - all of which require a strategy that takes financial, environmental and social concerns into account. We are committed to finding the right balance to meet the needs of our stakeholders and to remain a sustainable organization.

## **Measuring Our Performance**

Our system was tested by weather extremes in 2010, but we were able to respond accordingly. An unusually cold winter and hot summer across our service territory pushed demand up and required all available units to be operational.

Our peak demands are highest during the cooling season. In 2010, cooling degree days were up 17 percent throughout the AEP system from 2009. By contrast, heating degree days were up only 9 percent. Cooling degree days are the number of degrees that a day's average temperature is above 65 degrees Fahrenheit, prompting greater use of air conditioning. The one exception is Texas, where the measure is 70 degrees. Each degree above this temperature results in an additional cooling degree day. The same is true in reverse for heating degree days.

The duration and frequency of power outages are basic reli-

ability measures that we track continuously. Our performance in 2010 was very good in two of three metrics we track.

The first metric is the System Average Interruption Duration Index (SAIDI), which measures the average length of time a customer is without power during an outage. The three-year average (2008-2010) improved 1.7 percent over the previous three-year rolling average (2007-2009). In 2010, our three-year SAIDI average was 194.7 minutes - our best performance in five years. The improvement can be traced to better maintenance in circuit sections of the system with high customer density/counts, also known as feeder breaker zones, and more effective use of approved tree trimming procedures. Approximately 30 percent of SAIDI is caused by tree limbs falling on or getting tangled in power lines.

The second key reliability metric is the System Average Interruption Frequency Index (SAIFI), which represents the average number of interruptions experienced by a customer. At the end of 2010, the three-year rolling average of SAIFI was 1.397 compared with 1.471 in 2009, an improvement of 5 percent. This also was our best performance in five years.

The third metric is the Customer Average Interruption Duration Index (CAIDI), which represents the average length of time to restore service once an outage occurs. Our performance on this measure did not meet our expectations, as CAIDI increased nearly 3.5 percent in 2010 compared with the 2009 three-year rolling average. CAIDI was negatively impacted by the work force restructuring. We will monitor our performance and staffing levels very closely.

## **Complying with Reliability Standards**

New security and reliability standards arose from the 2003 blackout



Southwestern Electric Power Co. uses a mobile substation that it can quickly position in the event of a substation failure. In October 2010, this unit helped restore power to more than 4,500 customers within 24 hours.



As the economy improves, demand for electricity will naturally increase and could create unbearable pressure on the existing infrastructure. We urgently need to modernize the grid.

that affected much of the Northeast. The North American Electric Reliability Corp. (NERC) requires utilities to be audited on compliance with these standards. Later in 2011, AEP will undergo its first audit of the standards, known as Critical Infrastructure Protection.

In late 2006, we created a reliability compliance program governed by an executive-level Reliability Compliance Committee (RCC) to assure coordination throughout every business unit. We are investing significant financial and human resources to ensure compliance. The RCC had developed a companywide approach, working internally and collaborating externally, to identify and implement leading practices.

We are not hesitant to bring potential issues forward to NERC, the agency responsible for compliance. We want to foster a culture of compliance that motivates employees to report incidents of non-compliance, such as shortcomings in record keeping, without fear of retribution.

## Reliability Issues

Much of our equipment that produces and delivers electricity is old and in need of modernization. As revenues declined during the

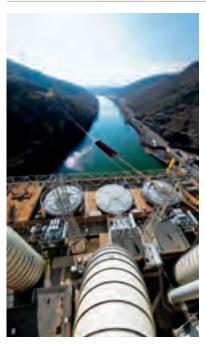
## Three-Year Rolling Average Systemwide Reliability Performance

|         | 2006  | 2007  | 2008  | 2009  | 2010  |
|---------|-------|-------|-------|-------|-------|
| SAIFI*  | 1.526 | 1.548 | 1.526 | 1.471 | 1.397 |
| SAIDI** | 203.0 | 199.0 | 201.0 | 198.1 | 194.7 |

<sup>\*</sup>System Average Interruption Frequency Index is the average number of interruptions a customer experiences annually.

recession, we were forced to alter or delay replacement and some maintenance. These aging assets could pose a reliability risk across our system and potentially affect customer satisfaction, regulatory oversight and our reputation.

Often we don't know a failure has occurred until a customer reports it. Our inability to be more proactive results in additional customer outages and increased repair costs. We are discussing a preventive maintenance approach with our regulators. We are considering seeking incremental rate increases, dedicated to modernizing the grid, in all rate cases going forward. This will help us to



Smith Mountain Lake, near Roanoke, Va., is one of the nation's largest pumped storage facilities. It recently received a 30-year license extension. The nearby Claytor Lake facility is up for relicensing in 2011.

<sup>\*\*</sup>System Average Interruption Duration Index represents the total minutes of interruption the average customer experiences annually.

## 2011 Operating Company\* Projected Construction **Expenditures** (in thousands)

| Appalachian Power                  | \$450,100 |
|------------------------------------|-----------|
| Columbus Southern Power            | \$186,900 |
| Indiana Michigan Power             | \$304,900 |
| Ohio Power                         | \$264,100 |
| Public Service Company of Oklahoma | \$169,200 |
| Southwestern Electric Power        | \$441,500 |

<sup>\*</sup> SEC registrants

better prioritize needs and make improvements in the system.

Kentucky Power Co. has proposed a 138-kilovolt (kV) transmission line between Knott and Perry counties that would enhance reliability and security. If regulators approve, construction of the 24-mile line could begin in 2012.

An extreme cold weather snap tested the electricity system in the Lower Rio Grande Valley in Texas in February 2011. A loss of supply and high demand led to rolling blackouts across the state that affected many AEP Texas customers. The event, which remains under investigation by federal and state regulators, could potentially lead to even stricter reliability rules for the industry. It also strengthens the argument for additional transmission in the area.

## **Secure Fuel Sources**

Coal is an abundant, indigenous resource used to produce roughly half of the nation's electricity supply. It has been our most costeffective fuel for more than a century, enabling us to provide a source of reliable, affordable electricity to our customers. Coal will play an important role in our energy future, but natural gas looks increasingly attractive given the promise of continued relatively low prices due to the development of shale gas and the high cost of environmental controls associated with coal.

In 2010, AEP consumed 67 million tons of coal, which accounted for 80 percent of the energy we produced. As we retire some of our coal units and adjust the operation of other units during the next decade, we expect that our generation from coal will gradually decline. We will continue to be a major consumer of coal, but we are aware of the increasing difficulty of negotiating longterm fuel contracts with the current heightened regulatory and market uncertainty.

Natural gas generation creates about half the carbon emissions of coal generation per kilowatt-hour of energy produced. Largely because of this advantage, natural gas is widely viewed as the "bridge" fuel to a future when new technologies and renewable energy become widely available and cost-competitive. We have increased our natural gas generating capacity during the past five years and will continue to do so as long as it remains a cost-effective fuel option. We have added 4,181 megawatts (MW) of nominal natural gas capacity to our system since 2005.

Our natural gas generating units consumed nearly 134 billion cubic feet of natural gas in 2010, a 40 percent increase over 2009. We expect our natural gas-fueled generation will further increase



Workers assemble some of the massive pipes that will be part of the 580-MW Dresden combined-cycle natural gas-fired power plant in Dresden, Ohio.

from approximately 8 percent of our fuel portfolio today to 15 percent during the next decade.

In 2010, we completed construction of the 508-MW J. Lamar Stall unit in Shreveport, La., to serve Southwestern Electric Power Co. (SWEPCO) customers. This combined-cycle gas plant is colocated with SWEPCO's Arsenal Hill Plant to take advantage of existing natural gas pipelines and electric transmission lines. During the peak construction period, the Stall unit provided 700 jobs and now employs 10 permanent workers.

We plan to complete the 580-MW Dresden combined-cycle gas plant in Ohio and bring it on line in the first quarter of 2012, creating approximately 25 permanent jobs.

One of the factors driving our transition to natural gas is the growing supply of shale gas. The Marcellus, Utica, Haynesville, Fayetteville, Eagle Ford and Woodford shale formations are located within or close to AEP's service territory. The U.S. Energy Information Administration (EIA) Annual Energy Outlook 2011 estimates that the United States has 827 trillion cubic feet (Tcf) of natural gas shale resources. If the predictions are accurate, that is 480 Tcf more than was estimated in the EIA's Annual Energy Outlook 2010 and represents a long-term source of supply that should lead to stable prices.

As the shale gas market develops, we are talking to pipeline companies and gas producers about building infrastructure capable of delivering the gas to our power plants. As these new markets evolve, we will learn more about choosing the optimal sites to build new gas plants to serve our customers.

## **Nuclear & Hydro Power**

Nuclear and hydroelectric power represent a diverse and secure energy future. Our Cook Nuclear Plant provides 5 percent of our generating capacity and supplied more than 15,600 gigawatt-hours of carbon-free electricity to customers of Indiana Michigan Power Co. (I&M) in 2010. The two units are licensed until 2034 and 2037. We have conducted feasibility and cost studies to increase output by up to 400 MW during the next decade. We will determine the cost effectiveness and demand for additional power before making a decision to proceed. Given the challenges created by the Japanese nuclear crisis following the earthquake and tsunami, a rigorous evaluation is being done by the U.S. nuclear industry to ensure the ability to safely shut down reactors in the face of similar circumstances. We will learn from this.

We also own and operate 16 hydroelectric facilities and a pumped storage facility that contribute to cleaner energy resources on our system. These facilities generate approximately 1,549 gigawatt-hours of power each year, serving customers in five states.

## Turk Plant Will Provide Energy Security

Construction continues on SWEPCO's 600-MW John W. Turk, Jr., Plant in Hempstead County, Ark. During 2010, the Turk project encountered many legal challenges, including a decision by the Arkansas Supreme Court reversing the certificate issued by the Arkansas Public Service Commission, an appeal of its air permit, and federal court actions challenging the permit issued by the U.S. Army Corps of Engineers for stream crossings and wetland impacts. SWEPCO is proceeding with construction under an exemption to the Arkansas utility certificate law, and it received a decision from the Arkansas Circuit Court affirming the air permit. Opponents have appealed the decision to an Arkansas Court of Appeals.

In addition, a federal district court has issued a preliminary injunction affecting the completion of the water intake and two

A Public Service Company of Oklahoma employee switches meters as part of the gridSMART® program in the Tulsa, Okla., area.



transmission lines that will serve the plant. We have appealed that decision, and a ruling is expected in the summer of 2011. Currently, more than 1,600 workers are employed in construction at the plant, which is scheduled to be placed in service in late 2012. The plant will also create 110 permanent jobs.

The Turk Plant is needed to serve growing demand in that region, providing long-term energy security for customers. If we are unable to complete construction and place the plant in service or if we cannot recover all of our investment in and expenses related to the plant, it would materially reduce future net income and cash flows and impact our financial condition, as well as reliability.

## **Secure Delivery Systems**

A robust and reliable transmission grid is another element of a secure energy future. Regulatory delays and negotiations with stakeholders over siting, planning and cost allocation have caused significant delays in transmission project approvals across the country. These delays are placing the nation's grid in an evermore precarious position from a reliability and security standpoint. As the economy improves, demand for electricity will naturally increase and could create unbearable pressure on the existing infrastructure. We urgently need to modernize the grid.

We plan to enhance the reliability of our existing transmission system while investing in new infrastructure in our service territory and other parts of the country. Our transmission business will help us grow our earnings potential as it helps to modernize and secure the nation's electric grid. In the process, we are supporting the clean energy policies being considered in Congress, improving the operational efficiencies of the grid and reducing congestion costs. Learn more at www.AEP.com/about/transmission.

## **Using Energy More Efficiently**

Our energy efficiency and demand response programs are important ways to further bolster energy security. Read more about energy efficiency in Climate Change.

## gridSMART®

A secure energy future requires that we use energy more efficiently and responsibly and improve the performance of the energy delivery system. We launched gridSMART® in 2007 to give customers greater control over their energy usage, increase the efficiency of the electric grid, improve service to our customers and lead us to a new era of energy delivery.

From a technology standpoint, gridSMART® incorporates a two-way communications system between AEP and our customers that facilitates the more efficient use of electricity. For example, gridSMART® may allow us to send price signals to customers so they can decide when to run home appliances. It can also allow us to adjust customer thermostats automatically, with their preapproval, when demand is high and we need to lessen the stress on the electric grid.





## approximate amount of AEP's earnings that come from AEP Ohio

AEP Ohio is pursuing a comprehensive gridSMART® project involving 110,000 smart meters and distributed grid management technologies on 70 circuits. The \$150 million project was funded with a \$75 million grant from the Department of Energy (DOE), inkind contributions from vendors and regulatory recovery from Ohio regulators. The project features smart meters, time-of-use tariffs, home energy use display devices, smart grid-enabled appliances, plug-in electric vehicles, distribution automation equipment, community energy storage devices and a cyber security center.

Our most extensive smart meter deployment project is in Texas, where we are installing nearly 1 million smart meters. In addition, I&M and Public Service Company of Oklahoma (PSO) are deploying smart grid technology pilots in their states.

Our initial goal was to install 5 million smart meters by 2015 throughout the AEP system. Through our early deployments, we hope to determine if the expense of the meters is offset by the benefits. We will continue to pursue the deployment of these smart grid technologies where regulators are supportive and there is a proven business case. We believe modernizing the grid is critical to reducing demand and energy consumption, contributing to energy reliability and security, and preparing for the future needs of customers. Get a state-by-state breakdown of gridSMART® initiatives online at www.AEPsustainability.com.

## **Energy Demand & Financial Growth**

The recovery and growth of the U.S. economy depends on reliable and cost-effective electricity. This is particularly important as local economies and companies struggle to regain their pre-recession footing. AEP strives to serve as a partner in these efforts. For example, AEP Ohio worked with regulators, state officials and Ormet Corp., our largest customer, to structure an economic development contract that helped the company to continue operating through the economic downturn. The competitive rates offered by AEP Ohio enabled Ormet to return to full production this year. That is good news for the people and economy of eastern Ohio, where Ormet's increased business is putting people back to work. It is good for AEP because it means our largest customer is expected back on line at full capacity this year.

Over time, demand for electricity naturally increases. The EIA projects residential electricity use will increase 24 percent between 2008 and 2035. As electronics proliferate and more people move to warmer climates where cooling needs are higher, this trend is likely to continue.

The hotter-than-normal summer of 2010 demonstrated how weather affects electricity use. PJM Interconnection, the grid operator for our eastern states, recorded a 12 percent increase in electricity consumption compared with the summer of 2009, led partly by greater use of air conditioning.

## **Measuring Growth**

Customer counts are one measure of our company's financial strength. At the end of 2010, we had about 5.3 million customers on our system. Residential and commercial customers increased slightly, but the gains were offset by modest decreases in the industrial sector. This was true across all of our service territory.

Sales growth varied by sector: Residential (weather-normalized) sales were relatively flat in 2010, increasing 0.6 percent. We are forecasting a 1.9 percent increase this year. Commercial sales also remained relatively flat, down by 0.4 percent. We're forecasting a modest recovery of 0.7 percent in 2011.

We experienced significant sales growth of 5 percent in the industrial sector, the hardest hit in 2009. The five sectors that comprise 60 percent of our industrial sales increased their consumption in 2010. Led by primary metals, these sectors include chemical

| AEP Operating Company* Profiles (dollars in thousands) |           |             |            |                      |  |  |
|--|-----------|-------------|------------|----------------------|--|--|
|  | Customers | Revenues    | Net Income | Total kWh<br>Sales** |  |  |
| Appalachian Power                                      | 957,000   | \$3,275,103 | \$136,668  | 38,556               |  |  |
| Columbus Southern Power                                | 749,000   | \$2,149,041 | \$230,223  | 24,185               |  |  |
| Indiana Michigan Power                                 | 582,000   | \$2,195,727 | \$126,091  | 26,560               |  |  |
| Ohio Power   | 706,000   | \$3,223,707 | \$311,393  | 31,716               |  |  |
| Public Service Co. of Okla.                            | 532,000   | \$1,273,662 | \$72,787   | 19,107               |  |  |
| Southwestern Electric Power                            | 520,000   | \$1,523,534 | \$146,684  | 25,146               |  |  |

<sup>\*</sup>SEC registrants

<sup>\*\*</sup> Millions of kilowatt-hours



AEP Texas senior engineer Sam Hunt, left, observes while employees from Comisión Federal de Electricidad and an AEP contractor conduct final testing of a 4-MW NaS battery at Presidio, Texas. The installation enhances grid reliability along the Texas-Mexico border

manufacturing, petroleum and coal products manufacturing, mining (except oil and gas) and paper manufacturing. The primary metals sector grew by 6.5 percent, but the recovery was widespread.

Overall, sales for all classes of customers grew by 1.1 percent in 2010, and we are forecasting 1.7 percent growth in 2011. Sales in the western part of our service territory are growing faster than in our eastern service territory, and we expect that to continue.

## Transmission as a Growth Engine

An interconnected and robust transmission grid that can easily move power between different regions of the country is central to our vision of a modern electric system. We believe this "transmission backbone" is the key to a secure energy future, economic prosperity and AEP's continued financial growth. Effective and efficient transmission is critical to ensuring our ability to access the new base load generation that will replace older coal plants that will be retired during the next decade.

Our three-pronged transmission strategy will create significant growth opportunities within and outside of AEP's traditional service territory.

The first part is Electric Transmission Texas (ETT), a joint venture between subsidiaries of AEP and MidAmerican Energy Holdings Co. that operates within the Electric Reliability Council of Texas. ETT has been assigned about \$1.1 billion in Competitive Renewable Energy Zone projects in Texas. These involve seven double-circuit 345-kV transmission lines, eight transmission stations and other equipment. The Public Utilities Commission of Texas

has already approved 284 miles of the 451-mile project. Reviews are expected to be completed this year. Once these are under way, an additional \$1.6 billion in projects are in the pipeline, representing 822 miles of lines and 28 substations with inservice dates through 2017. These projects support the state's commitment to renewable energy.

The second leg is our AEP Transmission Co. (Transco). In 2009, AEP Transco formed seven wholly owned transmission companies. AEP Transco is operating in Ohio, Michigan and Oklahoma. Applications to initiate operations have been filed with the respective state public utility commissions in Kentucky, Indiana and West Virginia.

The transcos have their own capital structure, which relieves some of the financial burden from our operating companies. The transco rates are regulated by the Federal Energy Regulatory Commission. We invested approximately \$50 million in these states in 2010 and expect to increase that to \$160 million in 2011 and approximately \$350 million in 2012.

The third leg of our strategy is our joint ventures with other companies to build transmission capacity. These projects leverage our transmission expertise and feature partnerships with other companies to finance them.

Our transmission strategy is a key component of our future earnings growth. We are reprioritizing some of our transmission projects to accommodate those that are likely to move forward more quickly. Cost allocation and siting continue to be the biggest challenges. We are committed to working with state and federal regulators and with local communities to get these needed projects built in a timely fashion. We believe they will help to create and supply energy that will spur economic growth and prosperity.

In February 2011, the Southwest Power Pool gave its approval to Prairie Wind for an extra-high voltage 345-kV double-circuit transmission line running from a new 345-kV substation near Wichita, Kan., to a new 345-kV substation northeast of Medicine Lodge, Kan., and then south to the Kansas/Oklahoma border. A siting application is pending before the Kansas Corporation Commission. Prairie Wind Transmission is a joint venture between Electric Transmission America and Westar Energy. Learn more about our overall transmission strategy at www.AEP.com/about/transmission/.

| Transmission | Joint Venture Initiatives (estimated of | cost in thousands) |   |                |
|--------------|---|--------------------|---|----------------|
| Project      | Location                                | Completion Date    | Owners (Ownership %)                    | Estimated Cost |
| ETT          | Texas                                   | 2017               | MEHC Texas Transco, LLC (50%)/AEP (50%) | \$3,100,000    |
| PATH         | West Virginia/Virginia/Maryland         | To be determined   | Allegheny (50%)/AEP (50%)*              | \$2,100,000    |
| Prairie Wind | Kansas                                  | 2014               | Westar Energy (50%)/ETA (50%)**         | \$225,000      |
| Pioneer      | Indiana                                 | 2016               | Duke Energy (50%)/AEP (50%)             | \$1,000,000    |

<sup>\*</sup>Allegheny Energy merged with FirstEnergy effective Feb. 25, 2011.

<sup>\*\*</sup> Electric Transmission America, LLC (ETA) is a 50/50 joint venture with MidAmerican Energy Holdings Co. (MEHC) America Transco, LLC and AEP Transmission Holding Co., LLC. ETA will be utilized as a vehicle to invest in selected transmission projects located in North America, outside of ERCOT. AEP Transmission Holding Co., LLC owns 25 percent of Prairie Wind through its ownership interest in ETA.

or more than 100 years, our customers have relied on us to deliver dependable, affordable electricity, and our shareholders have relied on us to deliver a return on their investment. We also must comply with all applicable environmental laws and regulations, manage our impacts beyond compliance when appropriate, and work with our suppliers and stakeholders on a wide variety of other issues. We welcome and embrace these challenges because, in working to meet them, we become a stronger and more resilient company.

In recent years, our environmental efforts have become much more closely linked to our business performance and our relationships with a wide range of stakeholders. We have spent billions of dollars to comply with environmental regulations and face significant business risks related to our impacts on the environment if we fail.

Our company and our industry are on the cusp of a major transformation. It is being driven, in part, by new market fundamentals that will prompt a shift in resources, an aging infrastructure that is not cost-effective to operate and changes in how customers use electricity. Another major factor driving this transformation is proposed changes to environmental regulations.

The U.S. Environmental Protection Agency (EPA) has announced new or revised regulations governing coal ash disposal, air emissions, cooling systems and power plant wastewater effluent.

We are developing a transition plan that addresses all factors driving our transformation, and all options are under consideration. It will take time, but we are confident AEP will emerge from this transformation successfully. As we put our plan together, we are very concerned about the EPA's proposed timing and lack of coordination for implementation and the consequences of disjointed



AEP's coal plants, including the Rockport Plant, Rockport, Ind., accounted for 80 percent of the energy we generated in 2010 and will continue to be an important part of our fuel mix for years to come.

approaches. We believe the implementation process must be thoughtful and take into account the impacts to the economy, reliability of the electric grid and costs to customers, as well as the environmental and public health benefits. We support the Clean Air Act and we are not seeking to halt implementation of the rules. But that is the perception of some of our stakeholders. We simply need more time to comply, and it is up to us to do a better job communicating our true intent.

We believe additional time to comply is justified because significant bodies of scientific work, including previous calculations by the EPA, indicate that power plant particulate emissions are not a significant risk to public health. We contend that particulates generated by the transportation sector are a greater risk to public health.

We recognize that environmental regulation is connected di-

## **Environmental Performance:**

## Environment



cubic meters of water loss due to evaporation from cooling towers per year

## Environmental Performance Index (number of incidents per year)



This internal index sets targets for environmental performance that are tied to compensation. It sets goals for opacity, NPDES, and oil and chemical spills at our power plants. rectly to our social and economic issues. Well-designed regulations with realistic compliance requirements and reasonable timelines for implementation can protect the delicate economic recovery of communities, preserve and create jobs, ensure grid reliability and keep electric rates reasonable for consumers and businesses, while achieving significant environmental benefits. These are the issues we are trying to address with the EPA.

We have already made significant progress toward reducing emissions by installing state-of-the-art pollution controls during the past decade. We have built nine scrubbers on 7,900 megawatts (MW) of our coal-fired generating capacity between 2003 and 2011 and selective catalytic reduction systems (SCRs) on more than 11,000 MW since 2001. As a result, sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NOx) emissions have been reduced by about 80 percent from 1980 levels. In preparation for the addition of more controls on our plants, we have begun preliminary engineering and design work to build new scrubbers and other controls. In our experience it takes four to five years to engineer, fabricate and install a scrubber. Even this early preparation won't get us to the EPA's compliance deadlines on time, but we are confident that we can do it by 2020.

Our coal ash management practices also have evolved. We beneficially reuse or recycle approximately 40 percent of the coal combustion residuals (CCRs) we generate. We enhanced our groundwater monitoring program by installing 84 additional monitoring wells since 2008 and expanded the inspection program at our coal ash disposal facilities to include audits of our inspection process in 2010 - an added layer of checks and balances. We support a comprehensive review of all the regulations in concert to ensure coordination and feasibility of the regulations and timing.

## **Environmental Compliance & Performance Management**

We believe our environmental compliance is excellent overall. But we always will maintain the attitude that there is room for improvement. Our challenge is to maintain compliance and improve performance while our industry is in transformation. We face uncertain fuel markets, aging infrastructure, and pressure to keep costs down for customers during tough times, as well as a regulatory environment that is more stringent and complex.

Compliance is the foundation of our environmental efforts and our goal is to have no significant enforcement actions.1 State and federal regulators conducted more than 190 inspections across our system in 2010, scrutinizing everything from physical structures and procedures to record-keeping practices. We received notice of three significant enforcement actions from regulatory agencies related to operations at our Amos Plant in West Virginia in 2010 and thus failed to meet our goal of zero enforcement actions. For details, go to www.AEPsustainability.com.

## **Our Position on Pending Regulatory Changes**

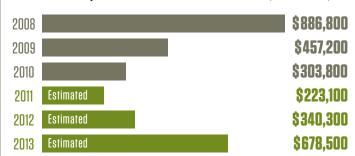
Both the industry and the EPA need to consider the full range of regulatory proposals in context to ensure the most efficient and effective approach to the timing and implementation of multiple and overlapping requirements. We support the Clean Air Act and understand the EPA's role as rule maker and enforcer. As we develop our transition plan for the future, our commitment is to compliance.

The industry and the EPA need to consider the full range of regulatory proposals in context to ensure regulations are well-designed with realistic compliance requirements. If done right, we can protect local economies and jobs and keep rates reasonable for customers.





## Historical & Projected Environmental Investments (in thousands)



<sup>&</sup>lt;sup>1</sup>We define a significant enforcement action as one that arises from events that are within our control, has more than a minor environmental impact and results in a fine greater than \$1,000.

## 2009 U.S. Coal Combustion Residuals Utilization Summary

(in tons)

| CCR Production Utilization Totals       | 55,642,011 |
|---|------------|
| Beneficial Use as Percent of Production | 41.3%      |
| Miscellaneous/Other                     | 1,323,172  |
| Aggregate                               | 574,083    |
| Agriculture                             | 388,990    |
| Waste Stabilization/Solidification      | 3,738,799  |
| Gypsum Panel Products                   | 7,288,755  |
| Mining Applications                     | 14,897,415 |
| Blasting Grit/Roofing Granules          | 1,743,621  |
| Snow & Ice Control                      | 302,827    |
| Mineral Filler in Asphalt               | 0          |
| Soil Modification/Stabilization         | 957,116    |
| Road Base/Sub-base                      | 968,291    |
| Structural Fills/Embankments            | 8,856,396  |
| Flowable Fill                           | 414,410    |
| Blended Cement/Raw Feed for Clinker     | 3,577,726  |
| Concrete/Concrete Products/Grout        | 10,610,410 |

Source: American Coal Ash Association, Coal Combustion Product Production & Use Survey

2010 AEP Coal Combustion Residuals Utilization Summary

| CCR Donated (tons)                            | 186,015      |
|---|--------------|
| CCR Used Internally (tons)                    | 1,448,885    |
| CCR Sold (tons)                               | 1,565,247    |
| Total CCR Produced (tons)                     | 8,706,332    |
| Total CCR Avoided Cost                        | \$18,309,834 |
| Total CCR Revenues                            | \$10,793,087 |
| Total Worth                                   | \$29,102,921 |
| % Total Utilization Based on Total Production | 36.76%       |

3,200,146

When we analyze the rules together, we see one outcome; when the EPA analyzes the rules one-by-one, they see something entirely different. We are trying to persuade the EPA that, in our experience, we cannot achieve compliance on the prescribed timetables and we must consider the rules in concert. We know we can comply if we have more time.

We are asking that the timeline for the proposed changes reflect

a balanced consideration of public health, customer impacts and financial constraints. We feel that, on occasion, the EPA views companies' access to capital as infinite. It is not.

We will continue to work closely with the EPA and our stakeholders to achieve the favored outcomes. But if the implementation schedules are too aggressive, the technology to comply is not available or the costs are too high, or if compliance with one regulation creates noncompliance with another, then we will not be able to support those proposals.

Following is a summary of where we stand on each of the rules and regulations the EPA is proposing. More detailed information about each rule is online at www.AEPsustainability.com/ourissues.

## **Clean Air Transport Rule**

In July 2010, the EPA proposed the Clean Air Transport Rule (CATR) to replace the Clean Air Interstate Rule (CAIR). CATR would impose new and more stringent requirements to control SO2 and NOx emissions from fossil-fueled electric generating units in 31 states and the District of Columbia, starting in 2012. Each state covered by the Transport Rule is assigned an allowance budget for SO2 and NOx and limited trading may be allowed. Facilities in Texas, Arkansas and Oklahoma would be subject only to the seasonal NOx program, with new limits that are proposed to take effect in 2012. The remainder of our states would be subject to seasonal and annual NOx programs, also starting in 2012, and an annual SO<sub>2</sub> emissions reduction program that takes effect in two phases. The first phase, in 2012, requires approximately 1 million tons in additional SO<sub>2</sub> emission reductions across the region than would have been required under CAIR. The second phase takes effect in 2014 and reduces emissions by an additional 800,000 tons per year.

With the final rule due later this year, there will be little time to make the infrastructure additions to comply with the reduction required by 2012.

We believe the emissions reductions that have already occurred or that will occur by complying with CAIR and other regulatory programs will achieve the air quality goals the EPA has identified. The Transport Rule should be delayed at least until the end of

# megawatts

generating capacity retrofitted with scrubbers between 2003 & 2011

**CCR Utilized (tons)** 



AEP completed this scrubber at the Amos Plant in St. Albans, W.Va., in 2010, one of nine scrubbers built since 2003

2015, when other regulatory programs will be in full effect. Then, if necessary, the rule should be reconsidered in the context of any remaining air quality improvements that can be achieved with further reductions from the electric power sector.

## **Hazardous Air Pollutants from Electric Generation Units**

On March 16, 2011, the EPA proposed a rule that would regulate emissions of mercury and other hazardous air pollutants (HAPs) from electric utility boilers (coal and oil). A final rule is due in November 2011. In general, affected facilities must comply within three years after a final rule is published, with the possibility of a one-year extension. The proposed rule addresses emissions of mercury, acid gases, nonmercury metals and organics and also includes work practice standards and monitoring and reporting requirements.

We are still in the process of reviewing the documents and assessing the impact on AEP. Our initial assessment suggests that we will have to install additional controls on a number of our coal plants and the compliance deadline of three years, with a possible one-year extension, simply is not feasible. Our evaluation will be part of the transition plan we are preparing, which won't be final until we have a clearer picture of all of the rules and their collective implications for our operations.

## **Coal Combustion Residuals**

In June 2010, the EPA proposed a rule to regulate the disposal and beneficial reuse of CCRs, including fly ash and bottom ash generated at coal-fired electric generating units. The rule contains three alternatives. One would impose federal hazardous waste disposal and management standards on these materials. One would regulate CCRs as solid wastes under state programs, implementing new federal requirements. Both proposals would impose stringent requirements for the construction of new coal ash facilities and would require existing, unlined landfills and surface impoundments to upgrade to new standards or stop receiving coal ash, which would initiate closure of the impoundments under a schedule that would be directed by the new rule, once final. A third option would allow existing facilities that pose no risk to groundwater to continue operating, but not to expand, and would require additional groundwater monitoring and other controls.

We estimate the potential cost to comply with the least restrictive proposed solid waste alternative could be as high as \$3.9 billion for units across the AEP system. If the EPA decides to regulate coal ash as a hazardous waste, those costs would significantly increase. The EPA received more than 420,000 public comments on this proposed rule.

## Section 316(b) of the Clean Water Act -**Cooling Water Intake Structures**

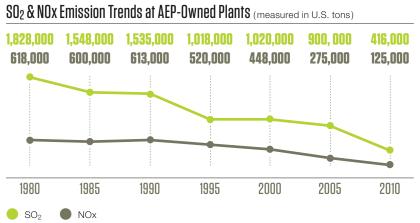
To protect aquatic species, the EPA is evaluating revisions to regulations under Section 316(b) of the Clean Water Act that govern the design and placement of cooling water intake structures and systems at power plants. One option the EPA has proposed is to require the construction of cooling towers on power plants that withdraw cooling water from rivers, lakes and estuaries. The premise is that plants with cooling towers require less water to be withdrawn and have less impact on aquatic life. The U.S. Supreme Court has confirmed that the EPA may take costs and benefits into consideration in developing these standards.

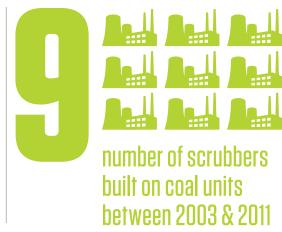
We agree that appropriate and cost-effective measures can be taken to reduce impacts to aquatic life from cooling water intake structures but believe that, for many plants, the impacts are small. As a case in point, we have more than 30 years of data on the Ohio River that show relatively minor impacts and that the existing cooling systems are compatible with the health of the ecosystem.

We strongly believe the EPA needs to weigh carefully the costs and benefits of any proposal. The agency has proposed a rule that lays out a process for a site-specific review of technology choices.

## **Greenhouse Gas Regulation**

AEP's position on climate change has not wavered: We believe that scientific evidence points to human activity as a contributor to global warming. However, given the magnitude of the transition to a reduced carbon electric sector, AEP believes this issue should be addressed legislatively. Despite this, the EPA has forged ahead with





two greenhouse gas (GHG) regulations that affect AEP's facilities.

The first requires us to formally report GHG emissions for each power plant for the first time. This is not a significant issue for us because we have been tracking CO2 emissions from our power plants since 1993 through the EPA's Acid Rain program and have been reporting emissions to EPA's Climate Leaders program and the Chicago Climate Exchange since 2003. There are other smaller sources of GHGs at our facilities that have not been routinely inventoried (less than 1 percent of our emissions), and we have established an electronic reporting system to collect this new information. EPA's electronic reporting system is not yet available and reporting has been delayed. Read about the Tailoring Rule online at www.AEPsustainability.com.

## **Stakeholder Reactions**

We continue to have candid discussions with stakeholders, regulators, customers, legislators and other policymakers about the transition we are in and the impacts it will have on reliability, customer bills, jobs and the economy, as well as the environmental benefits. The perspective of our stakeholders is diverse. Some have challenged why we didn't start preparing state regulators and regional transmission operators sooner, knowing these system changes were coming. However, until we knew with certainty what the proposals would be, we could not determine the impact on our system. We are having those conversations now. We also are trying to figure out how to pay the cost of this transformation.

We encourage our stakeholders to come to us with their concerns, as they have been doing; this helps us to be better informed about these issues and to clarify any misperceptions about the positions we are taking and the reasons for them. It also helps us to understand their perspective and consider alternatives. We may disagree on some issues, but it is important that we continue to communicate. We hope our approach is mutually beneficial to our stakeholders and that they better understand our challenges.

## The Cost of Compliance

The time frame for compliance is one concern; the other is the cost



Water intake screens like these at the Cardinal Plant in Brilliant, Ohio, are the target of the U.S. EPA's proposed rule regarding cooling water intake structures at power plants.

to customers and the economy. Until the rules are final, it is extremely difficult to estimate the total cost of compliance or the exact amount of coal-fired generation that will be retired. However, we know it will be significant. During the past decade, we invested more than \$5 billion in pollution controls at many of our coal units, and we believe the cost to comply with the EPA's proposed rules, if approved as is, could be more than double our costs to date during the next decade. This is consistent with the Edison Electric Institute's analysis that concluded the rules would force the shutdown of 20 percent to 30 percent of coal-fired capacity nationwide and require about \$200 billion in additional capital expense for the utility industry. This is about three times what the industry spent on environmental controls during the previous 20 years.

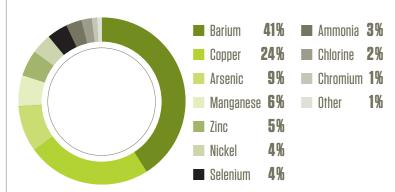
What concerns us most is the impact this would have on our customers and local economies. We could see rates increase significantly at a time when the economy is still fragile, particularly in the areas we serve where income is below the national median and customers already struggle to pay their electric bills. Such rate increases would have very detrimental impacts on jobs and the economy in general. Read more about this issue in Public Policy.

Between 2003 and 2011, we built nine scrubbers. Since 1980, our investments in environmental controls have reduced SO2 and

cubic meters of total annual plant water discharges

number of ash ponds on the AEP system

## TRI System Releases in 2009 to Water (147,284 pounds)



NOx emissions by about 80 percent. During that time the rate impacts to customers were somewhat offset by fuel cost reductions, reductions in the normal capital budget and very little construction of new power plants. That will not be the case going forward.

We don't dispute that there would be short-term job creation during the construction phase. But those jobs would disappear when the construction is complete. Our analysis indicates that for every job gained at a combined-cycle natural gas plant, which is what we would eventually build, four or five jobs would be lost by a coal plant shutdown. That's because gas plants require fewer people to operate. At the same time, manufacturers that rely heavily on electricity for their production processes could be forced to close or go abroad, eliminating jobs and tax revenues. We know this because we are hearing it from customers now.

## Other Environmental Issues

## **Protecting the Water**

The production of electricity can affect the quality of surface water and groundwater through precipitation runoff, infiltration and collection of wastewater for treatment. States protect surface waters through a National Pollutant Discharge Elimination System (NPDES) permit process. State regulation of surface impoundments and landfills promotes protection of surface and groundwater resources. The federal Clean Water Act and the Safe Drinking Water Act also protect groundwater and surface water by setting standards on discharges.

We have invested heavily in water treatment systems to ensure we comply with our NPDES permits, and we have an extensive groundwater monitoring program to help us detect adverse impacts to water quality. Our design and construction practices for new landfills typically include composite liners, leachate collection systems and groundwater monitoring wells. We are proactively adding an additional synthetic liner to the landfill that will eventually serve the John W. Turk, Jr., ultra-supercritical coal plant in southwest Arkansas. This will bring the design up to the level included in the EPA's proposed coal combustion residuals rule.

## **Reducing Waste**

The production of electricity creates solid and hazardous waste that we work to manage responsibly. Our largest waste stream is from coal ash; we operate 14 landfills, 44 ash ponds and 10 other impoundments at 22 power plants. About 40 percent of our coal ash is recycled or reused each year. These beneficial uses reduce the need for more landfill space and also provide revenue. In 2010, we received \$10.8 million from the sale of coal combustion residuals and avoided another \$18.3 million in disposal costs.

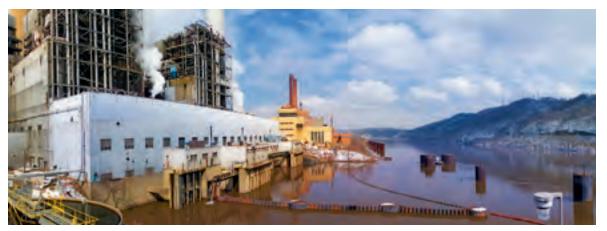
We continue to reduce the amount of PCB-containing equipment in the AEP system. PCBs have not been used in new equipment for more than 30 years but are still present in some of our older equipment. In 2010, we removed and recycled approximately 32,800 pieces of electrical equipment. Of that, 1,790 (approximately 5.5 percent), and less than 0.5 percent of the transformers, were found to contain greater than 500 parts per million (ppm) of PCBs. Only about 3 percent of 1,576 transmission and distribution electrical equipment spills involved oil that contained 50 ppm or greater PCBs, and all were cleaned up properly.

## **Biodiversity**

"Ecosystem services" is a term that refers to the concept that people receive "services" from healthy, functioning ecosystems. For example, products such as clean drinking water and processes such as flood control through wetlands and the decomposition of wastes are beneficial "services" that are provided by the environment that benefit people. The pollination of trees and crops, sequestration of GHGs and recreational opportunities are other examples.

The electric power industry may also benefit from these ecosystem services, but we do not fully understand what services we rely on, what services our operations may impact or the economic consequences if those services were no longer provided by nature.

Read more about emission reductions, water availability and usage, avian protection and coal supplier performance online at www.AEPsustainability.com/ourissues/envperformance/.



The Cardinal Plant, in Brilliant, Ohio, is one of AEP's plants most likely to be affected by the U.S. EPA's proposals to modify cooling water intake systems to reduce the impact on aquatic life. The Cook Plant, in Bridgman, Mich., is also among those that could be most affected.

or many years, climate change has been one of the most significant sustainability issues facing AEP. One major reason is our reliance on coal. Because of the company's proximity to the nation's coal fields, its legacy in coal-fired generation, the expertise we developed over more than a century and the huge investments we have made, coal will remain a part of AEP's fuel portfolio for many years to come. We are one of the largest consumers of coal in the Western Hemisphere and coal still accounts for about 80 percent of the energy that we generate.

As our nation and the world began to focus on global warming, we took steps to reduce greenhouse gas emissions, from planting millions of trees to building the world's first carbon capture and storage validation facility at our Mountaineer Plant in West Virginia. We did this voluntarily.

Our position on global warming has not changed: We do not dispute the science that indicates that human activity contributes to climate change. However, we support a legislative approach to deal with this issue rather than through regulation. And while voluntary activities have diminished in the United States, climate change remains an important issue for AEP that we will continue to address. Our challenge is that without a legislative requirement to reduce greenhouse gases (GHGs), the state regulators who set our rates have been sending us clear signals that they will not approve rate increases to recover our climate-related project expenses. Without a market for carbon allowances, we cannot obtain early-action credit toward future emission mandates. We remain open to considering all options, but-especially in light of the continuing economic challenges we face-we are not likely to commit to new projects.

We remain convinced that federal legislation is the best way

to address the issue of climate change in the United States. Such an approach would provide the certainty needed to plan long-term capital-intensive investments. That is why we have supported a host of bills in Congress to advance this issue on the legislative front. We don't agree with all provisions of all bills. Many stakeholders, including environmental groups and policymakers in our states, have taken issue with our approach. But we believe the path toward a workable solution includes incentives for technology development and deployment, credit for early actions and an approach that is economywide. This can best be achieved through legislation and not regulation under the constraints of the Clean Air Act.

Without that certainty, it is impossible to justify expenditures in the billions of dollars that might otherwise put the company and its shareholders at risk. Unfortunately, such legislation appears unlikely in this Congress.

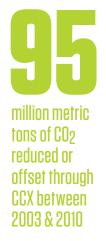
## When Technology & Policy Collide, Technology Often Loses

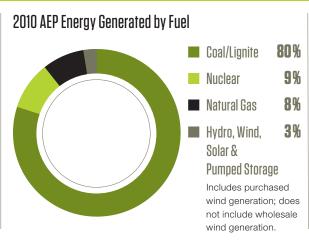
Our carbon capture and storage (CCS) validation facility, which removes CO<sub>2</sub> from a 20-megawatt (MW) stream of the Mountaineer Plant's flue gas and stores it underground, demonstrates that CCS technology works on a small scale. It has captured more than 27,000 metric tons of CO2 and stored more than 17,000 tons underground. This project has become the basis for a larger study at the same facility, funded in part by the U.S. Department of Energy (DOE) under the Clean Coal Power Initiative Round 3 program. These are critical steps toward commercializing this technology.

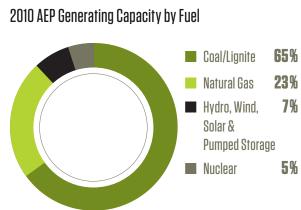
The legal and political landscape has changed significantly since the validation facility began operating in October 2009, and the changes affect our ability to commercialize CCS. The state of

## **Environmental Performance:**

## **Climate Change**



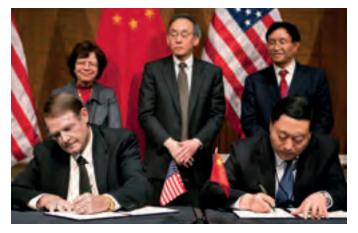




Virginia disallowed recovery of a portion of the Mountaineer carbon capture validation facility expenses, signaling a greater reluctance by regulators to pay for developing technology. We took a pretax write-off of approximately \$54 million as a result. We are evaluating West Virginia's regulatory decision on the project.

Without regulatory support or incentives, neither AEP nor our customers can afford the enormous expense associated with developing CCS technologies. Until regulatory policy changes or financial incentives become avail-

able, CCS technology likely will elude commercialization.



AEP Chairman & CEO Mike Morris, left, and Zhenya Liu, CEO of State Grid Corporation of China, right, sign a technology transfer agreement in January 2011 as U.S. Energy Secretary Steven Chu, center, looks on.

## Federal Clean Energy Standard

A more likely alternative is a federal clean energy standard. The existing environmental regulatory scheme directed toward clean energy is a hodgepodge and is conducted in siloed processes that do not adequately consider the impact of previous or upcoming regulations, the economic costs and benefits to communities, or the time required for compliance. A comprehensive federal legislative approach could achieve significant energy savings, foster domestic energy supplies and provide more rational environmental regulation. Even so, this legislation will be difficult to achieve.

During his 2011 State of the Union speech, President Obama proposed a federal standard that sets an 80 percent clean energy goal by 2035. Our ability to achieve this goal will hinge on details such as whether natural gas, nuclear, hydro, and coal with CCS

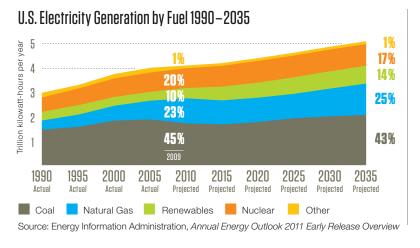
count fully or only partially, and the interim targets we would have to achieve. In the wake of the Japanese nuclear crisis, the role that nuclear power may play in meeting such a standard is uncertain. Its exclusion would be unfortunate.

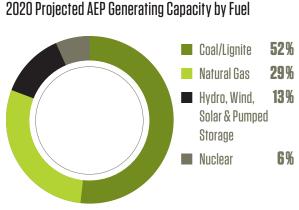
We are concerned about the inequities that could occur in pursuit of the president's clean energy plan. For example, some states in the Pacific Northwest are already producing more than 90 percent of their electricity from clean sources, thanks to significant hydro resources in that region. The plan could lead to huge surpluses of clean energy credits for states and utilities with large hydro or nuclear capacity today, and huge deficits for states such as Ohio, Kentucky, West Virginia and Indiana, which rely heavily on coal. Some method to deal with these inequities would be required.

## **Slowdown in Other Voluntary Efforts**

As noted, it is extremely difficult for regulated utilities to take on

## The appetite for voluntary action has diminished. Without a clear legislative mandate to reduce greenhouse gases, state utility regulators are sending clear signals that they will not approve rate increases for climate-related projects.





voluntary programs to reduce greenhouse gas emissions in the absence of federal climate legislation. Our voluntary tree planting and agricultural methane capture efforts are difficult to justify when we aren't getting any return on them for our shareholders or assurances of credit toward future compliance obligations.

Structured voluntary efforts, such as the EPA's Climate Leaders program and the Chicago Climate Exchange's emissions trading program, also were affected by the lack of momentum on Capitol Hill. In the case of Climate Leaders, which AEP joined in 2003, the EPA ended the program as it implemented GHG regulations. The Chicago Climate Exchange (CCX), which AEP joined as a founding member in 2003, announced in November that it would suspend its emissions credit trading program.

AEP expects to reduce GHG emissions by an additional 10 percent by 2020 from 2010 levels. In 2010, AEP emitted 134 million metric tons of GHGs from its plants. This will result in a total reduction of approximately 25 percent from 2003 levels, the first year of our CCX commitment.

We will, however, achieve additional GHG reductions as we retire older, less efficient coal units and replace them with new natural gas and/or renewable generation, where supported. Under the EPA's proposed Transport, Coal Combustion Residuals and Hazardous Air Pollutant rules, AEP may be forced to retire a significant amount of older coal-fired generation in the next several years. The industry as a whole may retire between 50 gigawatts and 100 gigawatts. Some of that generation most likely will be replaced with natural gas plants, which emit about half the carbon dioxide of coal combustion plants. See *Environmental Performance* for more information about these rules and our positions on them.

## **The Transition to Natural Gas**

Recent developments in the technology to economically recover natural gas from shale rock formations have taken some of the urgency away from clean coal and nuclear power. This represents an exciting opportunity for AEP and much of the energy industry. If domestic shale gas can be safely, environmentally and economically tapped, stored and delivered, it will stabilize energy costs,



The Wyandot Solar Project, which began commercial operation in 2010 near Upper Sandusky, Ohio, provides 10 MW of renewable energy to AEP Ohio customers.

increase reliability and enhance America's energy independence.

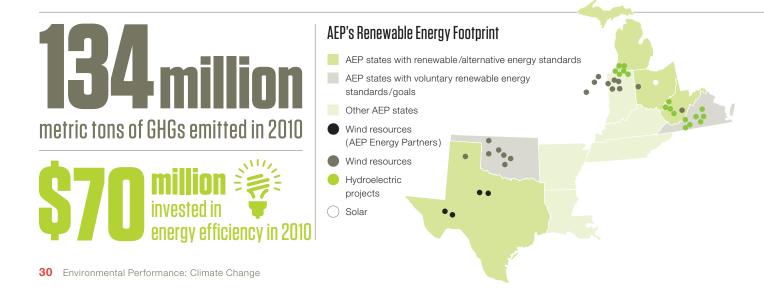
Furthermore, since natural gas also emits less carbon dioxide per unit of electricity produced than oil and coal, moving to natural gas will give the nation more time to develop other sources of clean energy while combating climate change. Natural gas generation facilities generally can be sited and built much more quickly, less expensively and with much less risk than coal or nuclear plants.

AEP has been steadily increasing its gas generation capacity. Since 2005, we have added 4,181 MW of nominal natural gas capacity to our system, and we expect natural gas to account for about 29 percent of our generating capacity by 2020 versus 23 percent today. Read more about this issue in *Energy Security, Reliability & Growth*.

## The Role of Renewable Energy

Even as natural gas becomes a larger part of the nation's and AEP's fuel supply, we also continue to develop renewables such as wind and solar where they are supported. We must develop all cost-effective sources of energy in order to be sustainable.

In 2009, we doubled our goal of adding 1,000 MW of renewable energy (from 2007 levels) to serve our customers by the end of 2011. We made steady progress, completing 209.5 MW of previously announced wind and solar projects and 99 MW of new wind



## **Total Coal Delivered to AEP Plants**

|                       | 2008    | 2009    | 2010    |
|-----------------------|---------|---------|---------|
| Thousands of tons     | 77,054  | 75,909  | 64,614  |
| Average price per ton | \$47.14 | \$49.54 | \$44.82 |

projects. In addition, we announced plans for an additional 99 MW from the Timber Road Wind Farm, which is slated for completion in mid-2011. This project is subject to regulatory approval in Ohio.

The new projects put us at 1,111 MW toward our 2,000-MW goal. That does not include a 49.9-MW solar project announced in Ohio but not yet commission approved.

In addition to our wind and solar efforts, initial testing of biofuels at some coal units started in 2010. Biomass pellets were co-fired with coal at two AEP Ohio coal plants. Biodiesel used for unit startup and flame stabilization was also tested at one of the coal plants. Following the testing period, AEP received approval from the Ohio EPA for the operational use of biodiesel at three coal units. In addition to traditional biofuels products, we continue to evaluate emerging fuel products and technologies.

Although our renewable goal remains 2,000 MW, the recession and regulatory resistance have slowed our progress and we are not likely to meet it by the end of 2011. Just as with some of our clean coal projects, regulators are less inclined to approve renewable energy projects without a legislative mandate if they result in higher costs for customers, which is almost always the case. Read more online at www.AEPsustainability.com.

## The Role of Energy Efficiency

Energy efficiency is often viewed as one of the most important fuel sources of the future. Increasing the efficient use of energy would contribute to achieving climate change reduction targets, help delay the need to build new generation and reduce environmental impacts. AEP has increased its commitment to energy efficiency in the last three years, partially as a result of input from stakeholders and support from regulators and customers.

We set an internal goal to reduce 1,000 MW of demand and 2,250,000 megawatt-hours (MWh) of energy consumption on our system by the end of 2012 through demand response and energy efficiency programs. Between 2008 and 2010, we achieved approximately 400 MW and 1,116,000 MWh of demand and energy consumption reductions, respectively. Subject to regulatory approvals and continued customer interest in our programs, we expect to surpass our energy reduction goal.

These efforts are reflected in the growth of our investments in energy efficiency during the past several years. In 2008, we invested nearly \$13 million in energy efficiency and demand response programs. In 2010, we invested approximately \$70 million in these programs that are now being operated throughout most of our service territory, and we expect they will continue to grow.

## The Role of Carbon Capture & Storage

We expect to complete our assessment of the Mountaineer CCS validation project, which is based on a chilled ammonia technology patented by Alstom of France, this year. Through 2010, AEP captured more than 27,000 metric tons of CO2 and stored more than 17,000 metric tons underground. While this is a very small quantity (less than 1 percent) compared with the power plant's total CO<sub>2</sub> emissions, it is the first demonstration in the world of its kind.

On the basis of the validation project, we initiated a commercial-scale project to capture and store CO<sub>2</sub> from a 235-MW stream of flue gas from the 1,300-MW Mountaineer Plant's emissions, using Alstom's chilled ammonia technology. The project team will complete the initial engineering and design phase in the third quarter of 2011. The DOE agreed to pay 50 percent of the project cost up to \$334 million. We also will receive funding from the Global Carbon Capture & Storage Institute, based in Canberra, Australia. The Institute will provide \$4 million to support the initial engineering work. This project is scheduled to be completed in 2015.

However, the balance of the funding is uncertain. Given regulator reluctance to pay for nonmandated technology, we continue to evaluate options.



The Timber Road Wind Farm, under construction in Paulding County, Ohio. will provide 99 MW of carbon-free electricity when it goes into service in mid-2011.

roviding a safe, stimulating and rewarding workplace is the most important thing AEP can do for its employees. Environmental stewardship, safety and health are core values that employees take to heart. As a result, 2010 was one of the best years for employee safety performance in our history. Our board of directors proudly recognized this achievement in a special resolution that was unanimously adopted (read the board's resolution online at www.AEPsustainability.com).

We are deeply grateful that no AEP employees lost their lives while on the job. But we know we can still do better at preventing harm because injuries are preventable. We give employees the tools and training to work safely and strive to foster an environment that allows anyone to stop a job if safety is at risk. We are also putting more emphasis than ever on contractor and public safety.

Change is the norm in today's business climate. Successful companies are able to effectively manage risk, solve problems, quickly adapt to new situations and identify new opportunities and capitalize on them. As a result, they gain a competitive advantage. The diversity, talent, knowledge, insight, experience and imagination of our work force provide the means to achieve sustainable growth. We have to understand and respond to the shifting values of today's work force if we want to fully use our employees' talents and continue to attract, motivate and retain the best and brightest.

As our business operations are in transition, so is our work force. In response to a continued sluggish economy and lower demand for electricity, we reduced our work force in 2010. We ended the year with 18,712 employees, compared with 21,673 at the end of 2009. We lost the equivalent of 81,000 years of experience and knowledge. Most left the company through a voluntary severance program, though there were some involuntary severances, too. We had done everything we could since the global economic collapse in late 2008, including a hiring and salary freeze, to avert this reduction. It was a difficult but necessary step to keep AEP strong and sustainable for our shareholders, customers and employees in the longer term.

One of our greatest challenges during these difficult economic times has been keeping employees focused on working safely despite the distractions. We learned how valuable it is to have good management systems to capture knowledge and expertise for the future, as well as human performance tools that help prevent errors that lead to injury. We increased our communication about safety and health to all employees. We also provided leadership training for the 300 first-time leaders who emerged from the restructuring.

The changing demographics that were heralded a decade ago are here today. Our work force is more diverse, there are multiple generations working side by side and our employees have new and different expectations about their careers. In response, we've made our culture much more open and inclusive, employees are encouraged to interact with each other and with management and we celebrate diversity. We believe this environment fosters high involvement and shared commitment among our employees, and our safety and health performance is one measure of the depth and effectiveness of that cultural shift.

## **Our Performance**

When it comes to safety lapses, our goal will always be zero - zero



AEP's work force had one of its best safety performances ever in 2010, with both the number and severity of injuries declining.

number of AEP employees at end of 2010

## **Social Performance:**

## **Work Force**

errors, zero incidents, zero harm. It is a very difficult goal to achieve but one that we are absolutely committed to. In three of the last five years, we have had no employee fatalities. Although 2010 was one of our best years for employee safety performance in terms of the number and severity of injuries, people were still harmed and that is not acceptable. Slips, trips and falls again accounted for the most incidents. Fortunately, there was a major reduction in injuries caused by electrical flashes, which are among the most life-threatening of injuries.

We completed our first five-year Path to Excellence in 2010, setting a course for achieving top-quartile performance among peer companies in terms of recordable injuries and the severity of injuries that result in lost work days. While our performance improved significantly during this period, unfortunately there were two employee fatalities in 2009 and one in 2006.

We will now set a new five-year goal to achieve top-decile performance. To reach this level, we must achieve a recordable injury rate of 0.97 and a severity rate of 19.94 for 2011. This compares with actual 2010 performance of 1.05 and 22.62 (excluding River Operations), respectively. Activities focused on proactive prevention will be reflected in how we measure success going forward.

Some of our business units outperformed our corporate goals in 2010. Among them was our Fuel, Emissions and Logistics (FEL) organization, where both employee fatalities occurred in 2009. Investigations of those fatalities revealed areas in need of improvement that were subsequently addressed. In response, unit managers, led by senior management, made a personal commitment to achieve zero harm. They set specific expectations for management

## years of experience

& knowledge lost as a result of work force restructuring

## 2009 EMPLOYMENT DATA - EEO-1 (as of Aug. 31, 2009)

|                      | <b>Employees</b> | Fei   | males (%) | Mino  | rities (%) |
|----------------------|------------------|-------|-----------|-------|------------|
| Total Employment     | 21,737           | 4,013 | (18.5%)   | 3,174 | (14.6%)    |
| Officials & Managers | 3,629            | 382   | (10.5%)   | 305   | (8.4%)     |
| Professionals        | 5,544            | 1,450 | (26.2%)   | 836   | (15.1%)    |

## **2010 EMPLOYMENT DATA — EEO-1** (as of Aug. 31, 2010)

|                      | Employees | Fen   | nales (%) | Mino  | rities (%) |
|----------------------|-----------|-------|-----------|-------|------------|
| Total Employment     | 18,650    | 3,417 | (18.3%)   | 2,732 | (14.6%)    |
| Officials & Managers | 3,200     | 367   | (11.5%)   | 261   | (8.2%)     |
| Professionals        | 4,427     | 1,240 | (28.0%)   | 684   | (15.5%)    |

to lead by example and held a safety summit with all safety professionals. The message was that management wanted to hear from the field about how to improve safety and health performance and establish a zero-harm culture. These expectations led to the formation of new safety committees and hourly worker participation in management meetings that focus on safety-related issues.

Dolet Hills Lignite Co. in Louisiana, where one of the 2009 fatalities occurred, faced significant challenges stemming from Mine Safety and Health Administration (MSHA) inspections in 2010. The agency issued 47 citations during a month-long, full-facility inspection. In response, a team of safety and process experts from across the FEL organization made several recommendations for changes following a two-week review. This high level of collaboration, enabled by the culture shift occurring throughout FEL, has made Dolet Hills a safer, more efficient operation. In our River Operations group, "Let's Talk" sessions reached more than 1,000 crew members with a day-long safety refresher; in 2010, all fleet workers in the Gulf and all new hires also received in-water training. When people fall overboard, it is often life threatening. There were three overboard falls last year; thankfully, none resulted in a fatality. Teaching employees how to recover if they fall overboard and instituting portable fall protection for our barge washers were some of the changes instituted.

The FEL team made safety 25 percent of its incentive compensation plan for 2010 and will increase it to 30 percent in 2011. In addition, the FEL senior management team participates in safety audits and attends safety meetings with employees.

The renewed focus on safety is paying off. Dolet Hills reduced the number of citations from 47 to only 15 in its latest MSHA inspection cycle. The lignite mining operation also achieved a recordable

We encourage open, candid dialogue among our employees. It has been a slow, deliberate path, but we believe we are well on our way to building the kind of open culture we need and want for sustainable success.

rate of 0.74 in 2010, compared with 0.90 in 2009 and an industry average for surface mines of 1.90. River Operations achieved a recordable rate of 0.99, while AEP achieved a 1.05 recordable rate overall. As a point of comparison, River Operations' previous best was 1.52 in 2009.

In our Engineering, Projects and Field Services (EP&FS) organization, which relies heavily on a contract work force, the mantra is "target zero." This group believes that working in a power plant does not mean that injuries are inevitable, whether you are an employee or a contractor. And in 2010, EP&FS achieved a 0.66 Occupational Safety and Health Administration (OSHA) recordable injury rate on the projects it managed. This is 69 percent better than the top-quartile performers within the nation for similar projects.

An important improvement tool is our ongoing implementation at our fossil and hydro plants of the Occupational Health & Safety Assessment Series (OHSAS) 18001 safety and health management system. This is being done in conjunction with the International Standards Organization (ISO) 14001 environmental management system. These systems provide document-based routines for managing health hazards and risks, policies and procedures, and requirements and priorities using a collaborative tool and document control system. This ensures that our employees' knowledge and expertise is captured for the future where everyone can access it, rather than in a notebook or in someone's head. We plan to implement these management systems at all of our fossil and hydro plants by the end of 2012.

We also perform regular internal audits of our safety and health compliance processes. Ten significant safety and health audits were completed across the company in 2010, identifying and raising business unit awareness of compliance and process gaps. Identified opportunities for improvement included aspects of inspection and preventive maintenance programs for lifting devices, such as cranes and hoisting equipment; oversight of asbestos abatement

work performed by contractors; and training and mitigation procedures for asbestos projects completed by AEP employees.

#### **Embracing a Zero-Harm Culture**

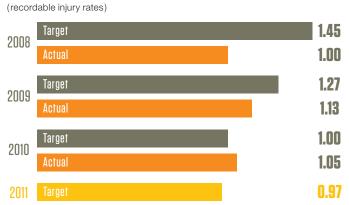
With the right standards and processes, leadership commitment, and a sense of responsibility and accountability among employees, we believe a zero-harm culture can be created and maintained throughout AEP. Leaders at all levels are expected to embody these values and cultivate an environment that encourages employees to make safety a priority and to look out for each other. This includes stopping a job when conditions change and safety and health are at risk. While we are making progress toward this goal, we still have work to do, including focusing more on behaviors and less on statistics. Too often we tell employees what we want them to achieve but not what we want them to do. They need to know both.

We want an environment where employees are encouraged to report all events. We recognize that, as people become more comfortable with reporting safety and health events, an increase in recordable events is likely. To get there, our employees need assurances of consistency, transparency and fairness in how they are treated when an event happens - in other words, a "just culture."

There are still too many near-misses. These are events that may appear minor but could have had much more serious consequences. Several incidents in 2010 easily could have resulted in serious injuries or fatalities. We are analyzing such events to understand why they happened and how they can be prevented. We can't rely on luck to prevent injuries. Creating and following well-designed policies and procedures, using error reduction tools such as Human Performance and looking out for each other are the steps that will get us to zero harm.

Human Performance is an error reduction initiative that puts barriers in place to prevent mistakes that lead to injuries. Every business unit is using some component of Human Performance to

# Employee Safety & Health Path to Excellence

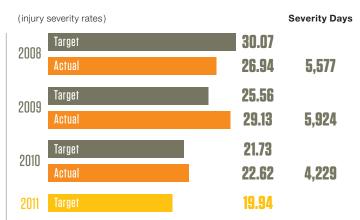


Recordable injury rate = total deaths + lost work injuries + lost work illnesses x 200,000 ÷ hours worked

Excludes AEP River Operations

2008-2010 performance includes hearing loss

Starting in 2011, goals will exclude hearing loss



Average injury severity rate = lost work days + restricted activity days x 200,000 ÷ hours worked

Excludes AEP River Operations

Excludes hearing loss

Severity days represent lost productivity due to lost work days or restricted duty

mitigate the risk of employee injury. Some organizations are farther along than others, making it challenging to determine its overall impact on performance.

#### **Welding Survey Leads to New Requirements**

Our employees and contractors who perform various types of welding will have new requirements later this year to better control exposure to potential health hazards associated with welding fumes. Our Industrial Hygiene team conducted the largest known study of welding fume exposures in the electrical industry. We collected and analyzed more than 550 air samples representing exposure to employees performing all types of welding tasks. The study, combined with research into the recent science of potential health effects of exposures to welding fumes, led to a major revision of our welding policy.

The heating processes from welding or cutting create metal fumes that are easily inhaled into the lungs, where there is potential to cause harm. Metals commonly found in welding or cutting include aluminum, beryllium, cadmium, copper, iron, zinc and others. OSHA doesn't regulate the metal fumes from welding as a single standard but regulates them individually. Our new policy will take effect in October 2011 to give work groups and contractors time to prepare. The policy takes additional precautions to minimize exposure and sets new limits for exposure to some types of metals.

#### **Contractor Safety a Priority**

More and more, how a company manages its contractors affects its safety performance, risk management and corporate reputation. This became abundantly clear in 2010 in the wake of the Deepwater Horizon oil leak in the Gulf of Mexico. If contractors aren't following proper procedures, our own employees can be at risk - and we don't want anyone who is working for AEP to be harmed.

Tragically, three contractors were fatally injured while working for AEP in 2010. Two were killed while setting up their work zone on a busy highway in Kentucky, and one was trimming trees in a transmission right of way in Oklahoma.

We want our contractors to be as committed to safety as we are. We are working more closely with them to make sure they know what we expect.

The recordable injury rate target for contractors was set at 1.80 for 2010, and those business units that tracked contractor performance achieved a rate of 1.66, better than the target. We have established a contractor Path to Excellence beginning in 2011, when the performance of all our major contractors will be tracked regardless of the business unit contracting the work. The recordable rate target for 2011 is 1.70.

Our approach to contractor safety calls for one-on-one meetings with contractors to review their work practices and provide them with information about ours. The contractors are expected to develop an action plan about how they will keep events from recurring, and a "significant event call" is scheduled with AEP executives and affected business units whenever a significant incident occurs. Read about how AEP's safety culture is influencing contractors at www.AEPsustainability.com/ourissues/workforce/.

#### Taking the Electric Safety Message to the Public

Protecting the public from contact with our electrical facilities is a chief goal for AEP but one of the most difficult to achieve. We have little control over the decisions people make when they are in proximity to our lines and equipment.

The main public safety risks are experienced by "weekend warriors" performing household and yard duties; contractors who are not working for AEP, such as highway construction personnel; and people working on billboards.

As copper prices have risen and the economy has stagnated, copper theft has increased in certain areas. In 2010, three of the nine public fatalities and four other electrical contacts stemmed from copper theft. Read more about AEP's public safety efforts at www.AEPsustainability.com/ourissues/workforce/.

#### Preparing Our Company and Our People for the Future

While reining in spending and protecting the company's financial health has been essential, it has also been painful at times. On the one hand, the work force reductions have led to heavier workloads for many employees. This jeopardizes the work/life balance we strive to achieve. Some work groups were reduced by half. Employees and their leaders are working together to identify process improvements and efficiencies to get the work done.

At the same time, the restructuring has given employees opportunities to be creative and take on new assignments, progress within their current jobs or move into leadership roles. There are approximately 300 first-time leaders across the company, many of whom were front-line workers until recently. We've launched a leadership training program to help this group develop leadership skills as quickly as possible.

Groups throughout the company are exploring how to adapt to a smaller work force and become more efficient - by working differently, eliminating work or making greater use of technology. Quickly "recasting" work is especially challenging where high numbers of time-sensitive transactions involving customers or employees are

## Targeted Contractor Recordable Rate Path to Excellence



Contractors covered by this target are defined as large O&M contractors such as construction, tree trimmers, etc.

required, as in our Customer Solutions Centers and the Human Resources Service Center. While the reorganization has led to some short-term negative effects, we have taken actions to remedy these problems.

The work force reductions in 2010 lowered the median employee age from 49 to 47 and the percentage of Baby Boomers declined from 48 percent in 2009 to 40 percent in 2010. Nonetheless, like many other utilities, AEP continues to face an aging work force. We take this into account as part of our ongoing work force planning efforts. However, projecting ahead more than a few years involves certain assumptions that may or may not materialize.

#### **Everyday Innovation**

We are a different company today than we were just a few years ago, and the future is also looking much different than what we envisioned. The evolution is just beginning. A big challenge as we prepare for the future is that we aren't certain which skills will be most needed. But we know that one critically important characteristic will be a willingness to innovate. Even now, employees are finding new ways to get work done with fewer people.

The stronger operating-company business model, which entrusts greater decision making and accountability to operating company management, serves as a catalyst for some of these changes. For example, Cook Plant and our Indiana Michigan Power subsidiary are finding that working together is helping each understand and address the other's needs. Each now has a seat at the other's management team table. This did not happen routinely before.

There are other examples. The EP&FS business unit traditionally was the organization to engineer, design and construct new

Demographics at AEP in 2010 July 2010 April 2010 Change 45.0 years Average age 46.7 years -1.7 years Median age 49.0 years 47.0 years -2.0 years Average years of service 17.3 years 15.5 years -1.8 years Average annual wage \$68,235 \$67,452 -\$783 Number of employees 21,127 18,265 -2,862 employees power plants and maintain existing ones in collaboration with the Fossil & Hydro organization. Today, because we are building fewer plants, fewer employees are required to perform this work. But there are still engineering and design needs, some of which are handled in-house and some of which are outsourced.

#### The Value Proposition of Wellness

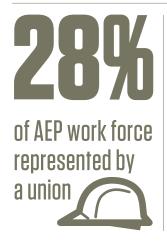
Today's economic realities force companies to look for every opportunity to reduce their operating costs. Health care costs, one of the largest items on any company's ledger, are an obvious target. It is no different at AEP. But we believe that cutting costs without improving the health of our work force is short-sighted and will be more expensive in the longer term.

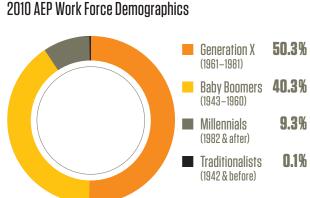
The challenges in this area are enormous. The cost of highquality health care continues to rise annually. AEP, which selfinsures, covers approximately 80 percent of employee medical plan costs. The company's annual net cost of providing this benefit in 2009 was approximately \$250 million. Between 2010 and 2015, we expect health care costs to increase 42 percent, or more than \$21 million per year. This is unacceptable and we are developing programs to address this issue.

Our strategy to stem this tide is to shift cultural norms by teaching our employees and their families how to stay well and how to use their benefits optimally; building skills needed to change behaviors that threaten their health; and showing them how to maintain positive, healthy behaviors. If we succeed, our employees and their families will be healthier and costs will decline for the company and for employees.

The tools we use to manage costs are a comprehensive wellness program and consumer-driven health plans that help employees make better decisions about managing their health care.

Our "AEP Wellness ... Energy for Life" program has completed its third year with overall positive results while helping employees achieve the work/life balance we seek. Approximately 36 percent of eligible employees and 32 percent of their covered spouses or domestic partners completed all three steps of the program - a health screening, health assessment questionnaire and health im-







provement program. Health improvement programs include health coaching, wellness condition management for certain chronic conditions, maternity management and cardiovascular activities.

#### **Our Corporate Culture & Values**

A strong corporate culture is built around openness and collaboration while fostering community and communication that extend beyond company walls.

We are committed to open, candid and honest discussions with our stakeholders and we encourage the same dialogue among employees. It has been a slow, deliberate path, but we believe we are well on our way to building the kind of open culture we need and want for sustainable success in the years to come.

This openness is fostered through the company intranet site, AEP Now, where employees can react to news items and stories about company events and people. They also can comment on internal blogs, including one written by CEO Mike Morris entitled "Wide Open." The culture of openness was especially evident during the restructuring that followed 2010's work force reduction. Employees shared ideas and even criticized or questioned corporate decisions without fear of reprimand. The most viewed stories on AEP Now in 2010 involved the severance program and its effects on the company, and dozens of employees posted reactions to those pieces. Read more about this in Stakeholder Engagement.

We rely on these attributes to guide us and they are embodied in all that we do. Wherever we go, our culture goes with us. Future changes in senior management are not likely to alter this culture of openness. It is becoming an entrenched part of AEP that could help attract new employees as well as retain existing talent.

#### **Labor Relations & Diversity**

We have an excellent relationship with our labor unions. Labor unions have worked with AEP leadership not only on the financial challenges we have faced during the economic downturn, but also in major legislative, regulatory and work force-related initiatives.

The restructuring in 2010 didn't change the demographics of our represented work force; approximately 28 percent of our

#### **Organized Labor at AEP**

| Labor Union                                     | Number of Employees |  |
|---|---------------------|--|
| International Brotherhood of Electrical Workers | 3,327               |  |
| Utility Workers Union of America                | 1,163               |  |
| United Steelworkers of America                  | 512                 |  |
| United Mine Workers of America                  | 282                 |  |
| International Union of Operating Engineers      | 2                   |  |

employees are represented by unions. We worked closely with union leaders during our restructuring to ensure they understood what we were doing and why we had to do it. They were collaborative and supportive throughout the process. The company and labor frequently work together on projects that support our communities, such as United Way and Operation Feed in Central Ohio.

Diversity of the work force in 2010 was affected very little by last year's severance program. Approximately one-third of our employees are minorities or females. In 2010 as in past years, we set diversity targets for females and minorities for management, professional and front-line positions. Placement rates in three of the six job categories exceeded target: females in the management and professional categories and minorities in front-line posts. We made progress in our placement rate for minorities in management and professional positions but were unable to reach our targets, largely due to the work force reorganization.

AEP is committed to providing opportunities for small, minority-owned and women-owned businesses. We view supplier diversity as a business imperative, and we're focused on continuous improvement as a way to maximize business effectiveness and operational efficiency. Adoption of a new supplier registration tool in 2010 and increased educational outreach efforts will help us to identify new opportunities for diverse suppliers.



Contractor safety is taking on greater emphasis at AEP as we institute a Path to Excellence for contract workers. These contractors are working on a transmission project in West Texas.

ach year that the United States fails to enact a comprehensive energy policy, two things happen: The nation's energy future is put in greater jeopardy, and AEP's public policy function becomes an evermore important aspect of what this company does.

When the economy slows, energy often becomes the public policy stepchild. The nation's focus turns to protecting jobs, maintaining family incomes and managing government revenues. The Congress's failure to pass significant energy legislation in 2010 reflects that pattern.

As AEP deals with issues such as climate change, environmental regulation, transmission policy, rate regulation, inland waterway maintenance and others, we recognize that our public policy efforts are a basic element of our success. We realize we have a responsibility to be truthful, honorable, fair and transparent, and to serve the interests of many diverse stakeholders. Because congressional inaction is likely to lead to an even greater collision between energy supply, increasing demand and prices, environmental policy and international dynamics, we expect to be even more involved in public policy matters in the future.

Our goal remains to deliver safe and reliable energy at the most reasonable cost to our customers. We have taken our own steps to trim corporate expenses, including reducing the size of our work force during the past year, reducing travel, cutting our own energy use and improving operating efficiencies. However, we also believe that the nation's energy future is put at more risk by inaction and short-sighted decisions that consider only today's circumstances.

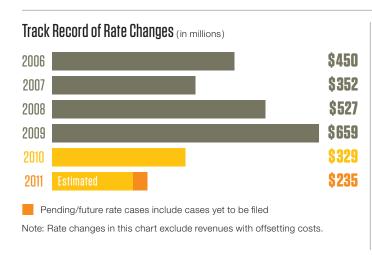
We believe that strong public policy must be based not only

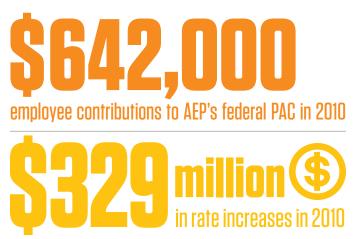
on today's concerns but tomorrow's needs, especially in regard to energy. America is at a crossroads: One road requires investment today that will bring us new supplies, including more renewable, nuclear and clean-coal energy tomorrow. The other road fosters lower prices today but leads to higher prices in the years ahead and a much more uncertain energy future. Unfortunately, it is far from clear which path the nation will choose.

As the prospect for climate change legislation has receded, the attention to other environmental regulations affecting the power sector has grown. In 2010, the U.S. Environmental Protection Agency (EPA) proposed new rules for air emission reductions and the disposal of coal ash with additional proposals in 2011 for air and water. These proposals raise serious concerns for us about the timing for compliance, the ability to secure the billions of dollars in capital that will be needed and the potential reliability risks created by the proposed timetables. Read more about our positions on these issues, how they will affect AEP and what we are doing in Environmental Performance.

During 2010, we engaged in a robust advocacy campaign on these issues, educating our state environmental regulators, elected officials, customers, employees and other stakeholders about the implications of these rules and asking for support of our positions. Many of these stakeholders shared our concerns and communicated that to the EPA.

Rather than isolated rules that often are not coordinated and fail to consider the impact on the nation's electrical system or our communities, we support a more comprehensive approach that considers the impact of plant closings on the nation's grid and sets





**Social Performance:** 

# **Public Policy**

a more rational time frame for compliance. AEP alone would save billions of dollars in costs, retain more jobs and affect our communities less severely if allowed to spread these major environmental projects over a longer period.

#### The Cost of Electricity

The cost of electricity is critical to our customers. Even though our rates remain below the national average, our customers generally live in lower-income regions and are particularly sensitive to rate increases. In addition, much of our service territory was affected by the loss of manufacturing jobs in our region. A comparison of state median incomes shows that virtually all of our states are below the national median income.

This is particularly true in our Appalachian Power and Kentucky Power service areas. Both companies have seen rising customer complaints due to recent rate increases. Customers of both operating companies have voiced protest in person, in petitions, on social media outlets and through legislators who are taking a more active role in opposing rate increases for their constituents. As the economy remains weak in both areas, we can expect continued resistance and opposition to future rate increases - and vocal criticism from customers who are finding it increasingly difficult to pay their electric bills, particularly during the coldest and hottest times of the year.

The fact remains that coal is still among the most affordable generation sources in the nation and largely is the reason behind our low rates. But as the nation addresses issues such as climate change and the need to further reduce sulfur dioxide, nitrogen

oxide, mercury and other emissions, electricity will become more expensive. AEP has spent more than \$5 billion on numerous environmental grades since 2000. These expenses ultimately are reflected in rates make energy more expensive. In fact, the American Coalition for Clean Coal Electricity, an advocacy group we support that promotes the use of coal, reports that half of U.S. households will devote at

lower-income households.

#### 2009 Median Household Income by State (two-year average in dollars)

| AEP States            | Amount   |
|-----------------------|----------|
| Arkansas              | \$37,987 |
| Indiana               | \$45,324 |
| Kentucky              | \$41,828 |
| Louisiana             | \$42,423 |
| Michigan              | \$47,797 |
| Ohio                  | \$46,318 |
| Oklahoma              | \$45,907 |
| Tennessee             | \$40,034 |
| Texas                 | \$46,895 |
| Virginia              | \$61,126 |
| West Virginia         | \$39,170 |
| United States Average | \$49,945 |

Source: U.S. Census Bureau, Current Population Survey, 2007 to 2010 Annual Social and Economic Supplements.

least 20 percent of their after-tax income to residential and transportation energy in 2011. That number was 12 percent in 2001. Higher gasoline prices are a large part of this increase, but it's clear that escalating energy prices have a disproportionate effect on

As regulators and customers approach the limits of what they are able or willing to pay for electricity, our ability to develop newer but more expensive forms of energy, such as wind, solar, biomass and clean coal - at the pace we had anticipated a few years ago is affected.

In addition, we plan to install technologies such as smart

The M/V Mariner and a tow of 15 coal barges prepares to leave the Newburgh lock on the Ohio River near Newburgh, Ind., as the M/V Hoosier State and its barges get ready to enter. AEP supports legislation that would improve the nation's inland waterways and navigation system.





McDonald's franchisee and Appalachian Power customer Sherry Wolf demonstrates the electric vehicle charging system she installed at her restaurant in Huntington, W.Va. Wolf and her husband, Tom, invested in the system to encourage the use of electric vehicles.

As regulators and customers approach the limits of what they are able or willing to pay for electricity, our ability to develop newer but more expensive forms of energy, such as renewables and clean coal, at the same pace we expected a few years ago is affected.

meters and smart grid systems that will give customers far more ability to control their energy use and costs. However, these will be deployed only where regulatory approval is certain. For example, we likely will not meet our goal of installing smart meters throughout our customer base by 2015 without additional regulatory support. We will work with all of our regulators to advance new forms of energy and deploy new technology as quickly as we can, but we can do so only when they permit us to obtain cost recovery.

#### **NERC Security Standards**

All bulk power system owners, operators and users, including AEP, are now required to comply with system reliability standards developed by the North American Electric Reliability Corp. (NERC). Operating under the auspices of the Federal Energy Regulatory Commission, NERC is charged with developing and enforcing these standards to ensure the reliability and security of the nation's electrical grid. NERC standards became mandatory in 2007 and fines for violations can be significant.

AEP has created a cross-functional team of executives from the Transmission, Legal, Regulatory Services, Commercial Operations, Generation, Shared Services, Corporate Planning and Budgeting and Distribution groups to implement new compliance requirements. These include training for all employees in areas such as proper record-keeping procedures, cyber security and physical access rules for critical facilities.

NERC is scheduled to conduct an extensive audit of AEP's compliance with the reliability standards later in 2011. We expect to be prepared for the audit but also realize that it may uncover system risks. Penalties largely are determined by the risk factor associated with the violation as well as the severity level. Read more about this issue in Energy Security, Reliability & Growth.

### **Retail Energy & Curtailment Service Providers**

The development of a competitive electricity retail market in Ohio - our largest state in terms of revenues, employees and customers - presents a challenge to AEP. While competition has existed in Ohio since 2000, there were few attempts to sign up AEP Ohio

AEP's Mike Morris, Scott Osterholt and Karen Sloneker join U.S. Energy Secretary Steven Chu on a tour of the mobile gridSMART® showcase.



customers because our rates have always been among the lowest in the state. With recent changes in the market, however, some competitors are able to undercut our regulated rates to certain customers, particularly commercial customers. The lost load has not significantly harmed our business at this time. We formed a subsidiary, AEP Retail Energy, which also allows us to offer competitive services in deregulated states, including Ohio and Texas.

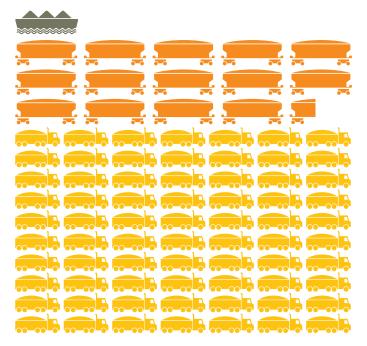
In addition, Demand Response Curtailment Service Providers are currently enrolling AEP retail customers in demand response programs sponsored by regional transmission organizations, such as those offered by PJM Interconnection. We contend that it is not appropriate for retail customers, who are taking service under regulated retail rates, to participate in wholesale market-based programs under the current rules and arrangements. The current structure allows a select few customers to independently benefit from generation capacity that is dedicated to serving all retail customers. In addition, we are working to correct the rate inequities that have prompted customers to shop for less expensive power.

We believe that participation by retail customers in such programs should be offered only through their utility and under terms approved by the responsible state regulatory commission. This arrangement would allow the costs and benefits of such programs to be shared among all retail customers. We continue to work with our state public service commissions on this issue.

#### **Inland Waterway Improvements**

The poor state of our nation's inland waterways transportation infrastructure is a serious issue for us and for the nation. We operate one of the nation's largest inland barge companies, and the

# **AEP Barge Transportation is Cost Effective** 1 Barge = 14.4 Rail Cars = 70 Tractor-Trailers



decay of the lock system on the Mississippi and Ohio rivers is causing costly river traffic delays and adding to the expense of hauling the millions of tons of coal, grains, metals and other commodities that we ship.

More than half of the 240 operational lock chambers run by the U.S. Army Corps of Engineers are over 50 years old. We rely on barges to deliver coal from various places along the Ohio River and upstream, including western coal from our Cook Coal Terminal in Metropolis, III. Increasingly, broken and undependable locks raise our costs and affect our ability to deliver to our customers on time. For example, coal delivery costs increased \$1.7 million as a result of closure of just one facility in 2010. Lock 52 near the Cook Coal Terminal was closed for 32 days. That same closure increased our commercial hauling costs by about \$2.9 million.

The Army Corps of Engineers, which maintains and operates the inland waterways, recognizes the problems but has not received adequate funding from Congress to address them. AEP supports adoption of the Inland Waterways Capital Development Plan, which would include a 30 percent to 45 percent increase in the fuel tax we pay for our barge operations, to fund capital improvements over a 20-year period. That proposal did not make the legislative cut in Congress in 2010. But we will continue to advocate on its behalf.

The nation's waterways provide an efficient, safe, low-cost, low-impact mode of annually transporting approximately 600 million tons of commodities valued at \$70 billion, according to the Army Corps of Engineers. Shifting even part of that load to rail or trucks would result in more congestion, more fuel consumption, more pollution, higher road maintenance costs and higher overall transportation costs for coal, grains, other commodities and manufactured goods.

Repairing the lock system will benefit not only AEP and the electric industry but the nation's economy and the environment.

#### **Political Involvement**

Like many companies, we support candidates and legislation that we believe are in the best interest of our company and our stakeholders. We have a responsibility to be forthcoming about our political and lobbying activities and to make sure that we are not saying one thing in public and doing something else in the political arena.

We have many different constituencies and interests that are not always aligned or in agreement. We therefore try to be measured and balanced in taking public policy positions. We work to identify and weigh the environmental, economic and social issues involved in any specific piece of legislation or policy paper. We seek common-ground solutions wherever possible and attempt to align our interests with those of others whenever we can.

Sometimes we are faced with difficult decisions that please some AEP stakeholders and displease others. The best we can do is to be open and candid about our rationale and invite discussion and dialogue with those who have differing viewpoints. To find out more about how we do this, please see Stakeholder Engagement.

#### **Our Customers Speak Out** about Rate Increases

As energy bills continue to increase, customers in some of our hardest-hit service

territories have expressed their anger. We are sensitive to the effect that higher rates have on our customers. Our goal is to deliver reliable energy at the lowest cost possible, but new environmental regulations will require significant investments in our plants to comply. Customers posted these comments about their bills in online forums:

I think there will be a lot of people this winter whose electricity will get turned off because they can't pay their bill. I will probably be one of them. We have three kids and we have to have electricity and we have to have food. But if worse comes to worse, I will burn candles and use kerosene if I have to 'cause food is more important. ""

- A Kentucky Power customer writing in an online forum in response to an increase in electricity rates

Last month my bill was \$188 for 1,888 kWh. In December 2008, it was \$128 for 1,890 kWh. ... Something is wrong with this picture. ... I have e-mailed AEP several times, SCC (Virginia's State Corporation Commission) several times so now I am on to my congressman, my senator and delegates. I hope you guys will join me in making your voice heard. "

- An Appalachian Power customer's comments on Facebook about higher electricity bills in Virginia

AEP continues to be politically active through its political action committees (PACs) as well as through direct corporate contributions where permitted by law. We maintain lobbyists in Washington, D.C., and in each state where we have operations, except in Tennessee, Illinois and Missouri. Our full-time lobbyists work closely with our employee-run PACs to direct contributions to candidates and officeholders who will best represent our interests.

AEP's federal PAC contributed approximately \$582,000 to candidates in 2010 and received about \$642,000 in contributions from employees. AEP operates state PACs in Ohio, Michigan, Texas and Virginia. Reports about each PAC's activities are available at www.fec.gov and the respective state websites. We spent more than \$10 million on federal lobbying efforts in 2010. Approximately \$4.5 million of the dues or payments we made to trade organizations also was designated for lobbying activities. We post reports on our activities to our website at www.AEPsustainability.com/our issues/publicpolicy/lobbying.aspx, including breakdowns of where the money went.

ur ability to succeed as an organization and to deliver financial and social value is tied directly to the strength of our relationships with our shareholders and with other stakeholders. We provide an essential service to society and to local communities that requires us to be accountable, transparent and trustworthy. In addition, our operating environment is changing dramatically and becoming significantly more complex, and we must work with all of our stakeholders to evolve and thrive in it.

We have found that if we work with our stakeholders in good faith to find common ground, and if we are honest and candid about our decisions and the basis for them, they will respond in kind - even when our views differ sharply. We deeply appreciate and respect stakeholders' willingness to bring their issues, questions and concerns directly to us, and we will always endeavor to earn and keep that trust.

Engagement makes us a stronger, better and more resilient company because our stakeholders:

- Inform us of key issues that affect people who are important to us.
- Challenge us continually to improve our performance.
- · Give us insights into points of view that we may not otherwise have considered.
- · Help us see and understand how we are perceived outside of the company.
- · Work with us to find common ground and collaborate on common objectives.
- Hold us accountable for our actions and impacts.
- Are willing to engage in meaningful dialogue to achieve reasonable solutions.

As we create a culture of openness within AEP, we have encouraged a similar culture of openness with our stakeholders. It is not uncommon for leaders of environmental groups or governors in our states to call our chairman or other senior executives to discuss issues, raise concerns or challenge our positions or actions. We feel free to call them on the same basis. Last year, for example, we organized stakeholder calls, chaired by Mike Morris, to answer questions about our position on proposed EPA regulations. We see transparency, accessibility and engagement as important ways to manage our business risks, build trusting relationships, support our communities and ensure our financial health.

#### **How We Engage**

In today's interconnected world, technology enables us to engage with more stakeholders on a broader range of issues. We believe strongly in face-to-face engagement; it is the best way to build trust and to ensure that we are being heard and understood and that we are hearing and understanding others.

We began to venture into social media during 2010 to expand our reach and frequency of stakeholder contact. We can have discussions and also monitor the conversations that people are having about us. This helps us to understand the issues and receive feedback about how decisions and business strategies affect our customers. We compile and distribute a daily summary of social media "chatter" about AEP and key issues to AEP managers.

We now have a social media governance committee and policy, and more than 100 people across AEP are regularly and officially using Twitter, Facebook, YouTube and LinkedIn, among other

number of customers who switched to paperless billing in 2010



AEP Chairman & CEO Mike Morris, left, Dale Heydlauff, vice president of corporate communications, and President Nick Akins during a webcast to employees.



# **Social Performance:**

# Stakeholder Engagement

networks. We "tweet" during power outages, for example, to give customers instant information about restoration efforts. During one early 2011 massive ice and snow storm, more than 500,000 customers in Texas and Ohio were affected by power outages. Twitter and Facebook were integral parts of our customer communications efforts during these events. Our corporate Twitter account has nearly 800 followers (@AEPnews) and our sustainability director has a separate account with more than 300 additional followers (@Watts4U).

AEP and our operating companies were mentioned more than 17,000 times in social media arenas in 2010. The most discussed topics were company news (the employee severance program, leadership changes, etc.), outages, rate cases, investor information, environmental issues and energy efficiency.

Legislators across the country also have begun using social media, blogs and other online tools to communicate with their constituents and advocate their positions. In some AEP jurisdictions. legislators united with customers concerned about their rising electricity prices to voice their positions and create alliances, using some of the same online tools.

We held nine stakeholder meetings in 2010, most of them in person but some by phone. Our discussions focused on such issues as the cost of electricity, the future of coal, energy efficiency, environmental regulations, climate change, supply chain and our changing business model. We also published a mid-year update to our website (www.AEPsustainability.com/reporting).

#### Stakeholder Dialogues & Issues

During the past five years, we have engaged with more than 100 stakeholders on a wide range of issues. Energy efficiency is often a top concern, and last year we formed two stakeholder teams on the topic. The first brought together a small group of representatives from Ceres, the Natural Resources Defense Council and AEP to talk about increasing energy efficiency through the use of a rate structure known as decoupling, which would separate utility income from electricity sales. Prior to forming that group, our discussion had focused on why some stakeholders supported that approach and why we opposed it. We learned that we agreed on many aspects of decoupling and the importance of energy efficiency but disagreed on other key points, and our discussions will continue.

#### Assistance Provided in 2010 to Help Customers **Pay Their Electric Bills**

| Company                         | 2009         | 2010         | % Change |
|---------------------------------|--------------|--------------|----------|
| Appalachian Power               | \$35,912,830 | \$26,990,405 | -24.8%   |
| Kentucky Power                  | \$4,514,950  | \$4,586,968  | 1.6%     |
| Indiana Michigan Power          | \$9,244,881  | \$9,027,788  | -2.3%    |
| AEP Ohio                        | \$21,123,833 | \$18,017,939 | -14.7%   |
| Public Service Co. of Oklahoma  | \$10,415,763 | \$11,281,714 | 8.3%     |
| Southwestern Electric Power Co. | \$5,132,579  | \$5,407,410  | 5.4%     |
| Totals                          | \$86,344,836 | \$75,312,224 | -12.8%   |

#### A Stakeholder's Perspective

We invited Allen Hershkowitz, senior scientist at the Natural Resources Defense Council, to write a brief statement about his views on stakeholder dialogue and the importance of collaboration between industry, organizations, customers and government. Below are two excerpts. The entire statement is at www.AEPsustainability.com.

The time is long past when dialogue between environmental groups and industry is viewed as either a risk to business operations or selling out. All we're doing is coming together to try and find an effective path to resolve difficult problems. "

11 Needless to say, dialogue does not mean that we abandon our principles or agenda. Indeed, it means bringing our concerns to the negotiation table for discussion. In my case, important differences exist between AEP and NRDC: We disapprove strongly with the use by AEP of coal obtained from mountaintop removal mining (MTR) sites. ""

Last June we formed an external Energy Efficiency Advisory Council. The council includes 13 manufacturing, trade, technology, environmental and policy experts, who will help us achieve our energy efficiency and conservation goals and also help drive national awareness to change behaviors, support new technologies and standards, and influence public policy regarding efficiency and conservation.

It is not uncommon for leaders of environmental groups or governors in our states to call our chairman or other senior executives to take issue with our positions or challenge our actions. We encourage this culture of openness and accessibility.



Allen Hershkowitz, left, senior scientist at the Natural Resources Defense Council tours the Mountaineer Plant control room with Plant Manager Charles Powell. Hershkowitz visited Mountaineer to become familiar with how coal plants operate.

The council met twice last year and chose education, codes and standards, commercial lighting and industrial technologies as its priorities for collaboration. Early in 2011, the group sent a letter of support to U.S. Energy Secretary Steven Chu, urging adoption of the proposed Energy Efficient and Smart Appliance Agreement of 2010. This agreement would set new minimum energy efficiency standards for home appliances, extend and update tax credits for developing and manufacturing smart appliances, and include "smart grid" readiness as a feature of future ENERGY STAR qualified appliances. In addition to saving energy, resources and money, these appliances will enable quicker deployment of smart appliances to consumers. Read the letter online at www.AEPsustainability.com.

We also meet with stakeholders every year to obtain feedback on our Corporate Accountability Report before it is published. Ceres, a national network of investors, environmental organizations and other public interest groups, helps to organize a multistakeholder meeting with AEP executives in our Columbus, Ohio, headquarters. In 2010 and 2011, this group asked us to provide more information on how our business model is evolving to meet a carbon-constrained future. They also asked us about the role of technology and whether AEP

would consider moving from large-scale centralized power stations to smaller-scale decentralized options.

In response, we rewrote sections of our report each year to clarify our business strategy and transition plan, citing a combination of factors that are driving change, including environmental and climaterelated issues. We are still developing a transition plan and when it is complete, we will share it with stakeholders.

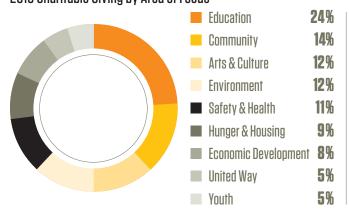
#### **Engaging Our Investors**

We seek to maximize shareholder value and strongly believe that shareholder return will be higher in the long run if we build strong, trusting relationships with our stakeholders. Engagement creates and protects long-term value and is focused on sustainable growth, which in turn promotes higher returns for shareholders. For example, by achieving our financial goals we can provide new opportunities to innovate, achieve cost-saving operational efficiencies, improve our environmental performance and create better prospects for our company and employees. Innovation, cost savings and improved performance, in turn, help us to improve financial returns. Profits build trust with investors, allow us to fulfill our nonfinancial commitments and keep us competitive and financially healthy.

Investor outreach is a cornerstone of any successful investor relations (IR) function. Approximately 69 percent of our outstanding shares are owned by institutional investors who have an investment horizon of more than two years. Our IR team increased its outreach to investors by 36 percent in 2010 over 2009. We participated in 40 investor conferences and in-person forums, hosted nine investor visits to our corporate headquarters in Columbus, Ohio, and met face-to-face with more than 500 financial investors in five countries. This robust outreach continues in 2011.

Our discussions most often focus on the legislative and regulatory uncertainties we face in our 11 states and particularly in Ohio, where approximately 40 percent of our earnings are generated. Investors are interested in how we will maintain fiscal discipline and match our capital expenditures with operating cash flows. Interest also remains high in our transmission growth strategy and in the potential opportunities, challenges and financial implications of cli-

# 2010 Charitable Giving by Area of Focus



Total Philanthropic Giving (Corporate and AEP Foundation)

| State     | 2010         | Stat   |  |
|-----------|--------------|--------|--|
| Arkansas  | \$356,444    | Texa   |  |
| Indiana   | \$1,589,000  | Virgii |  |
| Kentucky  | \$428,006    | Wes    |  |
| Louisiana | \$368,095    | Othe   |  |
| Michigan  | \$714,853    | Tota   |  |
| Ohio      | \$11,149,674 | *Givi  |  |
| Oklahoma  | \$709,016    | AEF    |  |
| Tennessee | \$33,553     | ben    |  |
|           |              |        |  |

| 2010         |
|--------------|
| \$1,631,808  |
| \$1,676,385  |
| \$2,247,377  |
| \$2,725,615  |
| \$23,629,826 |
|              |

ring to organizations outside P's service area or those that nefit multiple states

mate change policies and regulations.

We have seen a proliferation of enterprises that assess companies' sustainability performance and provide that research to the financial community. In 2010, we responded to at least a dozen different surveys that queried us on corporate governance, climate and water risk management, political contributions policies and our forestry footprint. We analyzed the results from the largest surveys to understand what information is most important to the researchers and, by extension, the investment community. Although we don't agree with the implied emphasis in all cases, we hope to improve this report by considering that kind of feedback.

#### **Connecting with Customers**

We are in business to deliver comfort to customers by providing reliable, affordable, high-quality power "24/7." The cost of electricity has increased significantly in the last five years, which has been particularly challenging during the recession. Most of the 11 states in our service territory were already below the national median income and were further affected by the recession.

Our customer service centers are often the first point of contact for customers who wish to communicate with us. Last year, we spoke with more customers, for a longer time per call. We spent an average of approximately 4.5 minutes per call discussing high bills, the recession and other issues. Call volume into our customer service centers daily increased over 2009 levels yet remained just under 50,000. Consequently, the amount of time customers had to wait on hold to talk to us - called the average speed of answer was longer.

At the same time, the number of customers conducting business with us online increased. Customers logged in to our utility websites to pay bills or conduct other business more than 4.2 million times in 2010. This is nearly double the online customer contacts in 2009. The Internet is much more efficient for customers and for AEP. It can reduce the number of calls we handle and on-hold wait times. By the end of 2010, approximately 433,000 customers switched to paperless billing and more than 1.1 million, mostly residential customers, were conducting online transactions with us.

#### 2010 Customer Satisfaction Results

| Survey Type              | % Satisfied | Quartile Ranking vs. National Peer Group |
|--------------------------|-------------|--|
| Residential              | 82.8%       | 1st                                      |
| Commercial               | 89.4%       | 2nd                                      |
| Managed/Key Accounts     | 82.0%       | 1st                                      |
| Call Center Transactions | 84.5%       | NA                                       |

We survey our customers regularly to assess our service performance and to set internal targets to ensure customer satisfaction, which remained high in 2010. We combine our surveys, conducted by a third party, with industry benchmarks of our peers to create a Customer Satisfaction Benchmarking Index. In 2010, AEP placed in the 82nd percentile relative to our national peer group in overall customer satisfaction, which exceeded our goal of reaching the 75th percentile. Satisfaction levels reached the 91st percentile relative to a national peer group for large commercial industrial customers, the 82nd percentile for residential customers and the 74th percentile for small commercial customers.

Account delinquencies can be a measure of economic growth or downturn. Residential account delinquencies increased significantly in 2010, up 48 percent from 2009. Nonresidential customers were not immune to the economic climate, either, as the average delinquent account balances for these customers increased approximately 10 percent from 2009.

We work with customers to keep them from being delinquent, providing payment plans and other forms of assistance. We connect them with energy assistance programs when appropriate. AEP customers received approximately \$75.3 million in energy assistance last year, a 13 percent decrease from 2009.

#### **Employee Engagement**

We believe that employee engagement begins with a culture in which employees are free to speak their minds. Our chairman, Mike Morris, has advocated and fostered an unprecedented level of openness that has changed our culture for the better. Employees have many opportunities and forums to discuss issues with each other and with management and are encouraged to do so. While

increase in residential account delinquencies compared with 2009

employee webcasts conducted in 2010



Providing support to the community is a long-standing tradition at AEP. Here, employees from AEP Ohio deliver holiday food boxes at a Cambridge, Ohio, food pantry.

ground rules require that discourse be respectful, employees feel free to comment on anything - including the chairman's blog posts. And they do.

We held 27 employee webcasts last year on issues ranging from gridSMART® to copper theft and transmission strategy to transformation of our Generation business. Employees are encouraged to call in or submit questions in advance, which executives answer live on the air. The webcasts are recorded and can be viewed by employees on demand.

We organized a weeklong Energy Sustainability Week to help our employees better connect sustainability, their jobs and our business strategy. More than 60 events were held at 30 work locations in seven states. We collaborated on the effort with peer utilities through the Electric Power Research Institute Sustainability Interest Group.

#### **Involved in Our Communities**

Strong communities are good for people and good for business. It's not only our operating companies that are engaged in the community; our employees are, too. AEP employees donated more than 57,000 volunteer hours in 2010 to assist a variety of organizations and educational institutions. And they did this at their own initiative and on their own time. We are very proud of this tradition of service.

Our employees' generosity and our commitment to community

involvement are supported by AEP Connects Grants of \$150 each. The grants go to organizations of employees' choosing, where they have volunteered 40 or more hours during the year. In 2010, 617 grants were awarded to employee-supported organizations. We also track the economic value of the volunteer time our employees give, which was approximately \$1.2 million (using a value of volunteer time of \$20.85 per hour, based upon the Independent Sector estimated value).

#### **Supporting Economic Prosperity & Charitable Giving**

In a slow economy, AEP's community support is more important than ever. Our operating companies contributed more than \$2.5 million in 2010 to more than 160 state and local organizations that help create jobs and improve the quality of life in our local communities. This is an increase of more than \$1 million from 2009.

AEP and our AEP Foundation donated a total of more than \$23.6 million to some 2,700 organizations in 2010. This was a slight increase from the more than \$23.4 million contributed in 2009.

Social investments are vital to keeping valuable community organizations intact and able to provide services that our customers need. AEP contributed approximately \$11.8 million in corporate giving; our AEP Foundation donated more than \$11.7 million.

### **Company Blogs Foster Candor, Communications**

AEP provides several ways for employees to communicate and provide feedback, including 20 blogs. One of the more popular is Chairman and CEO Mike Morris's blog, called "Wide Open," on which any employee is free to post. Here are some excerpts from "Wide Open" from April 2010, regarding the announcement of the voluntary severance program.

🕯 All in all, these are very difficult times, and these are very difficult things to go through. Those of you who are happy, and many of you are, I wish you well. Those of you who are not as pleased with the program, I'm sorry about that, but it is essential. One has laid out a pretty critical point that I'd like to at least address. It has to do with the whole notion of shareholders first. And the answer to that is, and always has been: YES, shareholders first. If it weren't for people willing to invest in the company, we'd have no company. I appreciate that customers are essential, because if they aren't satisfied, we have no business. And I know that we as employees are there to please our customers. So, I understand the trinity of what we're dealing with - it is an equilateral triangle – but, the shareholders are at the peak of the triangle, and we need to understand that. ",

- Posted by Chairman Mike Morris
- In some line crews we have been short-handed for some time, and work a lot of overtime to restore power. This being said, with further reductions of line mechanics how will we be able to keep up customer service and not have to increase the amount of overtime worked? ""
- Posted by an AEP employee
- Leclaring the 400th consecutive dividend during a contraction is at the same time unavoidable and bold. Shareholders really must come first. We don't just exist because of shareholders' investments; we will \*continue\* to exist as shareholders \*continue\* to consider us a "sure thing." This dividend may raise a couple eyebrows, but it declares we're contracting in a controlled and forward-thinking way. ""
- Posted by an AEP employee

# Corporate & Shareholder Information

#### **Corporate Headquarters**

1 Riverside Plaza

Columbus, OH 43215-2373

614-716-1000

AEP is incorporated in New York.

Stock Exchange Listing: The Company's common stock is traded principally on the New York Stock Exchange under the ticker symbol AEP.

Internet Home Page: Information about AEP, including financial documents, Securities and Exchange Commission filings, news releases, investor presentations, shareholder information and customer service information, is available at www.AEP.com/investors.

Inquiries Regarding Your Stock Holdings: Registered shareholders (shares that you own, in your name) should contact the Company's transfer agent, listed below, if you have questions about your account, address changes, stock transfer, lost certificates, direct deposits, dividend checks and other administrative matters. You should have your Social Security number or account number ready; the transfer agent will not speak to third parties about an account without the shareholder's approval or appropriate documents.

#### **Transfer Agent & Registrar**

Computershare Trust Company, N.A.

P.O. Box 43078

Providence, RI 02940-3078

Overnight Deliveries: 250 Royall Street, Canton, MA 02021-1011

Telephone Response Group: 1-800-328-6955

Internet address: www.computershare.com/investor

Hearing Impaired #: TDD: 1-800-952-9245

Beneficial Holders: (Stock held in a bank or brokerage account) - When you purchase stock and it is held for you by your broker, it is listed with the

Company in the broker's name, and this is sometimes referred to as "street name" or a "beneficial owner." AEP does not know the identity of individual shareholders who hold their shares in this manner; we simply know that a broker holds a certain number of shares which may be for any number of investors. If you hold your stock in street name, you receive all dividend payments, annual reports and proxy materials through your broker. Therefore, questions about your account should be directed to your broker.

Dividend Reinvestment & Direct Stock Purchase Plan: A Dividend Reinvestment and Direct Stock Purchase Plan is available to all investors. It is an economical and convenient method of purchasing shares of AEP common stock, through initial cash investments, cash dividends and/or additional optional cash purchases. You may obtain the Plan prospectus and enrollment authorization form by contacting the transfer agent or visiting www.AEP.com /investors/directstockpurchase.

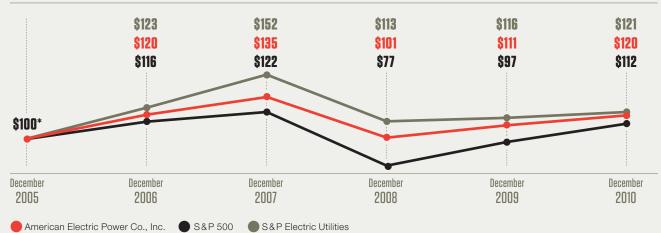
Financial Community Inquiries: Institutional investors or securities analysts who have questions should direct inquiries to Bette Jo Rozsa, 614-716-2840, bjrozsa@AEP.com; Julie Sherwood, 614-716-2663, jasherwood @AEP.com; or Sara Macioch, 614-716-2835, semacioch@AEP.com. Individual shareholders should contact Kathleen Kozero, 614-716-2819, klkozero@AEP.com.

Number of Shareholders: As of Dec. 31, 2010, there were approximately 91,000 registered shareholders and approximately 331,000 shareholders holding stock in street name through a bank or broker. There were 480,807,156 shares outstanding on Dec. 31, 2010.

Form 10-K: Upon request, we will provide without charge a copy of our Form 10-K for the fiscal year ended Dec. 31, 2010. A copy can be obtained via mail with a written request to AEP Investor Relations, by telephone at 1-800-237-2667 or electronically at klkozero@AEP.com.

#### Comparison of Five-Year Cumulative Total Return

Among American Electric Power Co., Inc., The S&P 500 Index & The S&P Electric Utilities Index



 $^{\star}\$100$  invested on 12/31/05 in stock or index, including reinvestment of dividends. Fiscal year ending Dec. 31.

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# **Forward-Looking Information**

This report made by AEP and its Registrant Subsidiaries contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Although AEP and each of its Registrant Subsidiaries believe that their expectations are based on reasonable assumptions, any such statements may be influenced by factors that could cause actual outcomes and results to be materially different from those projected. Among the factors that could cause actual results to differ materially from those in the forward-looking statements are:

- The economic climate and growth in, or contraction within, our service territory and changes in market demand and demographic patterns.
- · Inflationary or deflationary interest rate trends.
- Volatility in the financial markets, particularly developments affecting
  the availability of capital on reasonable terms and developments
  impairing our ability to finance new capital projects and refinance
  existing debt at attractive rates.
- The availability and cost of funds to finance working capital and capital needs, particularly during periods when the time lag between incurring costs and recovery is long and the costs are material.
- Electric load, customer growth and the impact of retail competition, particularly in Ohio.
- Weather conditions, including storms, and our ability to recover significant storm restoration costs through applicable rate mechanisms.
- Available sources and costs of, and transportation for, fuels and the creditworthiness and performance of fuel suppliers and transporters.
- Availability of necessary generating capacity and the performance of our generating plants.
- Our ability to resolve I&M's Donald C. Cook Nuclear Plant Unit 1 restoration and outage-related issues through warranty, insurance and the regulatory process.
- Our ability to recover regulatory assets and stranded costs in connection with deregulation.
- Our ability to recover increases in fuel and other energy costs through regulated or competitive electric rates.
- Our ability to build or acquire generating capacity, including the Turk
  Plant, and transmission line facilities (including our ability to obtain
  any necessary regulatory approvals and permits) when needed at
  acceptable prices and terms and to recover those costs (including
  the costs of projects that are canceled) through applicable rate
  cases or competitive rates.
- New legislation, litigation and government regulation, including oversight of energy commodity trading and new or heightened requirements for reduced emissions of sulfur, nitrogen, mercury, carbon, soot or particulate matter and other substances or additional regulation of fly ash and similar combustion products that could impact the continued operation and cost recovery of our plants.

- Timing and resolution of pending and future rate cases, negotiations and other regulatory decisions (including rate or other recovery of new investments in generation, distribution and transmission service and environmental compliance).
- · Resolution of litigation.
- · Our ability to constrain operation and maintenance costs.
- Our ability to develop and execute a strategy based on a view regarding prices of electricity, natural gas and other energy-related commodities.
- Changes in the creditworthiness of the counterparties with whom we have contractual arrangements, including participants in the energy trading market.
- · Actions of rating agencies, including changes in the ratings of debt.
- Volatility and changes in markets for electricity, natural gas, coal, nuclear fuel and other energy-related commodities.
- Changes in utility regulation, including the implementation of ESPs and related regulation in Ohio and the allocation of costs within regional transmission organizations, including PJM and SPP.
- Accounting pronouncements periodically issued by accounting standard-setting bodies.
- The impact of volatility in the capital markets on the value of the investments held by our pension, other postretirement benefit plans, captive insurance entity and nuclear decommissioning trust and the impact on future funding requirements.
- Prices and demand for power that we generate and sell at wholesale.
- Changes in technology, particularly with respect to new, developing or alternative sources of generation.
- Other risks and unforeseen events, including wars, the effects of terrorism (including increased security costs), embargoes, cyber security threats and other catastrophic events.
- Our ability to recover through rates or prices any remaining unrecovered investment in generating units that may be retired before the end of their previously projected useful lives.

AEP and its Registrant Subsidiaries expressly disclaim any obligation to update any forward-looking information.









**American Electric Power** 1 Riverside Plaza Columbus, OH 43215 614-716-1000 www.AEP.com

