



AMERICAN ELECTRIC POWER  
2009 CORPORATE SUSTAINABILITY REPORT

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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. At two of the Committee's meetings in the past year, the Committee and company management reviewed the company's sustainability objectives, challenges, targets and progress. That Committee gave management input and guidance for the proposed approach to this report, and then reviewed and discussed the final text of this report before recommending its approval by the full Board of Directors.

The AEP Board of Directors has received periodic reports both from management and from the Committee on Directors and Corporate Governance about the company's sustainability initiatives. Many of the topics in this report have been the subject of active discussion at Board and Committee meetings. Members of the Board all received copies of this report before it was published, and several directors made suggestions that have been incorporated into this report. Following its review, and upon recommendation of the Committee, the Board of Directors adopted a formal resolution approving this report.

The Board believes this report is a reasonable and transparent presentation of the company's plans and performance and of its environmental, social and financial impacts. The Board realizes that the company must be prepared to make frequent adjustments in response to the difficult economic and financial situation that the nation is experiencing. The Board has emphasized to management that it will 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 in this report.



**LESTER A. HUDSON, JR.**

Presiding Director of the AEP Board of Directors  
April 2009

COMPANY OVERVIEW 2008

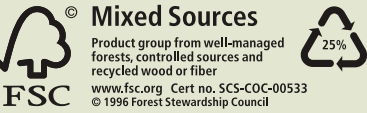
American Electric Power has been providing electric service for more than 100 years and is one of the nation’s largest electric utilities, serving 5.2 million customers in 11 states.

Revenues (in billions)	\$14.4
Net Income (in millions)	\$1,380 <sup>1</sup>
Earnings Per Share	\$3.43 <sup>1</sup>
Cash Dividends Per Share	\$1.64
Service Territory	197,500 square miles
Transmission	39,000 miles
Distribution	213,000 miles
Generating Capacity	37,736 MW <sup>2</sup>
Generating Stations	More than 80
Renewable Portfolio (hydro)	364 MW <sup>3</sup>
Renewable Portfolio (wind)	1,296 MW <sup>4</sup>
Total Assets (in billions)	\$45.2
U.S. Customers (year-end, in thousands)	5,213
Employees (year-end)	21,912

<sup>1</sup> Generally Accepted Accounting Principles  
<sup>2</sup> Includes 270 MW of retired/decommissioned generating capacity  
<sup>3</sup> Excludes pumped storage  
<sup>4</sup> Regulated wind capacity online or under contract

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 Company (in Arkansas, Louisiana and east Texas).

The company is based in Columbus, Ohio.

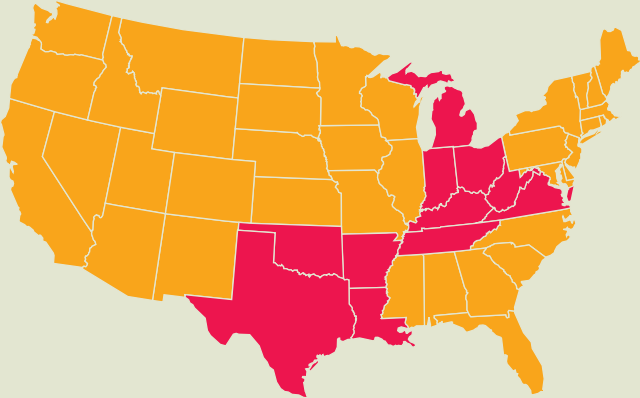


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MARKET PRICE — COMMON STOCK



SERVICE TERRITORY

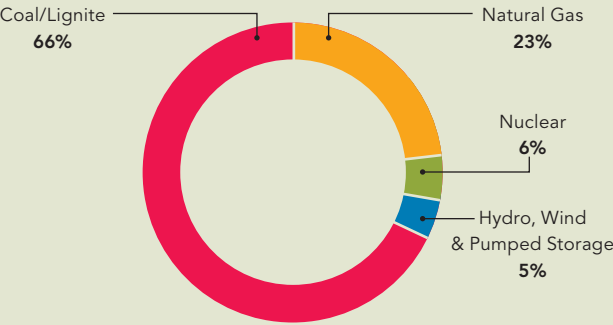


AEP ECONOMIC IMPACT 2008<sup>1</sup>

Jobs	21,912
Wages <sup>2</sup>	\$1,758,224,720
Construction Expenses <sup>3</sup>	\$3,981,200,000
Local Taxes	\$503,717,158
State Taxes	\$319,276,642
Federal Taxes	\$504,773,323
Materials & Services <sup>4</sup>	\$8,798,769,223
Value of All Contracts <sup>5</sup>	\$19,685,558,382
Value of Supplier Diversity Contracts	\$935,528,930
Coal Purchased (tons)	80,000,000
Coal Average Purchase Price	\$47.14/ton
Corporate Giving <sup>6</sup>	\$23,599,899
Economic Development Contributions <sup>7</sup>	\$1,247,444

<sup>1</sup> Reflects combined totals for the AEP utility units and the AEP Service Corporation  
<sup>2</sup> State unemployment wages  
<sup>3</sup> Includes environmental expenditures and excludes AFUDC, capitalized interest and assets acquired under leases  
<sup>4</sup> Includes fuel, diversity spend and current open/pending contract dollars  
<sup>5</sup> Includes open/pending contract dollars with varying expiration dates  
<sup>6</sup> Includes all corporate and AEP Foundation contributions  
<sup>7</sup> Includes grants and contributions by utility units to support economic development

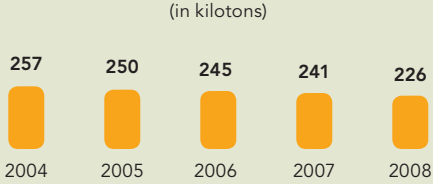
AEP GENERATION FUEL PORTFOLIO



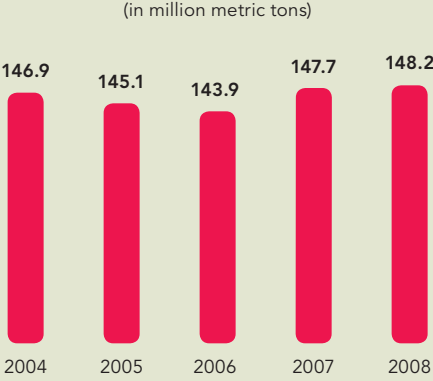
ANNUAL SO<sub>2</sub> EMISSIONS



ANNUAL NO<sub>x</sub> EMISSIONS



ANNUAL CO<sub>2</sub> EMISSIONS



In 2008, AEP’s CO<sub>2</sub> emissions increased 0.32 percent while electricity demand grew 0.5 percent. The decline in SO<sub>2</sub> and NO<sub>x</sub> emissions reflects the success of our environmental programs.

# COMMITTED TO OUR PRINCIPLES, MANAGING WITHIN OUR MEANS

## HOW TO READ THIS REPORT

This report is divided into seven sections, each one focused on one of AEP's material issues. To make it as comprehensive as possible for all readers, there is some redundancy if you are reading multiple sections. See page 6 for descriptions of our material issues. Each section was written to be comprehensive so that if you don't read any other section, you have a complete picture of that particular issue, metrics included. The photographs at the beginning of each section feature stakeholders who participated in our stakeholder meetings during the development of this report.

## ADDITIONAL WEB CONTENT

This report is supported by additional performance data on our Web site, [www.AEP.com/cr](http://www.AEP.com/cr). Throughout the report, you will find Web links that may be useful.

## GLOBAL REPORTING INITIATIVE

We follow the GRI guidelines for this report; a complete index of performance indicators is located at the end of this report. All of the data supporting these indicators can be found either in this report or on our Web site. This year, we also are reporting on electric utility sector-specific indicators.

## A MESSAGE FROM THE CHAIRMAN

### DEAR FRIENDS & COLLEAGUES:

I am pleased to share American Electric Power's third annual sustainability report. We believe that our ability to deliver a reasonable return to our shareholders is greatly enhanced when our operations also promote positive environmental and social outcomes. Our commitment to sustainability ensures that we take into account this business imperative in everything we do, whether in good times or in bad.

This is the third year in which we have met with many different stakeholders, including employees, regulators, environmental groups, investors, customers and others. These valuable interactions have taught us a lot about how our stakeholders perceive us and what they expect from us. I hope our stakeholders also have learned from these dialogues and now have a better understanding of AEP as we do of them.

We face resource constraints and economic challenges unlike any in our lifetimes. The economic crisis gripping our nation and the rest of the world is creating hardships on our customers, our employees and our business. Industries are closing their doors; jobs are being eliminated; homes are being foreclosed upon; retirement savings are drying up; and many are having difficulty making ends meet. We see the effect as electricity consumption decreases, customer delinquencies increase, and regulators signal their unwillingness to raise customer rates and instead choose to defer costs. Some of our employees face hardships as well. AEP has frozen salaries, curtailed hiring and reduced business travel for the year.

With significantly fewer resources to support business operations, we are responding in ways that ensure our sustainability. We cut approximately \$750 million in spending on important capital projects and are operating with "no growth" budgets this year. The picture is no different for 2010 and 2011; we intend to hold our operating budgets



flat going forward and further reduce capital spending in 2010 and 2011 by an additional \$700 million from 2009 levels. We also issued 69 million shares of common stock to reduce debt and revised our 2009 ongoing earnings guidance. These actions will strengthen our balance sheet, improve our cash liquidity position, help ensure our credit ratings remain investment grade and provide us with continued access to credit markets. Inevitably, our progress on some commitments will slow. Our intent is to move forward when and where we can.

The search for solutions dares all of us to think more creatively and to

address public policy more comprehensively, rather than as single-issue initiatives. We have to challenge ourselves to look beyond the assumptions that have historically guided our expectations and to work together.

Energy can and will play a central role in our global economic recovery. The time is now to advance policies and technologies, such as energy efficiency and smart grid technologies, that will stimulate growth, protect the environment and enhance communities. Conversely, poor policies could greatly impede our economic recovery.

We need a comprehensive domestic energy policy and workable, realistic international climate agreements that will enable us to meet the economic, energy and environmental challenges we face. As we continue to work with our stakeholders, we have found large tracts of common ground.

### HIGHLIGHTS OF OUR PROGRESS IN 2008

AEP has made significant progress toward the goals and commitments presented in our first two sustainability reports. One of our core values is the safety and health of our employees, and we are on track to achieve top quartile performance in our industry by 2010. We had our second consecutive year with no workplace employee fatalities in 2008 — for the first time in our 102-year history. I am grateful beyond words to everyone in the AEP family for making this possible, but I am very sad to report that one of our employees lost his life on the job at the Dolet Hills lignite mine in Louisiana in March 2009. Regardless



of the cause, his family will never be the same. Fatalities and injuries are not acceptable. We must determine what went wrong, fix it, and refocus our efforts to ensure it is the very last time we have to report this news.

Our goal is zero harm, and clearly we have much more work to do. Two contractors lost their lives on the job, and several incidents occurred that caused loss of limbs and other serious injuries. We continue to experience serious near-misses, indicating that luck is still too much of a factor in our safety and health success.

I have many goals as chairman of AEP, but what I want most, by far, is for every employee, and those who work for us as contractors, to go home each night to their families and friends safe and sound.

We continue to have an excellent environmental performance record, although there is still room for improvement. We received one significant enforcement action in 2008 related to a water quality permit at one of our power plants in West Virginia. Our goal continues to be zero enforcement actions.

We are making good progress toward reducing our emissions. We exceeded our Chicago Climate Exchange commitment to reduce or offset carbon dioxide, and our investments in environmental controls for our coal-fired generation plants have resulted in significant emissions reductions.

We received approval for the first ultra-supercritical pulverized coal plant in the United States. The Turk Plant in Arkansas is designed to be retrofitted with carbon capture and storage (CCS)

technology and has one of the strictest air permits in the nation for coal-fired power plants.

At a time when the economy is in crisis and regulators are loathe to raise customer rates, energy efficiency is an excellent tool that can hold customer bills steady, delay the need for new generation resources and help us address climate change. To do it effectively, we must give customers more real-time information about how they use electricity so they know how to save it. Our gridSMART<sup>SM</sup> initiative is key to solving that puzzle. We have installed 10,000 meters in a pilot in Indiana and received approval to install 100,000 meters in Ohio and 1 million meters in Texas.

#### OUR GOALS FOR 2009 & BEYOND

Our vision for the future is unchanged, but our progress will slow as we manage our resources differently in this environment.

We want to build on the growing momentum for a national interstate transmission system, which is vital to enabling commerce and economic recovery and strengthening energy security. A modern transmission system would save energy, facilitate more efficient energy markets and give us far better options for addressing climate change by enabling renewable power to be sent from where it can be most efficiently produced to where it is needed most. We are working with many others to achieve this goal.

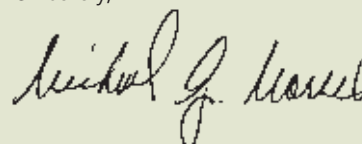
Our CCS validation project at the Mountaineer Plant is a priority and will be operational in 2009. More than 50 percent of the nation's electricity comes from coal, and CCS is an innovative way to deal with climate change.

We will continue to work diligently to advance policies and develop technologies that support energy efficiency and demand reduction. This year, we set a new goal for energy reduction that complements our 1,000-MW demand reduction goal. We believe it is achievable and will be acceptable to regulators. We also are doubling our goal for renewable energy to 2,000 MW by the end of 2011, with regulatory support.

We understand the new reality of today's economy. That's why our goal is to work to change the way the world produces, distributes and consumes energy. Supported by alternative regulatory solutions, new technologies, a strategic energy policy and greater collaboration with stakeholders and between nations, we believe that a secure, lower-carbon energy future that supports sustainable economic growth is within reach. We believe that coal will be part of our energy future and that advanced technology, more efficient use of energy and a modern interstate transmission grid are what will allow it. The near-term will be challenging, but the future is full of promise and opportunity — and the men and women of AEP are prepared and eager to lead the way. We invite you to join us.

Thank you for your interest in American Electric Power.

Sincerely,



**MICHAEL G. MORRIS**

Chairman, President & Chief Executive Officer

## LEADERSHIP, MANAGEMENT & STRATEGY

### DEAR STAKEHOLDERS:

Sustainability is a core commitment for AEP because it is a long-term, profitable business strategy that serves our shareholders, customers, employees, communities, the environment and society at large. We say long-term because we know that sustainability means meeting the needs of today, tomorrow and beyond. It is a journey and we stick to the path, in good times and in bad. Sustainability also means holding ourselves accountable by measuring and reporting our results and by being deeply engaged with a wide variety of stakeholders.

We realize that we need to improve our environmental, safety and health performance and work with our contractors and suppliers to help them improve theirs. And we believe strongly that more innovation in our company and within our industry will lead to better ways of delivering a reliable supply of clean energy and help customers to use it more efficiently. We recognize today's economic challenges could slow our progress.

### CARING FOR PEOPLE

The safety and health of our employees, contractors and the public is a core value for AEP. Although we have made great progress, we failed to live up to this value when an employee lost his life while performing his job in March 2009. As an organization, we are single-minded about preventing harm. Every one of us is troubled that employees and contractors get hurt on the job. Putting people in harm's way without the tools to keep them safe is unacceptable, and

we must do everything in our power to reduce the risk of injury. The injuries our employees received last year, the two citations we received for non-compliance with Occupational Safety and Health Administration regulations and the 43 citations from the Mine Safety and Health Administration underscore our need to improve.



Our vision is to get to the cause of every accident, every injury and every near-miss. We are reducing events through job hazard analyses, hazard recognition and risk assessment training along with an error reduction initiative (also known as Human Performance). Although we are on track to achieve top quartile performance within our industry for safety and health, we will not be satisfied until we eliminate injuries completely. Only then can we be assured of no fatalities. Protecting the public is important for us, too. Although the public had fewer electrical contacts with our equipment last year, the number of fatalities

increased, and copper theft continues to be a primary cause. Our efforts to improve our environment, safety and health management systems are helping us to address these issues.

We value our work force by celebrating diversity, promoting personal growth and creating a workplace to engage and inspire employees. We are making progress in fostering the culture to move forward on our sustainability journey.

### PROTECTING THE ENVIRONMENT

The political landscape changed dramatically in 2008 and so did the regulatory terrain. Two important environmental rules — the Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule — were overturned by the courts. Until a new rule is in place, CAIR will be kept intact, but we expect that its replacement will be more stringent and require additional investments for compliance. The U.S. Environmental Protection Agency (EPA) already has said it will develop new rules for mercury. We also expect the EPA to take a closer look at coal ash. We oppose regulating coal ash as a hazardous waste, but agree that some level of coordinated federal oversight of coal ash dams has merit, as long as it does not duplicate or overlap existing regulations.

Climate legislation is a high priority for the Obama administration, and the proposed federal budget has provisions to establish a cap-and-trade bill. We are very concerned about the provision for 100 percent auction of allowances because of the negative impact that would have on customer rates. However, we intend to be part of the solution and

will continue to work with Congress and the president toward that goal. AEP's position is clear: we believe climate change is a global issue that requires reasonable, achievable actions that take into account affordability, the availability of technology, and timing.

We will work collaboratively with the new administration on a national energy policy and its connection to the environment and the economy. We will advocate for the rapid development of advanced technology to allow us to use coal in a more environmentally acceptable way, such as at our carbon capture and storage validation project at the Mountaineer Plant in West Virginia. The environmental effect of underground storage of CO<sub>2</sub> is another important area where we are working closely with federal and state regulators. We invited the public to learn more about this project in 2008. Additional public hearings will occur in 2009.

#### WORKING INTERNATIONALLY

We continue to work both in Washington and internationally through the World Business Council for Sustainable Development (WBCSD) and the e8, among others. In 2008, the WBCSD released its second report at the U.N. Conference on Climate Change in Poland on technology and public policy solutions to address climate change. We agree with stakeholders who say the United States should take the lead on climate change and go to the next round of climate negotiations in Copenhagen later this year in a leadership position. We will do our part to help make that happen.

#### MAKING PROGRESS; FOCUSING ON THE FUTURE

I am pleased to share some of our many successes during the past year. AEP:

- Recorded one of the best years for environmental performance in company history;
- Brought two more scrubbers online at our power plants;
- Achieved a 4.2 percent reduction in energy consumption in our office buildings;
- Enlisted 10 suppliers to undergo an environmental review through the Green Suppliers Network, of which AEP is a corporate champion;
- Installed three additional advanced energy storage batteries to support reliability of the distribution system and gain experience with large-scale battery storage;
- Continued to press for Leadership in Energy and Environmental Design (LEED) Silver certification at three of our facilities;
- Deployed the first 10,000 meters of smart grid technology in South Bend, Ind.

We believe that climate change must be addressed as part of our nation's energy policy and that energy efficiency is a resource that will help meet our energy needs. We believe that carbon capture and storage and advanced coal technology must be part of the solution and that the nation needs a bigger and more efficient transmission system, one that can have the same positive impact on the economy as the Federal Highway Act had in the 1950s and '60s.

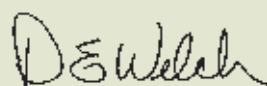
We face many challenges: a new

political landscape, a difficult economy, reluctance by regulators to raise rates, climate legislation, new and complex regulations, an aging work force, aging infrastructure and communities that are expecting businesses to step up their support of economic development in these hard times.

Sustainability encourages us to learn what others think and expect of us and look for ways to collaborate while adapting to change. As the challenges mount, it is even more important to work closely with regulators, environmental groups, legislators, our own employees and other stakeholders to achieve the best results. We will call on our stakeholders to publicly support issues we agree on, such as technology advancements and energy efficiency. We expect they will push us harder on some issues, too.

In spite of today's uncertainties, this is a time of exciting new opportunities and renewal — the prospect of building a brighter future for America. AEP will be part of that renewal and among those leading the way. We look forward to working together as we continue our journey.

Sincerely,



**DENNIS E. WELCH**

Executive Vice President,  
Environment, Safety & Health and Facilities



## ABOUT THIS REPORT

### OUR CORPORATE VISION

We seek to maintain and strengthen our leadership as one of the largest generation and transmission companies in the United States. We strive to maintain our leadership as the largest electric distribution business throughout the regions we serve, and to be a leader in technical innovation of power systems, environmental technology, transmission systems and customer service.

### OUR VISION FOR SUSTAINABILITY

American Electric Power will be an energy leader through programs and technologies that protect people, manage our impacts on the environment, promote energy efficiency, provide for customer control over electricity usage and provide for greater access to renewable forms of energy and advanced clean energy technologies. We will work with our regulators and other stakeholders to achieve this through an approach that maximizes the positive economic, social and environmental impacts of our operations.

### OUR MATERIAL ISSUES

Our material issues are those that (1) have a significant impact on the company's finances or operations; (2) have or may have significant impact on the environment or society now or in the future; or (3) can substantially influence the assessments, decisions and actions of our stakeholders.

We believe that our material issues are:

- **Leadership, Management & Strategy:** Sustainability requires a strong and committed leadership

team willing to be aggressive and take prudent risks to maintain AEP's role as an industry leader, meet the needs of our customers, deliver value to our shareholders and achieve our vision for sustainability. We will continue to integrate social and environmental considerations into our business.

- **Environmental Performance:** Although environmental laws and regulations are complex and change frequently, we must comply at all times. Our challenge is to continuously achieve compliance, reduce our

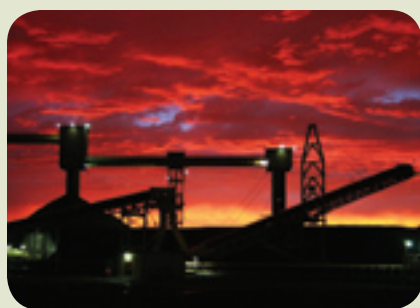


Photo by employee Rhonda Cowan

Cook Coal Terminal handles about 20 million tons of coal per year.

impact on the environment, improve the health of our communities and to go beyond compliance where we can.

- **Work Force Issues:** Protecting the safety and health of our employees and contractors and reducing the number and severity of work-related injuries is a core value. We seek a skilled, diverse and highly motivated work force to build, operate and maintain existing and future generation, transmission and distribution technologies.
- **Public Policy:** We must actively engage legislators, policymakers and other stakeholders to ensure that

public policy, laws and regulations now and in the future enable us to continue to serve our customers, reward our shareholders and pursue our vision for sustainability. We will work with regulators and legislators on alternative rate-making solutions.

- **Climate Change:** AEP has a major role to play in addressing climate change, including bringing advanced coal and other technologies to commercial scale, supporting energy efficiency programs and securing access to large-scale renewables through transmission development. Our company and the prosperity of many within our service territory require us to work effectively and cooperatively with government regulators, our stakeholders and the states and communities in which we operate on climate change issues. We must be a leader internationally to help achieve a global solution.
- **Energy Security, Reliability & Growth:** Our electric generation and delivery systems must be modern, reliable and able to handle a diverse fuel supply and keep pace with customer demand. Collaboration with others is essential not only to create and maintain these systems, but to ensure adequate and timely cost recovery.
- **Stakeholder Engagement:** All of the material issues we face and our well-being as a company increasingly depend on working closely with our stakeholders. Sustainability requires us to disclose our intentions, report on our performance and engage in active and forthright dialogue with our various stakeholders.

## STAKEHOLDER ENGAGEMENT

We conducted five stakeholder meetings in the process of preparing this report. The engagement was more issue-focused and represented a wider range of stakeholder views than in the past. Our discussions with employees, customers, labor, academia, regulators, policymakers, environmental groups, community leaders and investors were candid and helped us to identify strategies and specific actions. We are working to stay connected and talk more frequently with our stakeholders.

During the past year, we worked with SustainAbility, a leading sustainability firm, to facilitate three stakeholder meetings at the community level on climate and the environment, energy security and reliability, and work force issues. For the third year in a row, Ceres, a national network of investors, environmental organizations and other public interest groups, facilitated a dialogue for us with stakeholders on a national level. This year's report includes an unedited open letter to AEP from this stakeholder team (see Stakeholder Engagement section). We appreciate the candid discussions we had with all of our stakeholders and look forward to continuing the dialogue. Our discussions are reflected throughout the report.

Our primary stakeholders are:

- Shareholders and prospective investors
- Customers — large and small
- AEP employees and retirees
- Labor unions
- Local communities
- Federal and state legislators,

regulators and other elected leaders

- Prospective employees
- Suppliers and others doing business with the company
- Non-governmental organizations
- Professionals from industry, government, labor and academia

### The following issues were identified by our stakeholders as being important to them:

- Safety and health — for employees and contractors; for communities
- A workplace that stimulates employees' achieving their full potential
- Leadership in the public policy arena
- Climate change
- Environmental performance upstream and downstream
- Cost of electricity; reliable, adequate supply
- Leadership on energy efficiency/demand response
- Coal issues — mountaintop mining, coal ash, viability as a fuel source
- Renewable energy and transmission
- Collaboration, partnerships between AEP and its stakeholders
- Impacts of the economy on our commitments

## REPORTING PERIOD & DEVELOPMENT

This report is based on performance and information for calendar year 2008, but provides three- to five-year data trends when that information is avail-

able. Detailed financial information is available in AEP's *2008 Annual Report to Shareholders* and other financial filings ([www.AEP.com/investors](http://www.AEP.com/investors)).

AEP's Board of Directors reviews this report, provides guidance, votes to approve its content and passes a resolution each year to publicly voice its intent to hold management accountable. The resolution is published each year on the inside front cover. AEP's sustainability initiatives are overseen by the Board's Committee on Directors and Corporate Governance. AEP was recognized by *Corporate Secretary* magazine last year for having one of the most innovative corporate social responsibility disclosure policies. AEP's executive-level Steering Committee for Sustainable Development provides guidance on sustainable development and participates in developing our reports.

SustainAbility benchmarked last year's report to identify strengths and areas for improvement. Our report scored well for its candor and forthright tone as well as its discussion of process, outcomes and value of the stakeholder engagement process. SustainAbility called it "a strong second report with significant evolution of coverage of critical sustainability issues." The study noted areas for improvement, such as providing a better business case for action on climate change; providing a fuller picture of what is driving sustainability across the business; and improving the presentation of performance data. These issues continue to be areas of interest to stakeholders, and we have worked to provide greater focus and clarity around them.

## CHANGES IN REPORTING

Starting in 2009, we will provide a semi-annual update of our key commitments on our Web site ([www.AEP.com](http://www.AEP.com)). It will be the basis for a stakeholder briefing to be chaired by our executive leadership.

AEP was one of two U.S. companies that participated in a pilot program for the new Global Reporting Initiative (GRI) Electric Utility Sector Supplement. The supplement was developed to be applicable on a global basis, regardless of size, type of generation, ownership, or other variations within the sector. The indicators were not final at press time; consequently, the indicators we reported on were evolving. We have provided an index of the GRI and Sector Supplement indicators at the end of this report, with the full data online at [www.AEP.com](http://www.AEP.com).

## REPORTING PRINCIPLES & GUIDANCE

AEP's report follows GRI's G3 Reporting Principles. The GRI Electric Utility Sector Supplement will provide greater



insight into our specific industry and the issues we face. We adhere to the GRI principles of materiality,

stakeholder inclusiveness, sustainability context, completeness, comparability, accuracy, timeliness, clarity, reliability and boundary setting. Our report is checked by GRI.

## COMPLETENESS, RELIABILITY & ACCURACY OF REPORTING

AEP tracks all commitments made herein through our Enterprise Risk and Insur-

ance Department. Each business unit collects and verifies data for which it is responsible, some of which is verified for regulatory compliance as well. We are working on a more complete information management system and in 2010 our Audit Services Department will begin to audit our data collection process.

## CONTACT INFORMATION — IF YOU HAVE QUESTIONS

For additional information about this report, the GRI information posted on the company's Web site or the company's sustainability initiatives, please contact Sandy Nessing at [smnessing@AEP.com](mailto:smnessing@AEP.com) or TaKeysha Cheney at [tscheney@AEP.com](mailto:tscheney@AEP.com).

## STRATEGY, MANAGEMENT & GOVERNANCE

### OUR STRATEGY FOR SUSTAINABILITY

Our vision, mission, and values outline the principles that guide our business and provide the context for integrating sustainability into our strategy, daily operations, measurement and reporting. As we looked more closely at what sustainability means to us, we revised our *Vision for Sustainability* to better reflect our vision for the future.

Our goal is to help secure a lower-carbon energy future. That means more renewable energy, an extra-high voltage transmission backbone system, advanced coal technologies and energy efficiency. Our strategy and determination to achieve it have not changed. We want to work with all of our stakeholders to find common ground and move toward

this goal. Climate change must be addressed through reasonable legislation that sets ambitious but achievable goals.

Like many other companies, AEP is making adjustments to adapt to the current economic crisis and to ensure our sustainability. We have fewer resources to support our business, and we are managing them carefully. We have taken steps to limit spending and reduce debt in response to the economic downturn. We know our customers also are facing hardship; we see it in the loss of jobs throughout our service territory. Electricity consumption is down and customer delinquencies are up, as more customers face difficulties paying their bills. And we see it in regulatory decisions in our states where regulators are understandably unwilling to raise customer rates in this environment. But when rates are kept low and costs are deferred, we face difficult choices. We can no longer afford to spend now and collect later, especially as costs continue to escalate. This regulatory model is quickly creating a crisis in the electric industry, and our strategy is to work with regulators, legislators and other policymakers to develop alternative regulatory solutions.

We have made progress on several fronts, including the \$5.2 billion in environmental investments in our plants, although the recession may slow our pace. We are deeply concerned that if regulations move faster than the development of technology, older coal plants could be forced to retire sooner, leading to more costly generation solutions and higher costs for customers. Our customers have seen their rates increase between 20 percent and 50 percent

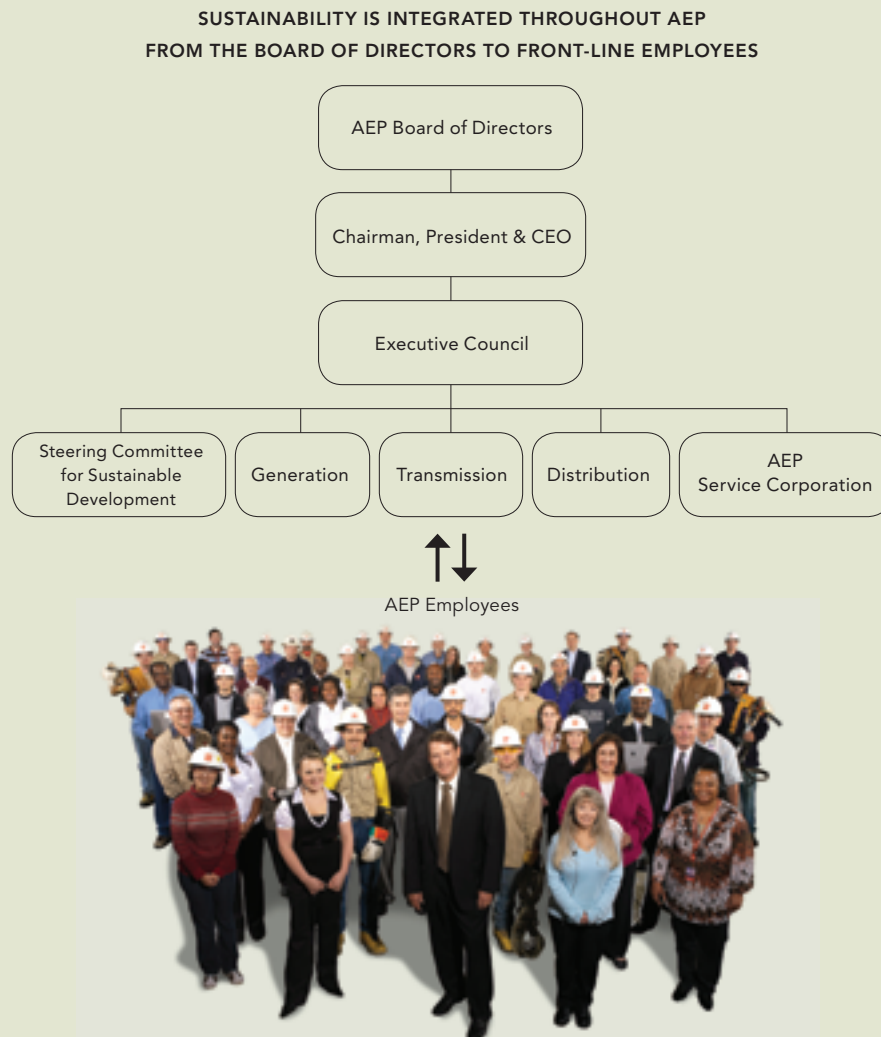
during the last three years, driven largely by government mandates and fuel costs. We expect costs to rise further, and we are seeking alternative rate-making options that allow us to make needed investments and recover the cost of those investments sooner.

Better managing the pathway from power plant to customer is a big part of our strategy — from building a far more efficient interstate transmission system to new customer programs enabled by the smart meters of our gridSMART<sup>SM</sup> initiative. Just as the federal highway system has facilitated growth in our national economy, so too will a modern electricity grid. It will create efficiencies for all electricity delivery, improve reliability and drive growth in renewable forms of energy by moving electricity from where it can be generated to where it is needed.

We support more emphasis on energy efficiency because it is an excellent tool to help customers manage their bills, delay or reduce the need for new generation and address climate change.

## GOVERNANCE

At AEP, we strive to work with integrity, responsibility and fairness. Our Code of Conduct helps to ensure that we operate to the highest standards of integrity and legal compliance. Employees are trained and must certify their understanding of and compliance with this code. The office of Ethics & Compliance operates a 24/7 hotline that allows employees to anonymously report or seek guidance on ethics and compliance issues. In 2008, 576 calls were handled, which was an increase from 476 cases



in 2007. We think the increased volume results from more communication with employees and greater employee trust that their contacts will be kept confidential and not result in retribution.

AEP started an ethics and compliance employee blog on the company's intranet. The blog is one of the tools we use to connect with employees and enable the sharing of ideas, questions, thoughts, frustrations and opinions. Each week, the director of Ethics & Compliance posts a new discussion topic.

AEP's enterprise risk reporting

focuses on providing information and education about our risks. This helps us to understand our risks and take actions to mitigate them where appropriate. Monthly reporting and risk executive committee discussions encompass both existing and emerging risks from all sectors of the company. The risks and commitments addressed in this report are part of our ongoing enterprise risk reporting process. ■





“AEP has begun to lead and must convince our government to develop a timetable of long-term standards; change must be mandated. Other nations may not agree, but we should share more technology with them and lead the way with major cuts in CO<sub>2</sub> and investments in wind and solar energy.”

Charles Dixon, Marshall, Texas; member of the Friends of Caddo Lake National Wildlife Refuge and AEP stakeholder



## ENVIRONMENTAL PERFORMANCE

12.3

(in billions)

Gallons per day of total water discharges  
from AEP's generating facilities

579,000

Tons of SO<sub>2</sub> emissions in 2008, down  
nearly 65% from 1980

226,000

Tons of NO<sub>x</sub> emissions in 2008, down  
nearly 60% from 1980

1.2

(in millions)

Gallons of oil recycled in 2008

Our success as a company rests on superior environmental performance and our willingness to engage regulators, environmentalists, communities and others around our environmental record and our plans for the future.

At the conclusion of our \$5.2 billion environmental retrofit program, we will have installed controls that dramatically reduce airborne emissions on nearly three-quarters of our coal-burning power plants. Through 2008, we already have invested \$4.36 billion in this program. As a result, in 2008 sulfur dioxide (SO<sub>2</sub>)

emissions from AEP power plants declined more than 100,000 tons — a 15 percent reduction from 2007 levels. In addition to air quality, we manage many other impacts to the environment every day. From landfills and ash ponds to water quality, polychlorinated biphenyls (PCBs) and electronic waste such as computers, cell phones and monitors, we have a social as well as legal responsibility to do what's right.

### ENVIRONMENTAL COMPLIANCE

Doing what is right is the foundation of all environmental activity at AEP; compliance is the baseline by which we measure our performance. We are committed to being 100 percent compliant at all times, to zero environmental enforcement actions and to go beyond compliance wherever possible.

AEP received one significant enforcement action in 2008 compared with two during 2007 and nine in 2006.<sup>1</sup> We tie compensation to this metric for most of our Generation organization and other business units, such as Environmental Services, as well as for all senior officers. Whereas our compliance record has improved, we will not be satisfied until we achieve and sustain zero environmental compliance actions.

The enforcement action occurred when the West Virginia Department of Environmental Protection (DEP) found that we had exceeded the permit discharge

limit for selenium in the fly ash pond at the Mitchell Plant from June 2006 to May 2008. It proposed a fine of \$47,530.

We first became aware of the problem after we installed a flue gas scrubber and a trona system at Mitchell.

Trona is a mineral used to control sulfur trioxide levels in flue gas. Its installation increased the pH of the fly ash pond and resulted in selenium levels rising above permit limits. We identified this issue in our 2008 sustainability report, although the enforcement action was issued after the report was published. As we gained operating experience with the new air quality control equipment, we were able to better control the balance between the trona and the pH levels in the ash pond to bring the selenium levels within the permit

### TOP 5 ENVIRONMENTAL ISSUES RAISED BY STAKEHOLDERS

- Coal ash management
- Supply chain impacts (fuel and non-fuel)
- Mountaintop mining
- Air quality issues
- Water quality, availability

<sup>1</sup> Significant enforcement actions are defined as actions arising from events that are within our control, have more than a minor environmental impact, and result in fines greater than \$1,000.

limit. We have been in compliance with the permit limit since May 2008.

Our John Amos Plant near Charleston, W.Va., was involved in two air quality episodes in 2008. In both, weather conditions caused haze to form in the Kanawha Valley near the plant, and the state's DEP determined that the plant was a primary contributor. As part of our overall upgrade program, the plant is being retrofitted with scrubbers, including new equipment to control the visible emissions that can be caused by the scrubbers. We are working with the DEP to identify appropriate operating parameters for the trona injection systems to control the visible appearance of the stack plumes. The operating parameters come from lessons learned and experience gained in operating similar systems at other AEP plants. These events demonstrate the complexity of installing new environmental equipment on our power plants.

Unfortunately, we received three enforcement actions early in 2009. The first was issued by the Virginia Department of Environmental Quality for exceeding a new SO<sub>2</sub> limit at our Clinch River Plant. In the process of switching to a lower-sulfur coal, we inadvertently reclaimed older, slightly higher-sulfur coal from the coal pile. The remaining two actions were issued by the West Virginia DEP related to the Amos Plant's fly ash landfill and the Mountaineer Plant's fly ash and gypsum landfill. A plan to address these concerns is being implemented.

#### **CHECKS & BALANCES ON OUR ENVIRONMENTAL COMPLIANCE**

To assess compliance and improve performance, AEP conducts environmental audits by checking records, inspecting



A conveyor transports gypsum from AEP's Mitchell Plant to a nearby CertainTeed Corp. facility where it is used to make wallboard.

facilities and observing work practices. The auditing team reports directly to the chairman and chief executive officer.

In 2008, we conducted audits at 10 utility operations centers, six sites within River Operations and 15 power plants. Examples of adverse findings include deficiencies in an above-ground storage tank management program, new construction activities, asbestos abatement and storm water permit compliance. We corrected these issues, implemented process controls to prevent their recurrence and shared audit results across the company. This year, we will begin unannounced plant audits to mimic unannounced visits from regulators. This will give us additional assurance that our compliance programs are strong and working effectively.

In addition to audits, we use MESH (Managing Environment, Safety and Health), our initiative to conform to the international environmental management system standard ISO 14001, to raise awareness and knowledge and drive continuous improvements. So far, 36 fossil and hydro facilities are in different stages of implementing various MESH elements, and four additional plants will begin implementation in 2009.

#### **AIR QUALITY**

The 1970 Clean Air Act (CAA) and subsequent amendments created public awareness about the importance of pollution control. The CAA helped to change the public's attitude about the value of environmental protection and created widespread understanding that economic growth and a clean environment can go hand-in-hand.

The investments we've made to improve power plant operations have contributed to better air quality by reducing coal consumption and producing fewer emissions. AEP consistently has produced electricity more efficiently than the national average for coal-fired power plants: our coal-fired power plant fleet is approximately 3.5 percent more efficient than the national average. Between 2001 and 2007, for example, we avoided burning 16.2 million tons of coal and the associated costs and space for ash disposal, saved approximately \$559 million in fuel costs and avoided 39 million metric tons of carbon dioxide emissions as a result of our ongoing efficiency efforts. Because AEP has a large percentage of coal-fired capacity, the economic conditions of our service territory and the markets have resulted in lower coal consumption.

Although we have been reducing coal plant emissions since the 1970s, our efforts have intensified the past 10 years. Court decisions in 2008 about U.S. Environmental Protection Agency regulations created regulatory uncertainty, with the expectation that the rules will change and compliance costs will increase.

AEP's environmental retrofit program to comply with the Clean Air Interstate Rule (CAIR) continues despite uncertainty over CAIR's future. We devoted 14.5 million

work hours to CAIR-related construction in 2008, making it among the largest construction programs in the country. Last year, new scrubbers were brought online at two coal units, and major construction continued on four additional units. One of these units also is being equipped with a selective catalytic reduction system to reduce nitrogen oxide (NOx) emissions; three others already have been equipped.

The D.C. Circuit Court of Appeals found significant legal deficiencies in CAIR and ultimately ordered the U.S. EPA to revise and correct the rule. Concerned the court would completely set aside the rule and leave no program in place, we advocated with state regulatory agencies and other utilities to keep CAIR in place. CAIR requires significant emission reductions and provides a degree of planning certainty for states and the private sector. Although the impact of the court's decision is uncertain and a new rule may be more stringent than CAIR, the original program is still in place. We are working with the U.S. EPA and others to help reach a realistic, achievable solution.

Because of the global financial crisis, we are facing severe financial issues that are likely to continue through 2010 or longer, forcing us to delay some of the scrubber projects that are planned. We want our stakeholders to understand that this is strictly a financial issue, not a change in our commitment to the environment.

#### MERCURY

The D.C. Circuit Court also set aside the U.S. EPA's Clean Air Mercury Rule (CAMR), a rule developed in concert with CAIR to reduce multiple pollutants. CAMR required coal-fired power plants to cap and reduce mercury emissions. The legal

appeals of the D.C. Circuit Court decisions have to run their course, and the EPA intends to develop a mercury regulatory program to replace CAMR.

The electric industry faces a challenge because the technology to control mercury emissions is relatively new and untested. Despite the reduction in our capital budget, we are continuing with the installation of an activated carbon injection mercury control system at our Rockport Plant in Indiana (2,600 MW), in part to gain experience with the technology. Installation of the technology on the Pirkey Plant in Texas, AEP's highest mercury emitter, was postponed because of the budget reduction. We will reevaluate this decision periodically so that if cash flow increases, the project can move forward. In the meantime, we are installing continuous mercury monitoring equipment at more than 20 coal-fired power plants, including Pirkey.

The Pirkey Plant, Hallsville, Texas, is one of 20 AEP plants to receive continuous mercury monitoring equipment.



“Achieving a high level of environmental performance has been an important goal for AEP for several decades and, in recent years, we have been a leader in implementing pollution control systems at our plants. We strive to not only be in compliance, but to achieve or go beyond compliance with innovative approaches that minimize the cost to our customers while achieving environmental goals. We realize that this is a critical attribute of a sustainable organization and an expectation of our various stakeholders, whether our own employees, our customers, our regulatory agencies or the public interest groups that we work with.”

John McManus, vice president,  
Environmental Services

#### NSR CONSENT DECREE

We have been complying with the New Source Review consent decree that we entered in 2007, which was described in last year's report. This requires environmental controls on nearly 75 percent of the installed capacity of our coal plants in our eastern region and the retirement, retrofitting or repowering of approximate-



A rendering of the John W. Turk Jr. Power Plant, one of the few coal generating stations under construction in the United States.

ly 2,000 MW of smaller, older and less efficient plants. The decree includes a cap on NO<sub>x</sub> emissions starting in 2009 and on SO<sub>2</sub> emissions starting in 2010. This year, we are adding NO<sub>x</sub> controls at some units and are operating all existing NO<sub>x</sub> controls on a year-round basis.

In 2010, our SO<sub>2</sub> emissions cap takes effect and represents an approximate 386,000-ton reduction from 2006 levels for our Midwestern plants. Both NO<sub>x</sub> and SO<sub>2</sub> caps will decline under the consent decree until 2018 and 2019, respectively.

The approval of an air permit for the John W. Turk Jr. Power Plant from the Arkansas Department of Environmental Quality was a significant achievement for AEP's Southwestern Electric Power Company in 2008. This ultra-supercritical pulverized coal plant will be the first in the United States and will feature the most efficient existing technology for burning western coals. It also can be retrofit with carbon dioxide controls. The emission limits set by the state are among the most stringent ever for a pulverized coal plant.

Although some opponents of the plant filed an appeal, we have been allowed to continue construction while the appeal is resolved. The plant will take 48 months to build, will create 1,400 tem-

porary jobs at the height of construction and will result in 110 permanent jobs. Turk is one of the few coal plants under construction in the United States.

## WATER QUALITY & MANAGEMENT

Water and energy production are fundamentally related from an environmental perspective — we need water to make electricity (10.5 billion gallons per day at AEP), and we need energy to sanitize and purify water. As with all aspects of the environment, compliance with water quality permits and other regulations is the foundation of our water programs, but we are increasingly focused on water use management. Although most of the water we withdraw is returned to its source, we are beginning to look beyond compliance to a total water management approach.

We formed a task force late last year to review AEP's water use and the impacts we have on water resources. We also will review water balances at our power plants to identify savings opportunities. Water is an increasingly valuable resource for our business, for the communities in which we operate and for the environment. We be-

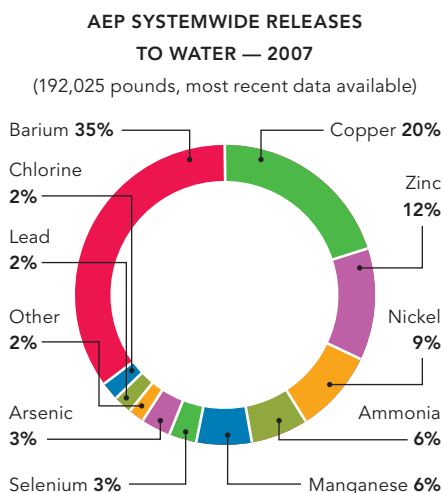
lieve that we must be more vigilant about how we manage it.

Although we need more than 10 billion gallons of water a day to produce electricity, most of it goes through a once-through system and is returned to the source. The U.S. EPA continues to develop regulations under Section 316(b) of the Clean Water Act to establish national performance requirements for once-through power plant cooling water systems. These regulations are designed to protect fish and other aquatic organisms that come in contact with water intakes, which often take in more than 2 million gallons per minute. The U.S. Supreme Court recently ruled that the EPA could consider costs as well as benefits of compliance in setting the new rule.

AEP owns and operates 18 power plants that would be affected by changes to this rule. One approach being considered — a requirement to install cooling towers at these plants so that water can be recycled — would reduce plant efficiency and actually increase water consumption. We are talking with the U.S. EPA to help ensure that all implications and unintended consequences are considered.

Underground carbon storage is a key component of advanced coal technology, and we must ensure that it does not contaminate drinking water resources. The EPA will regulate the storage of CO<sub>2</sub> by adding a new category of injection wells to the Safe Drinking Water Act regulations and creating extensive siting, testing and monitoring requirements to prevent leaks.

Carbon dioxide in water is not necessarily a problem — think of the carbonation in soda — but too much can turn water slightly acidic and allow other heavy



#### WATER USED FOR PROCESSING, COOLING & CONSUMPTION

(gallons per minute)

Typical 600 MW Plant	With Cooling Towers	Without Cooling Towers
Water Consumed	5,025	784
Water Withdrawn	6,431	401,610
Consumption Rate	78.1%	0.2%

metals and toxic substances to leach into the water supply more easily. Carbon dioxide will be separated from drinking water aquifers by many thousands of feet. Typically, drinking water supplies are only a few hundred feet deep in the Midwest, whereas injection of CO<sub>2</sub> would take place at depths of more than 8,000 feet. In addition, a variety of safety steps will be incorporated to protect drinking water.

Although underground carbon storage represents new territory for regulators and for utilities, natural gas has been safely and effectively stored underground for decades. Scientific evidence shows the same can be true for CO<sub>2</sub>. West Virginia has issued a draft permit for CO<sub>2</sub> underground injection wells at our Mountaineer Plant, and we anticipate receiving a final permit and beginning injection operations in September 2009.

#### WASTE MANAGEMENT

Minimizing landfill waste is a strategic objective for AEP. We recycle tons of materials each year, including light bulbs, glass, metal, paper, oil and electronics. If not properly handled, the special wastes that we track, such as hazardous wastes and PCBs, can have adverse effects on the environment. We seek opportunities to reuse materials, including coal combustion products, whenever possible.

In a unique arrangement of industrial recycling involving AEP's Mitchell

Plant, coal is mined, electricity is generated, emissions are cleaned, gypsum is created and wallboard is manufactured — all along a three-mile stretch of a West Virginia highway. CertainTeed Corp., a manufacturer of wallboard and building supplies, opened a manufacturing facility adjacent to our plant in 2008 to obtain the material it needs for its product — a high-quality synthetic gypsum — that is created as a byproduct at our Mitchell and Cardinal Plants. More than 650,000 tons per year of gypsum — a byproduct of the process to remove SO<sub>2</sub> from flue gas — is now being recycled into wallboard instead of being placed in landfills.

The turbine failure at Cook Nuclear Plant last year produced 240 cubic yards of asbestos waste that was properly disposed of. Approximately 1,600 gallons of turbine lubricating oil also were spilled, but were contained and cleaned up. The turbine is now being repaired.

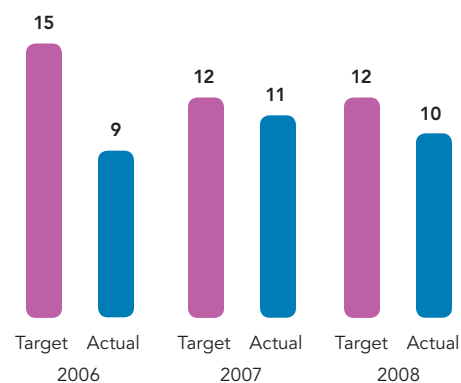
We report annually to the EPA under the Toxic Release Inventory (TRI) Program regarding the transfers and releases of toxic chemicals that occur off-site. Our TRI report can be found on our Web site, [www.AEP.com](http://www.AEP.com).

#### MAKING PROGRESS ON PCBs

We are making steady progress toward eliminating all PCB-containing electrical equipment, such as transformers and capacitors, from our power plants. Under

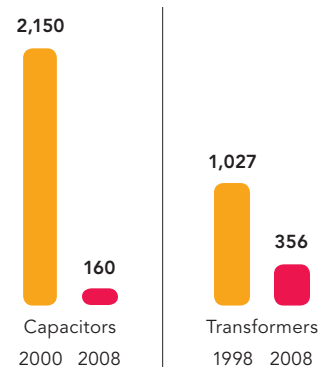
#### ENVIRONMENTAL PERFORMANCE INDEX

(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.

#### NUMBER OF COMPONENTS KNOWN TO CONTAIN PCBs

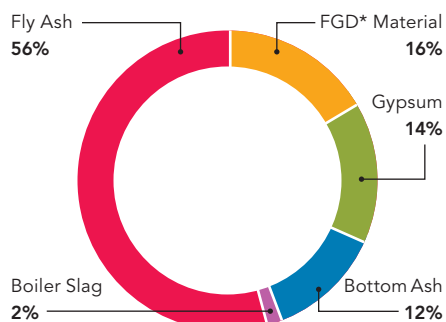


the EPA's National Partnership for Environmental Priorities program, AEP voluntarily removed more than 100,000 pounds of PCB-containing mineral oil in 2008. Our Picway (Ohio), Amos (West Virginia) and Clinch River (Virginia) plants recently completed projects recognized by the EPA.

AEP had 2,150 large PCB capacitors in service at 57 locations in 2000, and only 160 of them remain. The volume and number of PCB and PCB-contaminated transformers has steadily declined and now constitutes a very small percentage of our oil-filled equipment.



## COAL COMBUSTION PRODUCTS PRODUCED



10.3 million tons of coal combustion products were produced in 2008.

\*Flue gas desulfurization

In 2008, we had approximately 1,684 documented spills from oil-filled equipment. These spills are often caused by car accidents or lightning strikes. A small portion of these (about 5 percent) were significant enough to be reportable to regulatory agencies, and an even smaller number (about 2 percent) involved PCBs.

## COAL ASH & OTHER COAL ISSUES

In the wake of a major release from an unaffiliated coal ash disposal facility in Tennessee in December 2008, we

reviewed our inspection and maintenance program for fly ash ponds and other impoundments. We also are leading an initiative through the Edison Electric Institute to identify best practices and develop an industry strategy for the long-term maintenance of these facilities.

AEP annually consumes an estimated 77 million tons of coal, generating significant quantities of coal combustion byproducts that need to be recycled or disposed of. Some of these products can be used for roofing materials, blasting grit, wallboard production or structural fill, among other things. As a member of the Coal Combustion Products Partnership, we promote the beneficial use of these byproducts, which helps to keep them out of landfills or ash ponds. In 2008, AEP produced 10.3 million tons of coal ash and found beneficial use for about 40 percent of it. Use of coal ash combustion byproducts resulted in approximately \$14.3 million in avoided costs for landfills. AEP also is a member of the American Coal Ash Association, Midwest Coal Ash Association, Texas Coal Ash Utilization Group and the Western Region Ash Group. For more information about coal combustion prod-

ucts, visit our Web site at [www.AEP.com](http://www.AEP.com).

We operate 40 earthen dam impoundments that are used to store cooling water, fly ash and bottom ash from coal-fired power plants. These include 11 large fly ash and bottom ash impoundments in Ohio, West Virginia, Kentucky and Indiana; six large water storage impoundments in Texas, Oklahoma, Arkansas and Louisiana; and several smaller ash storage impoundments located throughout our service territory. Our policy requires us to inspect and maintain these surface impoundments according to guidelines provided by the Federal Emergency Management Agency and all applicable state regulations. In states where groundwater monitoring is not already required by permit, AEP plans to install and monitor wells, working with state agencies. AEP voluntarily installed groundwater monitoring wells around the Glen Lyn Plant bottom ash ponds in Virginia last year in accordance with a plan developed by the Utility Solid Waste Activities Group. The data from the wells will help assess groundwater quality near ash ponds and coal combustion landfills that are not already being moni-

The ash pond at the Amos Plant is one of 40 earthen dams that AEP operates throughout its system.



tored. Additional wells will be installed at 15 power plants. In addition, all surface water discharges from ash ponds are subject to wastewater permit limitations.

We realize this is an issue of great concern for many environmental groups and communities where these facilities are located. AEP's largest facilities are inspected frequently by plant staff and annually by corporate engineering staff. In addition, some of the fly ash ponds are equipped with instruments that monitor conditions. The monitoring data are collected at least annually, and a report on the condition and inspection results is provided to the plant for any action needed. We are committed to ensuring the structural integrity of these surface impoundments.

We recently testified before Congress on a proposal to establish federal mechanisms to help ensure that coal ash dams continue to be managed safely. We agree that some level of federal oversight to ensure dam safety has merit. The U.S. EPA already has begun inventorying existing impoundments and assessing their structural integrity. Many states already have detailed permitting, design, inspection and maintenance requirements for these impoundments. It is imperative that a new federal program does not overlap or duplicate existing regulations and that the appropriate federal agency be given oversight to ensure an effective, coordinated approach. We do not support regulating coal ash as a hazardous waste.

### NUCLEAR WASTE

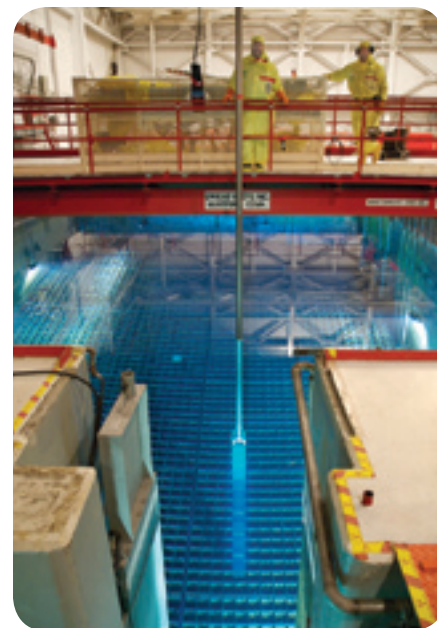
We are exploring options for expanding our nuclear power capacity, which would potentially include increasing the output of two units at our Cook Nuclear

Plant in Michigan. Although stakeholders are increasingly receptive to nuclear power, they still have serious concerns about nuclear waste, which we share. Our plan is to employ on-site dry-cask spent nuclear fuel storage, starting in 2011, until a permanent facility becomes available. We currently ship class "A" low-level radioactive waste to appropriate disposal facilities but store class "B" and "C" radioactive waste at an on-site facility.

### ECOLOGICAL STEWARDSHIP & BIODIVERSITY

AEP's facilities and the management of our land resources can directly affect biodiversity, and we are committed to establishing a corporate policy on biodiversity. Biodiversity describes the number of different species that live within a particular ecosystem. Some of our specific actions relate to compliance with state and federal laws, such as the Endangered Species Act. When protected or listed species are found on AEP's property, we take the appropriate measures to protect them. In 2008, we implemented an Avian Protection Policy and are now developing the first phase of a formal Avian Protection Plan.

We receive guidance from the U.S. Fish & Wildlife Service (USFWS) and the electric industry to ensure that we use best practices. Last year, a bald eagle was electrocuted at one of our facilities in Oklahoma. In response, we retrofitted certain types of electricity structures to make them safe for eagle perching. Since 1944, AEP has planted more than 63 million trees in the United States. Some of these forestry projects have been expansions of National Wildlife Refuges and were listed as priority sites by the USFWS.



Spent nuclear fuel is stored on-site at the Cook Nuclear Plant. AEP is developing a dry-cask storage facility for spent fuel at Cook.

Several power plants and transmission rights of way have undertaken habitat enhancement projects to attract and encourage development of various species. Many of these projects have been certified through the Wildlife Habitat Council, and some have received awards for their biodiversity successes. The international forestry projects undertaken to offset our carbon emissions are located in biodiversity "hot spots," such as Bolivia, and enhance biodiversity.

One concern raised by some stakeholders is whether we consider environmental impacts when siting new transmission lines and other facilities. We absolutely take those issues into consideration and also look at how we can better manage rights of way to enhance biodiversity. In order to better understand and manage AEP's impacts on biodiversity and address stakeholders' interests,

we will take a methodological approach such as one developed by the World Business Council for Sustainable Development — *Business and Biodiversity: The Handbook for Corporate Action*.

## WORKING WITH OUR SUPPLIERS

### Non-Fuel Suppliers

Doing business with AEP now means that suppliers are subject to greater scrutiny of their environmental performance. When AEP issues Requests for Proposals, suppliers are asked about their environmental practices to determine if they align with AEP's vision for sustainability. This is a first step in our commitment to hold ourselves accountable for the performance and practices of our supply chain. We also are developing a statement of principles for our supply chain that will include environmental expectations and other issues.

The Green Suppliers Network program includes an environmental assessment of the supplier's business conducted by the U.S. EPA. When we joined in 2007, we set a goal to enlist five non-fuel suppliers to participate in the first year. By the end of the year, 10 suppliers were on board. Early results showed improved environmental performance as well as more efficient business operations. You can learn about the experience of one AEP supplier who completed the program by visiting [www.AEP.com/cr](http://www.AEP.com/cr).

AEP is a founding member of the Electric Utility Industry Sustainable Supply Chain Alliance. This group of 15 electric utilities across the United States is focusing initially on developing environmental performance criteria for suppliers specifi-

cally related to poles and transformers. A sub-team was formed to engage with environmental groups and is processing the recommendations that were received.

### Fuel Suppliers

Mountaintop mining practices are a major concern for some stakeholders, who have raised a host of health and environmental concerns stemming from the practice. Some of our stakeholders are concerned that we purchase coal from suppliers who employ mountaintop mining practices. They have asked us to use our influence as the largest coal-burning utility in the United States to help end this type of mining.

In our last report, we committed to establishing criteria to evaluate the environmental, safety and health performance of coal suppliers. We began discussions with some environmental groups, coal suppliers and peer utilities and now have

a timeline to develop this evaluation process by year-end. We are hiring a mining expert to help us identify the right performance indicators; we also will meet with stakeholders during this process.

We believe this process will help us begin to evaluate the social aspects of coal mining,

give us an accurate understanding about how much of our coal comes from mountaintop mines and allow us to make more informed decisions in the future. We will have to test any possible purchasing restrictions and subsequent price increases with regulators for their acceptance and will look to our stakeholders to support us with our commissions.

We do know that the percentage of

mountaintop-mined coal that we consume is decreasing, but we do not know by how much. Scrubbers and other environmental plant controls require a different type of coal. We also are converting equipment to burn other types of coal that will further decrease our need for mountaintop-mined coal. We're conducting a detailed analysis this year.

We face three challenges — what will replace this type of coal in the longer term; how to deal with the increased costs involved and the fact that our competitors will, in all likelihood, continue to use it; and how much influence we can realistically exert on our suppliers. We plan to continue these discussions and seek long-term solutions.

Whether a fuel or non-fuel supplier, we don't want to do business with companies that persistently violate environmental laws or that have poor records on safety and health. ■

### USEFUL WEB LINKS:

[www.acaa-usa.org](http://www.acaa-usa.org) • [www.epa.gov](http://www.epa.gov)  
[www.fws.gov](http://www.fws.gov) • [www.greensuppliers.gov](http://www.greensuppliers.gov)



CHALLENGE	GOAL	2008 PROGRESS
Achieving environmental compliance, improving incident response and fostering positive regulatory relationships to enhance our environmental performance in an environment of complex regulations.	Zero enforcement actions.	Number of enforcement actions: 2008 — 1 2007 — 2 2006 — 9 2005 — 5
	<b>ISO 14001:</b> Complete phase-in to conform to ISO 14001 standards by end of 2012 in all fossil and hydro power plants. Target in 2009 — four fossil plants begin implementation.	<b>ISO 14001:</b> Phase I completed at 36 power plants, including 17 hydro facilities.
	Continue proactive outreach with regulatory agencies.	Ongoing outreach with regulators.
To assess compliance and improve performance, we track measures of air quality, water quality and waste management through an internal Environmental Performance Index (EPI). Performance is tied to compensation. The EPI sets a more stringent annual target of total number of incidents for the index.	2009 EPI goal = 10 or fewer incidents at generating units: 1. Opacity — a measure of visual appearance of gas exiting power plant stack and a rough indicator of particulate emissions. 2. NPDES (National Pollutant Discharge Elimination System) permit requirements (wastewater exceptions) — a measure of water quality permit compliance. 3. Oil and chemical spills — a measure of how we respond to and manage spills.	EPI set a 2008 target of 12 or fewer incidents; 10 occurred: Opacity exceedances — 2 (2007 — 1; 2006 — 0)  NPDES — 5 (2007 — 7; 2006 — 9)  Oil and chemical spills — 3 (2007 — 3; 2006 — 0)
AEP's biodiversity impacts, both positive and negative, need to be understood, prioritized and managed.	Utilize the WBCSD's <i>Business and Biodiversity: The Handbook for Corporate Action</i> as a tool to assess AEP's impacts or potential impacts on biodiversity and ultimately develop a biodiversity strategy and action plan.	N/A (New Goal)
AEP's environmental compliance requirements drive a \$5.2 billion program to install environmental controls on coal-fired power plants to meet requirements of the Clean Air Act and EPA's NOx State Implementation Plan rule and initial requirements of the CAIR.	Ensure company is fully equipped and prepared to comply with increasingly stringent regulations.	Completed more than two-thirds of program. Scrubbers brought online at two coal units in 2008; four others under construction.
The availability of water to make electricity and meet society's needs is increasingly important because of impacts from climate change and population growth.	Initiate a study to review consumption patterns and identify opportunities to set goals to reduce water consumption at AEP facilities and power plants.	Task force formed; review started for total water management approach.  Included water issues in stakeholder discussions.
Nuclear energy will play an increasingly important role in our nation's energy future, but managing nuclear waste storage remains a significant challenge.	On-site dry-cask storage of spent fuel at Cook Nuclear Plant, starting in 2011.  Engage in national effort to develop permanent solution.	Work continued to develop on-site storage facilities at the Cook Nuclear Plant toward 2011 goal.  Ongoing work with policymakers and stakeholders to achieve a long-term solution.
Sustainable supply chain development is new to the utility industry but has become increasingly important as we seek to reduce our environmental impacts; questions remain about recovery of higher costs that may be incurred because of performance standards regarding sustainability.	Champion Green Suppliers Network (GSN) process and the voluntary standards and guiding principles of the Electric Utility Industry Sustainable Supply Chain Alliance to encourage non-fuel suppliers to incorporate best practices in their product and service provisioning.  Develop process to evaluate environment, safety and health performance of coal suppliers: 1st quarter 2009 — Hire mining consultant. 2nd quarter — Develop/send questionnaire to coal suppliers. 3rd quarter — Analysis; follow-up meetings with suppliers; stakeholder engagement. 4th quarter — Final due diligence with suppliers; plan in place.	10 suppliers agreed to participate in GSN in 2008.  Founding member of Electric Utility Industry Sustainable Supply Chain Alliance (non-fuel).  Began discussions with coal suppliers and stakeholders.



“AEP has done a much better job with safety in the last few years, but I think safety has to become personal. Employees have to believe that their management truly believes in safety first. That message is a hard one to pass on but can be accomplished by walking and talking it every day — and it has to start at the top. I have seen a big change in mindset, but it is a fine line. I believe the continued implementation of MESH will help the future safety of the hourly workers.”

Bret Heltzel, maintenance welder, Rockport Plant,  
Indiana Michigan Power and AEP stakeholder





## WORK FORCE ISSUES

32

Number of work/life programs offered to full- and part-time AEP employees

30%

Percentage of AEP employees who are represented by labor unions

14.5  
(in millions)

Work hours devoted to environmental retrofit construction program

850

Number of automated external defibrillators added to AEP facilities in 2008

Safety and health are part of our culture at AEP. We have created programs to improve our employees' safety and health and believe we are seeing results. For the first time in AEP's 102-year history, we had back-to-back years with no on-the-job employee fatalities in 2007 and 2008. Unfortunately, an employee was killed at the Dolet Hills lignite mine in March 2009 while moving a walking dragline. Although investigations are still under way, we will learn from this tragedy and make appropriate modifications to our policies and procedures to prevent a similar event. We have made progress across AEP to refocus and recommit ourselves to working safely each day, but the loss of one of our employees shows that we still have work to do.

### ACHIEVING ZERO HARM

Our core value is to have every employee return home from work safely each day. To reach our goal of zero harm, we must have the right policies, procedures, tools and training, as well as a culture that encourages peer coaching, incident reporting, information sharing and corrective and preventive actions.

Zero harm involves more than just preventing accidents; it also means preventing occupational illnesses that can have long-term effects on health. During our work force stakeholder meeting, employees expressed a desire for AEP to

encourage a culture of safety that extends beyond the work day, to prevent vehicle accidents and other harm to employees and their families. By placing a value on safety and health, we will achieve our goal of zero harm — preventing injuries and illnesses all the time. The loss of life should never occur.

#### TOP 5

##### WORK FORCE ISSUES RAISED BY STAKEHOLDERS

- Safety and health — employees and contractors
- Aging work force — retention, recruitment issues
- Managing talent through the recession
- Communication
- Culture

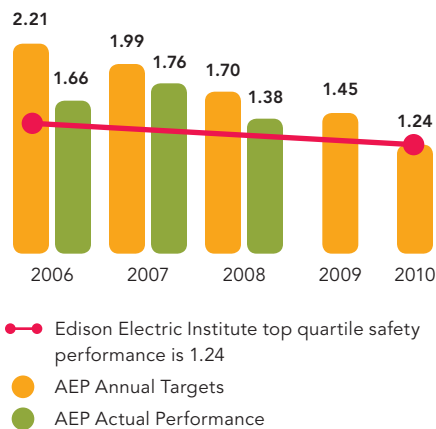
We had very serious injuries last year that changed the lives of some of our employees and their families forever. In many cases, pure luck prevented serious injury or death. These breakdowns happen in an instant, and the consequences can be severe.

We failed to meet our goal of zero harm because we had 39 life-altering injuries in 2008, and the fact that this was 11 fewer than in 2007 was small consolation. Our goal is zero, and we will not be satisfied until we reach it. This year's employee fatality underscores the urgency with which we must act.

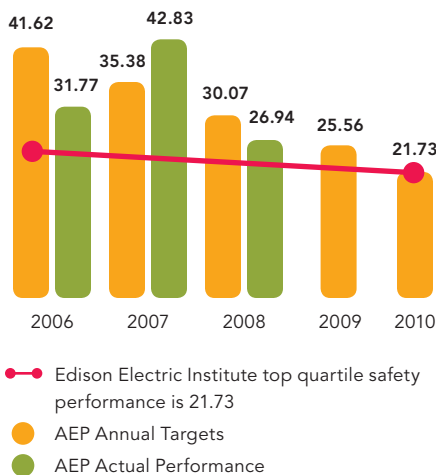
Many of the injuries were caused by falls or employees being struck by equipment. In 2008 we held seven significant-event conference calls with affected business units to ensure that information was shared and appropriate corrective and preventive actions were taken across AEP. We train employees to constantly assess and reassess the hazards in their environment and to minimize the associated risks by using the appropriate tools and techniques.

## EMPLOYEE SAFETY & HEALTH "PATH TO EXCELLENCE"

Recordable Injury Rates: AEP vs. Industry Peers



Injury Severity Rates: AEP vs. Industry Peers



We ask employees to look out for each other on the job and to speak up if safety or health is compromised. Creating a culture in which employees are comfortable stepping forward remains a challenge.

### CHANGING PRACTICES TO SAVE LIVES

When a safety or health event occurs, we analyze it, learn from it and make changes throughout the company to prevent similar occurrences. In October 2007, a coal equipment operator at the Mountaineer Plant in West Virginia got caught between a manlift step and the lower platform, severely injuring both legs. We examined this event and the risks posed by manlifts and decided to replace all manlifts with elevators by 2013 at a cost of approximately \$17 million. Until all manlifts are removed from service, we require annual user education in addition to regular equipment maintenance.

Safety and health performance accounts for up to 25 percent of employees' incentive compensation each year. We also have incorporated safety and health performance into our employee performance evaluation process to ensure all employees understand and accept their responsibility. We set a "Path to Excellence" to achieve top quartile performance of Edison Electric Institute peer companies for safety and health, based on recordable and severity rates. It is a measurable goal, and compensation is tied to our performance toward this goal.

We also try to learn from events that occur externally. Following a series of crane accidents last year in New York City and elsewhere, we drafted a new company policy and procedure for lifting and rigging that will be implemented this year.

We participated in a national crane safety summit with other industries to discuss and share corrective actions for construction sites. Most summit participants want mandatory certification of crane operators, riggers and signal persons. Following the summit, the Occupational Safety and Health Administration (OSHA) released a draft crane safety regulation about which AEP provided comments through our industry association. We are waiting for this regulation to be finalized and believe it will improve safety at construction sites.

Pole-related injuries are a leading cause of lost time, restricted work days and injury severity. We made significant improvements in 2008 to address the problem. A safety process improvement team that included employees who do this work conducted a study in 2007 and determined we could reduce these injuries by 50 percent by the end of 2008 and eliminate them completely by the end of 2010. We began the mandatory use of fall restraint equipment in June 2008 and exceeded our first goal by reducing the number of incidents by 56 percent.

Another safety process team addressed hazards related to meter reading such as slips, trips, falls and dog bites. We mandated training and proper footwear and now provide footwear reimbursement for employees to ensure they have the proper protection. Injuries caused by slips, trips and falls decreased by 56 percent from 2007 to 2008. Dog bites increased slightly from 2007 to 2008 despite a new policy that requires meter readers to carry dog bite prevention devices. We will conduct additional training and look for other ways to reduce animal hazards.

AEP spent \$1 million to place



A new policy requiring the use of fall restraint equipment has dramatically reduced the number of pole-related injuries.

850 automated external defibrillators in all facilities to respond to potentially life-threatening heart problems that may occur on the job. According to OSHA, 13 percent of all workplace fatalities result from sudden cardiac arrest.

#### PARTNERING TO IMPROVE SAFETY & HEALTH PERFORMANCE

AEP received two citations in 2008 from OSHA — the result of 19 inspections performed at our plants and construction sites. The Cardinal Plant in Ohio received a serious citation and a \$2,125 fine for inadequate railing and fall protection on a barge unloader. We installed additional hand rails and fall protection systems at the Cardinal Plant and at four other plants with the same design. The penalty was later reduced to \$1,487.

We also received a \$1,750 fine for an asbestos insulation spill that occurred

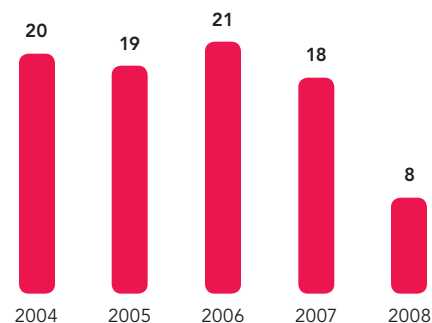
when a turbine failed at our Cook Nuclear Plant in September 2008. We took quick and thorough action to clean up the asbestos, and after discussions with OSHA the penalty was reduced to \$875.

Our Dolet Hills lignite mine in Louisiana received 32 citations from the Mine Safety and Health Administration (MSHA) in December 2008 for violations that included electrical and housekeeping issues. We developed an action plan and educated our employees about the findings to reinforce employee responsibility for safety and health, training, periodic inspections and accountability. In all, AEP received 43 citations from MSHA in 2008, which is a forceful warning that we need to strengthen our prevention programs. The recent employee fatality at this work site underscores the urgency of action on our part.

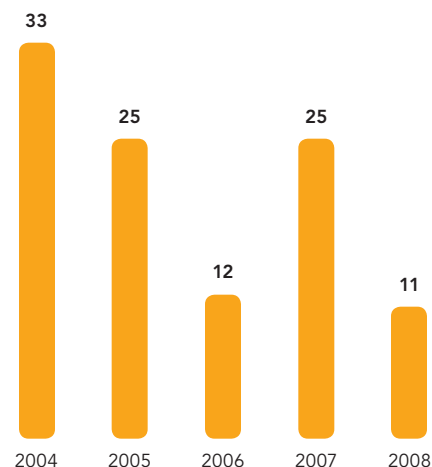
We work to be transparent, open and cooperative with our regulators to better meet their expectations and continuously improve our practices. We are working closely with OSHA in Ohio and West Virginia to develop a model program to reduce and control the dust found in coal plants so it will not harm people. We made this commitment at a stakeholder meeting last year.

We have a multi-year study under way to learn more about the health hazards of welding. OSHA does not have a welding exposure standard, partly because of the difficulty in predicting exposure levels. Our initial results show that additional controls may be needed for exposure to potential carcinogens, and the study is attempting to characterize the risk and hazard of more than 400 welding processes and metals. We expect to complete the study in 2009.

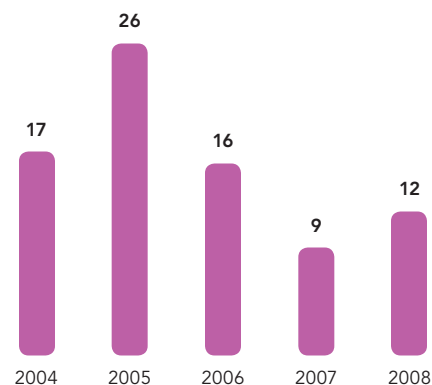
#### NUMBER OF POLE-RELATED INCIDENTS



#### NUMBER OF METER READER RECORDABLE INCIDENTS CAUSED BY SLIPS/TRIPS/FALLS



#### NUMBER OF METER READER RECORDABLE INCIDENTS CAUSED BY DOG BITES



“Our people are the key to producing and delivering a product that has truly changed the world — sometimes at personal risk. They deserve to know that their company values their safety unequivocally, and that their company respects the legacy of service they’ve established, by assuring that well-trained replacements are available to keep that legacy going when they choose to retire.”

Robert Powers, president,  
AEP Utilities

## COMMITTING TO CONTINUOUS IMPROVEMENT

AEP is now in the fourth year of implementing MESH (Managing Environment, Safety and Health) — an environment, safety and health management system that protects people and the environment through the implementation of two international standards, ISO 14001 and OHSAS 18001.

Through MESH, 36 of our power plants have identified their top safety and health issues and created objectives, targets and actions to address them. We have developed more than 83 objectives and 434 actions in the safety and health area of the system. These plants will now begin identifying roles, responsibilities and training needs for plant personnel and develop and document operational

controls. Four plants will be added to the MESH system this year.

MESH teams see the safety progress being made as a result of formal goal-setting and documentation. They meet regularly to manage and improve the environment, safety and health issues that are most pressing at their facilities. These include evaluating ways to reduce risk, improving employee competency through training, developing procedures for the safe management of hydrogen, reducing worker exposure to fugitive dust and asbestos and improving housekeeping and job safety analysis.

Our Safety and Health Event Management System, launched in January 2008, helps us make better decisions based upon accurate performance data. Through it, we are able to identify trends, develop leading indicators, reduce errors and put more emphasis on hazard recognition and risk mitigation.

Our safety and health audits enhance compliance and work to minimize harm to our employees and the public through the observation of work practices, work site

inspections and records review. In 2008, we conducted audits at seven operations centers and five power plants. We share best practices across the company as part of the audit program.

We made significant adverse findings in the asbestos and respiratory protection programs and in our operation and maintenance programs for cranes, resulting in procedural changes and corrective actions in both areas. In 2009, we will include audit reviews during plant outages so that work practices and procedures may be observed during these periods of high activity.

## THE HUMAN SIDE OF SAFETY & HEALTH

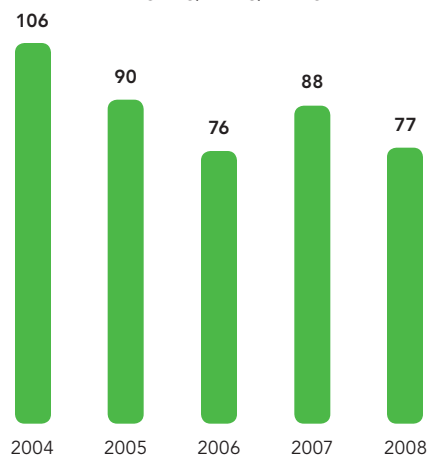
Everyone makes mistakes, so the focus of our Human Performance initiative is to reduce them and create controls so that mistakes don’t cause injuries.

AEP is working with renowned safety systems expert Dr. Chong Chiu, chairman of Performance Improvement International (PII), to help reduce the frequency and severity of human errors through the use of seven tools and techniques that teach employees to take deliberate actions to prevent injuries from occurring.

PII assessed our safety culture, performed a common cause analysis and conducted field evaluations at 14 district offices to observe our work. They identified 15 distribution work processes that need additional barriers to help prevent errors from becoming injuries. High-risk jobs require a minimum of three barriers to reduce the likelihood of a significant event occurring.

The Human Performance initiative already is helping us to improve in some of our business units, including the Cook

NUMBER OF RECORDABLE  
INCIDENTS SYSTEMWIDE CAUSED  
BY SLIPS/TRIPS/FALLS



Nuclear Plant and in transmission. We are adapting the same principles to our energy distribution operation, and during the next several years we hope to integrate the initiative throughout the company.

All of these programs — MESH, risk assessment and hazard analysis, a safety and health event management system, Human Performance Initiative and audits — are the tools we use to strengthen our safety culture, prevent accidents, reduce their impacts and work toward zero harm.

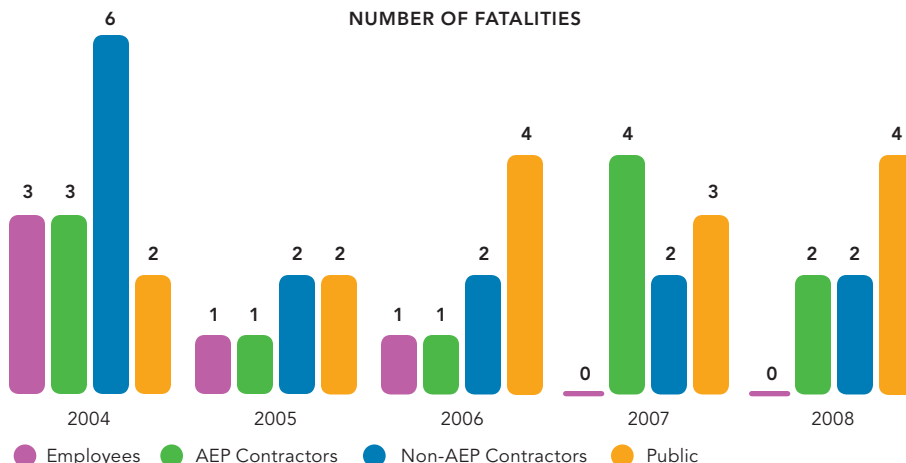
## PROTECTING CONTRACTORS WHO WORK FOR US

Contractor safety is a major focus of our efforts. Starting in 2009, we set a recordable injury goal and put systems in place to measure the safety performance of our contractors. Performance is tied to incentive compensation for senior officers. We have thousands of contractors working at our facilities each year, most of them involved with construction and tree trimming. While many of our contractors have improved their safety performance records, and we have been sharing our training and safety culture with them, we still had two contractor fatalities last year. That is not acceptable.

AEP is participating in an Edison Electric Institute task force to develop model contractor safety program guidelines. The goal is to create consistent safety and health expectations and practices that will result in fewer injuries and fatalities throughout the industry.

## PROTECTING THE PUBLIC

Although our employees are trained to protect themselves from the dangers of electricity, others who come in contact with our systems may not be so



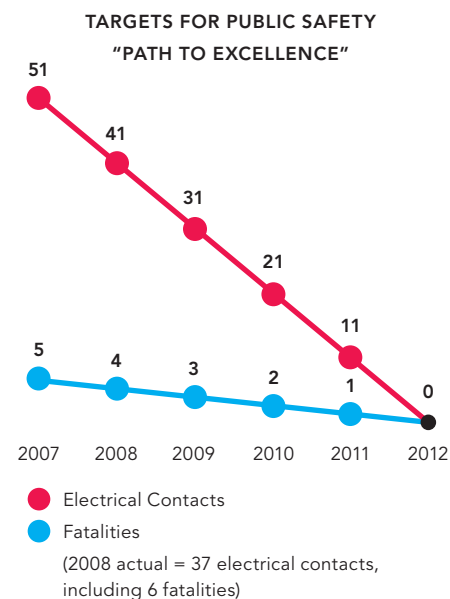
well-equipped. We saw fewer electrical contacts in 2008 than in previous years, but the number of fatalities increased. In 2008, 37 non-employees came in contact with our electric facilities, resulting in the deaths of two non-AEP contractors and four members of the public.

Three of these public fatalities were related to attempted copper theft, which has increased dramatically during the last few years as copper prices reached all-time highs. We placed ads in the media to remind potential trespassers of the dangers of getting too close to electrical systems and worked with local media outlets to alert the public to the dangers associated with copper theft. We also began switching to copper-clad wire, which is less valuable to thieves.

To help us focus efforts to improve public safety, we have established a public safety “Path to Excellence” that is designed to eliminate preventable public fatalities and contacts with our electrical facilities during the next five years. Each year, our goal is to reduce preventable public fatalities by 20 percent and electrical contacts by 10 percent.

Our public safety program expanded

as we developed and distributed new educational materials to contractors — those who do not work for AEP and do not receive our training — and the public, including two new videos. One campaign promoted our commercial contractor safety video, which is free online and on DVD by request. More than 1,000 copies have been ordered. A second video, *Anatomy of an Electric System*, targeted employees, customers and teachers; nearly 3,000 copies have been distributed.





## PROMOTING HEALTH, WELLNESS & WORK/LIFE BALANCE

We have a strong focus on health and wellness within our company. We believe there is a strong connection between health and wellness and safety and productivity. The AEP Wellness ... Energy for Life program, initiated in late 2007, provides employees and their families with access to health-related education, tools and programs that promote good health, well-being and productivity. The program promotes the adoption of healthy habits and choices, which lower the risk of developing chronic health conditions.

More than 56 percent of eligible employees and their spouses or domestic partners completed company-sponsored health assessment questionnaires during 2007 and 2008. The results showed the top five highest risk factors for AEP employees are: lack of physical activity (48 percent), poor nutrition (43 percent), obesity (39 percent), high cholesterol (33 percent) and tobacco use (19 percent).

Employee participation in health screenings increased 39 percent from 2007 to 2008. Some of these tests led to life-saving discoveries for employees and their families. Our plans include develop-

ing actions to address some of the health issues that have been identified.

AEP is proud to offer employees 32 work/life programs, including flexible work schedules, parental leave, alternative family benefits and backup daycare. Our employees have asked us to better publicize these programs so they can take advantage of them.

We received the 2008 Dave Thomas Award for Adoption-Friendly Policies and consistently have been named to *Working Mother* magazine's list of the 100 Best Companies for Working Mothers. We also have been recognized as a Top Military-Friendly Employer by *GI Jobs* magazine for six consecutive years and were named Veteran Employer of the Year by the Buckeye State Council in Ohio for our military-friendly hiring practices and training programs.

## BUILDING A SUSTAINABLE WORK FORCE

Our continued success as an organization will depend on our ability to maintain a knowledgeable, skilled and diverse work force. We see several challenges ahead, including:

- An aging work force and projected employee retirements;
- Enhancing workplace diversity;
- Long lead times to develop skilled workers for many key jobs; and
- Economic impacts on workers, including a wage freeze, limited hiring and budget reductions.

## ECONOMIC CHALLENGES WE FACE

We have had to make deep budget cuts due to the recession and are focused on keeping our employees engaged and productive. We expect these financial hardships to continue through 2010 and perhaps longer. This year, we are freezing wages and limiting hiring and business travel. We recognize these are tough times for our employees as well. We are offering tools to help, including free financial counseling, investment seminars, stress management programs and health and wellness activities.

## ONGOING DEVELOPMENT OF OUR EXISTING WORK FORCE

Our newer employees must be trained and ready to step in when our experienced employees retire. Our Legacy of Knowledge Program allows critical retirement-age employees to continue working part-time with full-time benefits while they share their invaluable knowledge and experience with their successors. We also established "communities of practice" to help with knowledge transfer by capturing and sharing best practices and other job-related information. Our first community focused on power plant efficiencies with 40 active participants, and we hope to add communities on change management and error reduction in 2009.

Some of our stakeholders asked that

The AEP Wellness ... Energy for Life program encourages employees to stay active and fit.





\$1.8

(in millions)

Cost to provide health screenings  
in 2008

65

Number of military veterans hired in 2008

132

Students selected for co-op or intern  
assignments in 2008

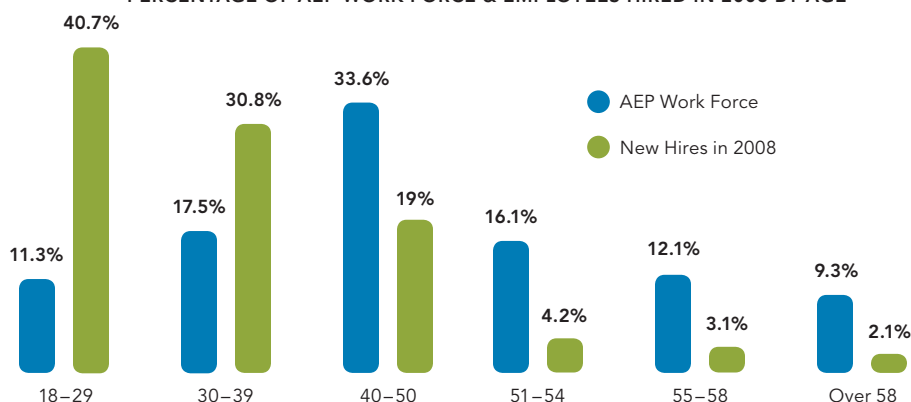
\$2.1

(in billions)

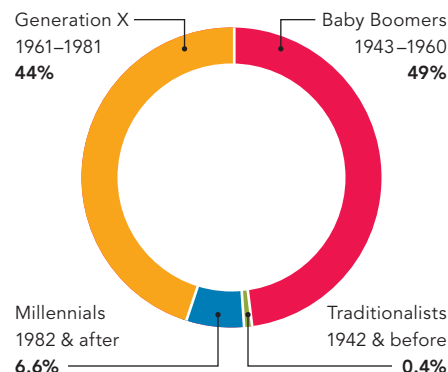
Total employee wages and benefits paid  
in 2008

Deck hand Gilbert Goodman. AEP has a fleet  
of more than 50 towboats that haul commodities  
on the Mississippi and Ohio rivers.

PERCENTAGE OF AEP WORK FORCE & EMPLOYEES HIRED IN 2008 BY AGE



AEP WORK FORCE BY GENERATION



we continue providing growth opportunities for our seasoned employees. We address this through programs such as Grid®, which instills a common set of core leadership skills such as listening, collaboration, team-building and learning to be candid in a respectful, constructive way. Since the program was implemented at AEP in 2005, about 1,600 leaders have attended, including 238 employees in 2008. In addition, our targeted leadership program focuses on the early identification and accelerated development of future leaders at all levels. We also are implementing a new system to improve the quality and consistency of how individual performance is managed by providing feedback and coaching to employees throughout the year.

### ATTRACTING DIVERSE, SKILLED TALENT

Our work force is aging, which is a daunting challenge for AEP and for our industry. Many job categories require years of training before an employee is experienced enough to work in the field.

An overhead line worker, for example, will begin with a combination of classroom and on-the-job training to

learn everything from how to climb a pole to how to safely handle live electricity. Even after four years, the worker may have the required training but is not yet qualified as a journeyman. In other parts of our business, such as generation and transmission, we have similar challenges.

We have focused our recruitment efforts on future needs and on developing and retaining employees. We hired 1,692 employees in 2007 and 2,189 in 2008. However, our hiring rate will slow considerably this year in response to the weak economy.

The good news for AEP is that we recognized the aging work force issue several years ago and have been aggressively recruiting and establishing alliances with two- and four-year colleges. This has resulted in more qualified job applicants with greater technical knowledge, which allows them to be productive employees sooner. Since 2003, 675 entry-level employees have begun training for distribution positions at our line school.

Looking forward, we expect the aging and shrinking work force will create long-term challenges to recruiting and retaining the talent we need to develop, operate and maintain the new technolo-

gies that will meet our customers' demands in the 21st century. One potential recruiting barrier is the negative perception many people have about coal, especially today when the general push is for 'green' jobs. As a result, we have enhanced our recruiting efforts to highlight AEP's standing as an innovative company, including our leadership in pushing advanced coal technologies.

We expanded our co-op program in 2008 to include our generation and construction management groups. A total of 132 students were placed in co-op/intern assignments involving all aspects of our business, from accounting and environmental services to information technology and Web design. We hired 51 percent of our co-op/intern program participants in 2008. We participated in 86 college relations/recruiting events at 30 different schools and collaborated with the Center for Energy Workforce Development in its efforts to direct the nation's youth toward careers in energy.

Our stakeholders have challenged us — and we are committed — to build upon our education partnerships to further develop a pipeline of industry workers who have the knowledge and skills we need. For



example, we continue to engage undergraduate engineering programs through our University Alliance Program, which allows students to help with research at our Dolan Engineering Laboratories in Ohio. In 2009, we expect to expand our involvement by engaging graduate-level programs in our technology and consumer behavioral research studies.

AEP's leadership in sustainability is helping us to attract new talent, especially among younger generations who are extremely concerned about the environment. One of the first questions prospective employees often ask is how AEP is involved in renewable energy resources and advanced coal technologies.

In addition to partnering with schools, AEP's Indiana Michigan Power received rate support for work force development at the Cook Nuclear Plant. The money will be used to hire additional fire and security personnel required by new Nuclear Regulatory Commission regulations and also help the plant tackle aging work force issues in engineering and operations. This type of rate recovery can be a model for other states and illustrates that customers are willing to pay for reliability and a skilled work force.

A diverse work force is key to AEP's success because it brings a variety of cultures, generations, thought leadership and skills to our work. Although more than 33 percent of our employees are minorities and/or females, we face challenges in achieving our diversity targets in power plants and engineering jobs. This is due to the remote locations of many of our plants and the low number of females and minorities who study engineering.

We started the AEP Executive Women's

#### 2008 EMPLOYMENT DATA — EEO-1 (as of Aug. 31, 2008)

	Employees	Females (%)	Minorities (%)
Total Employment	22,746	4,119 (18.1%)	3,433 (15.1%)
Officials & Managers	3,711	368 (9.9%)	319 (8.6%)
Professionals	5,625	1,456 (25.9%)	827 (14.7%)

#### 2007 EMPLOYMENT DATA — EEO-1 (as of Aug. 31, 2007)

	Employees	Females (%)	Minorities (%)
Total Employment	21,005	4,001 (19.0%)	3,075 (14.6%)
Officials & Managers	3,358	342 (10.2%)	272 (8.1%)
Professionals	5,285	1,367 (25.9%)	734 (13.9%)

en's Network in 2004 to foster professional networking among women executives and to encourage the professional and leadership development of women within the company.

AEP continues to partner with organizations that can help us increase, support and retain diverse talent, including the American Association of Blacks in Energy and the Women's International Network of Utility Professionals. In 2008, AEP joined the Board of Directors of the National Society of Black Engineers to encourage minority representation in professional and management jobs.

We have established strong relationships at universities with large minority female populations and have continued our aggressive recruitment program at the University of Puerto Rico, which has the largest percentage of minority female engineering students. We were proud to be recognized by *Working Mother* magazine in 2008 as one of the Best Companies for Multicultural Women.

We formed an informal alliance with Hard Hatted Women in 2008, a Cleveland, Ohio-based organization that helps women prepare for jobs in construction, manufacturing and other "nontraditional"

employment through outreach, education, training, support and job placement assistance. While this relationship is still developing, our goal is to use organizations like this to let women know they can choose from a variety of jobs in the utility industry.

#### IMPROVING OUR CULTURE

Our stakeholders emphasized the importance of culture — fostering a work atmosphere that brings out the best in all employees, helps us recruit and retain younger workers and ensures the company's future success. For the past several years, AEP's leadership team has been driving a culture of high involvement, shared commitment, agility, collaboration and mutual care.

We recognize that changing corporate culture can take years of demonstration and reinforcement of these values by the leadership team, managers and employees. While we still have work to do to make these cultural priorities the norm at all levels of the organization, we have made progress and have a plan to implement six new efforts in 2009 to enhance our culture. During a stakeholder meeting, employees suggested that

AEP conduct a culture survey and focus groups, which we are considering.

**VALUING DIVERSITY  
IN OUR SUPPLY CHAIN**

In addition to work force diversity, we want a diverse base of suppliers and have made strides in this area. We purchase approximately 23 percent of non-fuel materials and services from diverse suppliers and have increased spending with these suppliers from \$4.3 billion in 2006 to nearly \$5 billion in 2008.

AEP developed a supplier diversity policy and received an “acceptable” classification in a supply chain diversity audit conducted in 2008 by the Small Business Administration (SBA). The SBA defines “acceptable” as a good faith effort to meet all of our own goals, but not meeting the rigorous criteria for a “highly successful” or “outstanding” rating. As recommended in the audit, AEP intends to build upon its efforts by continuing outreach programs to identify and locate diverse suppliers for future procurement opportunities, promoting and recognizing supplier diversity efforts internally, and continuing to build relationships with groups such as the Women’s Business Enterprise National Council and National Minority Supplier Development Council. Our goal in the 2012 SBA audit is to achieve an “outstanding” rating.

**MANAGING LABOR RELATIONS**

Close to 30 percent of AEP’s employees are represented by one of four major labor unions — International Brotherhood of Electrical Workers (IBEW); Utility Workers Union of America; United Steelworkers of America; and United Mine Workers of America. Our partnership with the unions



Kent Harner, rail car mechanic. AEP uses a fleet of more than 9,000 rail cars to transport coal.

extends into many areas. Union leaders recognized the difficult economic situation facing the company and were proactive in communicating with their members and working with management about the pay freeze for 2009. We collaborate with the unions through ongoing management and safety and health meetings and on community projects, such as Operation Feed in Central Ohio, and routinely invite union employees and local and national labor leaders to stakeholder meetings.

In the first quarter of 2009, a new contract went into effect with the IBEW, which represents the majority of our union employees. This was the culmination of three years of partnering and negotiating at the local and national levels and resulted in a master contract agreement that establishes systemwide terms and conditions for IBEW members. This contract runs through Feb. 16, 2012.

Largely because we do not have

**ORGANIZED LABOR AT AEP**

Labor Union	Number of Employees
International Brotherhood of Electrical Workers .....	3,800
Utility Workers Union of America ....	1,400
United Steelworkers of America .....	525
United Mine Workers of America .....	400

policies in place regarding child labor and human rights, AEP consistently ranks low in the area of labor issues in sustainability benchmark surveys by investor analyst groups. Although we operate only within the United States, many of our suppliers do not; we recognize the value of these policies and plan to develop them. ■

**USEFUL WEB LINKS:**

- [www.cewd.org](http://www.cewd.org) • [www.dol.gov](http://www.dol.gov)
- [www.eei.org](http://www.eei.org) • [www.ibew.org](http://www.ibew.org)
- [www.msha.gov](http://www.msha.gov) • [www.osha.gov](http://www.osha.gov)
- [www.sba.gov](http://www.sba.gov)



CHALLENGE	GOAL	2008 PROGRESS
Achieving top quartile performance within the electric industry by 2010, as measured by recordable and severity incident rates, requires a major shift at AEP in behaviors and attitudes about safety and health (benchmarking performance against comparably sized EEI companies).	<p>Recordable Rate — Goal: 2009 — 1.45 2010 — 1.24 2011 — 1.12</p> <p>Severity Rate — Goal: 2009 — 25.56 2010 — 21.73 2011 — 19.58</p> <p>Establish leading indicators to measure safety and health performance.</p> <p><b>OHSAS 18001:</b> Long-term conformance with this standard will be reflected in recordable and severity rates. Complete first phase of rollout to all power plants by end of 2012. Four additional plants begin implementation in 2009.</p>	<p>Recordable Rate: 2008 — 1.38 (goal was 1.70) 2007 — 1.76 2006 — 1.66</p> <p>Severity Rate: 2008 — 26.94 (goal was 30.07) 2007 — 42.83 2006 — 31.77</p> <p>Safety and Health Event Management System created.</p> <p><b>OHSAS 18001:</b> Phase I completed at 36 power plants, including 17 hydro facilities.</p> <p>Conducted safety and health audits at seven operations centers and five power plants.</p>
It is imperative we eliminate worker fatalities. AEP's history tells us the risk for job-related fatalities is high.	Zero AEP employee fatalities.	Zero employee fatalities in 2008 and 2007 — the first time in AEP's history there were no fatalities for two consecutive years.
Improving contractor safety and health will require new expectations, measurement systems, oversight and evaluation. (New)	<p>Zero contractor fatalities.</p> <p>Recordable Rate — New Goal: 2009 — 2.00 (2008 baseline is 2.10) 2010 — 1.80</p>	<p>2008 — Two contractor fatalities 2007 — Two contractor fatalities</p> <p>Began participation in EEI Contractor Safety Executive Task Force in May 2007 to define and align utility industry expectations for contractor safety. Developed a model program for contractor safety management.</p>
Although AEP conducts business within the United States, we are exposed to potential supply chain risks because many products we buy and use are made abroad. We also are involved in international projects.	<p>Develop human rights and child labor policies by 2010.</p> <p>Develop a plan to move AEP to an "outstanding" SBA audit rating in 2012.</p>	<p>N/A (New Goal)</p> <p>N/A (New Goal)</p>
We must ensure that AEP can recruit from a skilled and diverse labor pool to meet our evolving work force needs.	Develop or expand three partnerships that increase the skill base of the labor market or broaden our opportunities to recruit diverse individuals.	N/A (New Goal)
As competition for talent grows with the retirement of Baby Boomers, AEP must ensure it has a culture that effectively attracts, retains and brings out the best in skilled talent.	Implement six specific efforts to continue shaping AEP's culture in 2009.	N/A (New Goal)
To ensure we comply with all laws and regulations governing our business, we must comply with a strict Code of Conduct.	Complete 100 percent training and certification in AEP's Code of Conduct.	N/A (New Goal)
The health and wellness of our employees is essential to safety and to having a productive, healthy work force. Completing a confidential health risk assessment gives employees and their families information to make healthier lifestyle choices and helps us design programs that meet those needs.	2009 — 65 percent of employees and their spouses/domestic partners complete health risk assessment.	N/A (New Goal)
Protecting the public is very challenging; copper theft makes it especially problematic.	Set five-year "Path to Excellence" (2009–2013) to reduce preventable public fatalities by 20 percent and electrical contacts by 10 percent each year.	N/A (New Goal)



“There is an exciting debate in the United States about our energy future, with many voices competing — and needing — to be heard. But one of the most critically important voices is that of utilities, because it is they who have the experience of dealing with the myriad challenges of both producing energy and delivering it. As a strategist, I believe passionately in the need to plan for the long term, not just tactically. Because of their business model, utilities are the sector of American business that practices most consistently real, long-term planning. That perspective means utilities must have a premier place at the table for any energy discussion.”

Susan Eisenhower, Washington, D.C.; president, The Eisenhower Group

## PUBLIC POLICY

\$195,500

Corporate political contributions  
in 2008

\$1.8

(in millions)

Federal, state and local lobbying  
expenditures in 2008

25

Siting meetings for the PATH Project

\$2.58

(in billions)

What AEP expects to spend on construction  
in 2009

Much has changed in the public policy arena in the past year, and we can expect more changes ahead. We have a new administration in Washington, new state and federal lawmakers, newly appointed officials and policymakers and a difficult economy. But AEP's long-term goals remain consistent.

Our future depends on the outcome of important high-priority policy issues that include:

- Alternative rate-making procedures that allow more contemporaneous cost recovery to ensure utilities remain financially viable to be able to deliver services in a timely manner that benefits customers;
- The development of an extra-high voltage (EHV) transmission grid to support a national energy strategy committed to enhanced reliability and optimal use of all resources, including new renewable resources;
- Federalization of siting authority for the EHV grid to overcome difficult decision-making processes that do not support a new national energy strategy;
- Reasonable and achievable climate change policies that include a national cap-and-trade program;
- Regulations and commercial-scale technology improvements to permit the capture and long-term safe storage of carbon dioxide to allow the continued use of coal;

- Timely deployment of smart grid technology to promote energy efficiency and give customers more control of energy use;
- Energy efficiency and demand response programs to reduce consumption and slow the need to build new power plants; and
- Development of renewable energy standards to support mitigation of greenhouse gases.

### THE ECONOMY

AEP is concerned about the nation's econ-

omy. With nearly 22,000 employees, we must ensure that our own finances and business are sound.

We need to provide our shareholders with the opportunity to earn a reasonable return on their investments and ensure we have suitable access to capital to fund our operations.

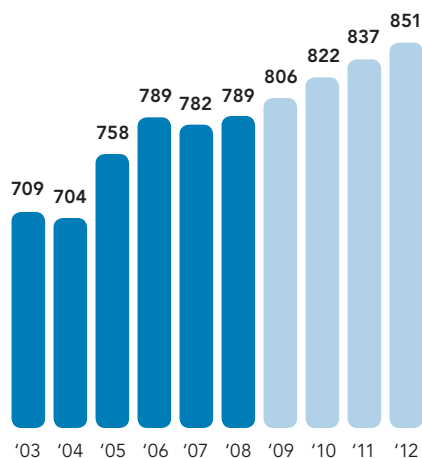
As we develop or advocate public policies, we also must keep in mind that our customers are experiencing their own economic difficulties.

The economic turbulence has created additional policy challenges. Through rate freezes and caps, the prices we charge customers for electricity have been kept artificially low in many of our states. The rates also are relatively low because a high percentage of our electricity comes from low-cost coal-fired generation. New laws requiring environmental controls on coal-fired generation and the rising cost

#### TOP 5 PUBLIC POLICY ISSUES RAISED BY STAKEHOLDERS

- Climate change, including advanced coal technologies and renewable energy
- Transmission siting; federal versus state oversight
- Cost of electricity
- Energy efficiency
- Alternative rate-making

**CONTIGUOUS UNITED STATES  
ACTUAL & PROJECTED PEAK SUMMER LOAD**  
(in thousands of MW)



North American Electric Reliability Council Region.

Source: *Electric Power Annual*, Jan. 21, 2009,  
Energy Information Administration.

to build needed generation are driving up the cost of energy. Electricity is going to cost more in the future — the best that AEP and other utilities can do is to mitigate those increases by helping customers reduce their usage and demand. That will delay or avoid the cost of new facilities. We also need policies that will create a healthy and reasonable business environment for the industry.

It would be wrong to say that the financial policy and alternative rate-making initiatives at AEP are based solely on the current recession. In reality, the credit crunch has simply made worse what had already shaped up as a “perfect storm” in the realm of utility policy and regulation. Rising costs for all fuels, an infrastructure that is aging and widely recognized as needing substantial investment for technological advancements, and a cost recovery system that requires utilities to carry the debt of new investments for years prior to any recovery does

not work given the magnitude of investment needed for this industry.

Compared with many nations, power prices in the United States remain a bargain. However, some of the countries with which the United States competes most heavily still have very low prices for power. One of the ongoing obstacles to enacting climate change legislation in the United States is ensuring that our trading partners will take comparable action and that their prices for power will reflect the cost of those actions. This is an issue AEP follows closely and has addressed in its proposal that it drafted with the International Brotherhood of Electrical Workers.

### CHANGING THE COST RECOVERY SYSTEM

The Regulatory Compact is the system in which state utility regulators define a reasonable rate of return for a utility and then structure a system that allows the utility the opportunity to earn that return. In exchange, the utility serves customers within a given jurisdiction. Traditional cost recovery methods no longer work well.

The utility industry can no longer afford to build needed infrastructure and wait to recover those costs later, sometimes many years down the road.

This is rapidly becoming a crisis as the industry is called upon to address an increasingly complex and expensive range of capital investments to replace aging infrastructure, expand existing infrastructure and meet environmental issues such as climate change. These investments carry increased risks and uncertainty and do not work well under a regulatory system built on price stability, long lag times to recover costs, and readily available and affordable capital.

**RETAIL PRICES IN SELECTED COUNTRIES**  
(in U.S. dollars per kWh)

Austria .....	.2261
Chinese Taipei .....	.0740
Czech Republic .....	.1917
Denmark .....	.2815
Finland .....	.1711
France .....	.1733
Hungary .....	.2558
India .....	.0543
Ireland .....	.2463
Italy .....	.2715
Korea .....	.0946
Luxembourg .....	.2307
Mexico .....	.1076
Netherlands .....	.2417
New Zealand .....	.1782
Norway .....	.1752
Poland .....	.1792
Portugal .....	.2334
Slovak Republic .....	.2009
Spain .....	.1870
Switzerland .....	.1556
Turkey .....	.1577
United Kingdom .....	.2271
United States .....	.1027

Source: *Key World Energy Statistics 2008*,  
International Energy Agency.

Although the economic crisis has not caused the problem, it has made it worse by depriving us of financing options and needed flexibility. We are working with legislators and regulators to develop new regulatory models that will help meet these challenges. Faster cost recovery would reduce the cost and risk of many projects and would allow us to do more with fewer resources.

If you were to view alternative regulatory models as a continuum, at one end would be a system in which all costs of

service are included in a single charge-per-kWh of consumption, with no adjustments outside of a general rate case. Utility revenues would be subject to intense volatility as customer usage varied. At the other end would be a decoupled rate structure in which virtually all costs of service are considered fixed and rolled into a flat user fee. Revenues in this case would be highly predictable but offer no flexibility to the benefit of either the utility or the consumer. Along the continuum are a host of rate-making tools. Among those garnering the most attention are:

- **Future test years:** Forecasted expenditures are used to calculate revenue requirements, with true-up to actual expenditures. This already is in use in Georgia and Connecticut.
- **Construction Work In Progress (CWIP):** Financing costs are placed into the rate base during construction. Virginia routinely awards CWIP in rates. Few other states do it automatically,

although many state commissions are authorized to consider it on a case-by-case basis.

- **Riders/trackers:** These tools are tariff adders that track specific categories of costs between rate cases. Most states allow them for fuel and purchased power costs (fuel adjustment clauses). Virginia has an Environmental and Reliability Rider, and West Virginia has an Expanded Net Energy Cost rider.
- **Formula rates:** Automatic revised tariffs based on formulae or indices without extended regulatory proceedings. These include performance-based rates. SWEPCO has formula rates in Louisiana. The Federal Energy Regulatory Commission (FERC) and Massachusetts follow formula rates, and legislation is pending in New Jersey.

#### BUILDING AN EXTRA-HIGH VOLTAGE TRANSMISSION BACKBONE

We believe an interstate EHV transmission

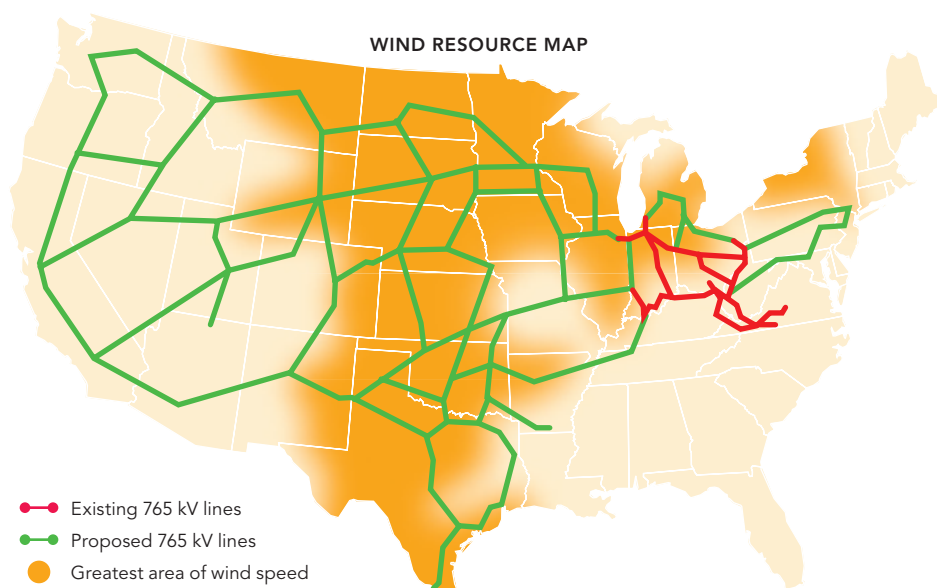
grid is essential, and we're committed to doing all we can to facilitate its development. A national EHV backbone would:

- Enhance the reliability and security of the grid;
- Enable efficient and more affordable access to renewable energy such as wind and solar; and
- Lower regional energy costs by reducing congestion charges and making more energy available when and where it's needed.

The siting process and arguments about cost allocation are impeding a much-needed national interstate transmission system. We respect the legitimate interests of states and local communities and will look for opportunities to use existing rights of way where possible, but we support a larger role for the FERC. We believe transmission is interstate commerce and should be regulated as such — at the federal level. We are advocating for a revision of the Federal Power Act so that EHV transmission lines will be federally regulated, just like natural gas pipelines.

We support two multi-regional planning authorities, one for the Eastern Interconnection and one for the Western Interconnection. We also support cost allocation for EHV backbone projects (those that overlay the existing grid) across the same wide areas. The benefits of such projects extend to broad geographic areas, and so should the costs. Allocating costs across a larger pool of consumers will, of course, reduce the impact of those costs on all individuals.

We also support the plan promoted by oil and gas industry veteran T. Boone Pickens to reduce the nation's dependence on foreign oil because it would develop both transmission and renewable



This map illustrates how a nationwide EHV transmission system could transport power generated in the wind corridor that runs from Texas to Canada to markets throughout the country.

Source: U.S. Department of Energy, National Renewable Energy Laboratory.



## AEP ENERGY EFFICIENCY & DEMAND RESPONSE PROGRAMS

AEP has assembled a number of energy efficiency and demand response programs aimed at different types of customers. Below is a list of the more common programs by customer type. Not all programs will be offered in all jurisdictions, and some may apply to specific jurisdictions.

### Household/Residential Customer Programs

Low-Income Weatherization	Provides a variety of energy efficiency improvements to customers at or below a certain percentage of federal guidelines. Program partners include state assistance agencies, community action agencies and/or other third-party contractors.
ENERGY STAR New Homes	Home builders are paid incentives for building new homes that meet ENERGY STAR New Home standards, which require homes be at least 15 percent more energy efficient than homes built to 2004 International Residential Code, and must meet U.S. EPA guidelines.
High-Efficiency Heat Pumps	Incentives paid to residential customers and contractors who install qualifying high-efficiency heat pumps in their homes.
Home Energy Fitness	Provides turnkey energy analysis to qualifying customers, including blower door diagnostic analysis and a variety of energy efficiency and conservation measures.
Mobile Home New Construction	Incentives paid to customers and mobile home dealers for the installation of high-efficiency heat pumps (13 SEER and higher) and upgraded insulation packages in new mobile homes.
Residential Standard Offer	Incentives paid to participating contractors for installation of qualifying measures in retrofit applications.
Appliance Recycling	Provides for the pick-up and disposal of second, inefficient, working refrigerators and freezers.
Compact Fluorescent Lighting (CFL)	Provides monetary incentives for customers to replace incandescent bulbs with CFLs. Various delivery methods may be utilized such as point-of-purchase, rebate coupons and bill inserts.
ENERGY STAR Appliances	Provides financial incentives for the purchase of certain new appliances with an ENERGY STAR rating.
Renewable Energy Technology	Provides financial incentives for the installation of solar and wind equipment.

### Commercial/Industrial Customer Programs

CitySmart Pilot	Incentives paid to cities for certain measures installed in new or retrofit applications that provide verifiable demand reduction and energy savings.
Commercial Solutions	Facilitates a comprehensive approach to help commercial customers identify various energy efficiency and cost-saving opportunities within the customer's operation. It also provides the direct support, tools and training necessary for customers to independently evaluate benefits of potential efficiency improvements.
Energy Efficiency for Cities	Offers incentives to cities for installation of LED lighting retrofits for traffic signals, crosswalk signals and building exit lighting.
Load Management Standard Offer	Targets large commercial/industrial customers. Incentives are paid based on metered demand reduction to participating customers who have identified interruptible load that can be curtailed on short notice.
Schools Conserving Resources (SCORE)	SCORE Market Transformation Program targets school districts and cities to provide incentives for installation of qualifying measures that provide verifiable demand and energy savings.
State and Municipal LED Lighting	Provides incentives for the installation of new LED traffic signals in either a new or replacement installation.
Commercial and Industrial Lighting	Provides financial incentives for installation of new high-efficiency lighting systems in a non-residential facility in either a new construction or retrofit application.
Commercial and Industrial Motors	Provides incentives for the installation of new properly sized high-efficiency motors in a new application or as a replacement for a less efficient operating motor in a non-residential facility.
Commercial and/or Industrial Standard Offer	Provides monetary incentives, based on savings, for a variety of retrofit measures, including installation of chillers, motors, heating/ventilation/air conditioning, lighting and window tinting/shading.
Large Industrial Process	Open to large industrial and government customers (typically over 1,000 kW). Program may provide financial support and assistance to identify and implement energy savings through a partnering approach with large industrial customers.

energy. We have asked our employees to support the Pickens Plan, and we expect to support it before Congress.

### ENERGY EFFICIENCY & DEMAND RESPONSE

In the past, AEP's low rates have served as a disincentive to regulators to approve energy efficiency and demand response programs because these programs often cost customers more, not less. But the recession and the rising cost of energy give us two compelling scenarios in which we can raise awareness of energy efficiency alternatives with customers and policymakers. When the nation's economy begins to recover, energy prices are likely to increase, which will provide further incentive for energy efficiency and demand response programs.

We are developing and implementing energy efficiency and demand response programs throughout our service territory in concert with our regulators and other stakeholders. Our programs are of significant interest to several stakeholders, including environmental groups.

The challenge is to create cost-effective programs that reduce energy consumption and demand so that capital expenses for new generating plants and infrastructure can be deferred or possibly avoided. These programs would ideally put utilities in a position of financial indifference between investing in new generation or demand response and efficiency.

We expect to have market potential studies completed in 10 of our 11 states this year. Programs are in place in Arkansas, Kentucky, Oklahoma and Texas and have been proposed for Indiana and Michigan. In Ohio, the Public Utilities Commission approved programs as

part of AEP Ohio's Energy Security Plan. Programs approved by regulators will be customized by each operating company based on several factors, including the cost of power, housing characteristics, air conditioning use, billing data, demographics and type of customer. We recently had a disappointing energy efficiency decision in Indiana and will work harder to make our case to the commission based on the outcome of our market potential study. (Read more about this in the Climate Change section.)

The American Recovery and Reinvestment Act of 2009 ("the Stimulus Bill") includes significant energy efficiency provisions, such as incentives for home weatherization. We will work in our states to implement those programs where it is possible for us to do so.

### RENEWABLE ENERGY STANDARDS

AEP is involved in discussions about a federal renewable energy standard (RES). A national RES would require use of a

AEP hosted a town hall meeting with CEO Mike Morris and investor T. Boone Pickens in Columbus, Ohio, in March 2009 to promote the Pickens Plan.

"As the regulatory process addresses increasingly complex issues, it's becoming more important than ever that utilities work with all of their stakeholders to come up with regulatory solutions that address those issues in a way that's fair to everyone. We are learning that, by listening to our customers, our employees, our investors and even our critics, we achieve better solutions and become a better company."

Craig Baker, senior vice president,  
Regulatory Services



“AEP is an integrated utility that has a wide range of stakeholders who often have competing interests and points of view. Our challenge is to develop comprehensive public policy strategies that balance the interests of those stakeholders, which include shareholders, customers, employees, environmental and consumer groups and government. Therefore, we must be at the forefront of the public policy arena championing solutions that make sense for all of us while being ever so careful to truly listen to those who have a stake in our overall success.”

Charles Patton, senior vice president,  
Regulatory & Public Policy

certain minimum amount of renewable energy. We have opposed a federal standard because we believed that one size could not possibly fit all — the wind power resources in Texas, for example, would be far different than those in Kentucky.

However, the development of a nationwide transmission system that would allow the transport of renewable energy would help negate our concerns, as would tradable renewable energy credits. We propose that standards be phased in as transmission becomes

available. We also will seek an expanded definition of renewable energy to include advanced energy projects such as carbon capture and storage. We will continue working with the Obama administration and Congress on a federal RES as well as transmission legislation.

### CARBON STORAGE POLICY

Carbon capture and storage presents a number of legal issues that must be resolved, or the technical ability to capture and store CO<sub>2</sub> will mean little. We want to ensure that states have policies in place to deal with liability for stored carbon. Only then can we make significant progress toward carbon capture and storage.

Our vision is that we will inject CO<sub>2</sub> into underground storage areas or use it for enhanced oil recovery. These technologies have been used and shown to be safe by the oil and gas industry for many years, and we believe they are viable ways to manage and store CO<sub>2</sub>.

We are working with insurance companies to assess the risks and costs and with state and national leaders to address long-term liability issues. We believe that the best option is for the government to accept the long-term liability for stored carbon regardless of whether insurance companies are willing to write such policies. This approach would provide the means for continued monitoring of the wells and corrective actions, if needed. We are promoting legislation in our states following the model advocated by the Interstate Oil and Gas Compact Commission.

### OTHER DOMESTIC POLICY ISSUES

We are following several environmental rules — the Clean Air Interstate Rule, the Clean Air Mercury Rule and Section 316(b)

of the Clean Water Act — as a result of judicial review. We also expect to see new regulations governing the management of coal ash impoundments as the result of the Tennessee Valley Authority coal ash dam failure in December 2008. We will work with regulators and policymakers to ensure that decisions are made on the basis of complete information.

As disclosed in previous reports, AEP supports candidates for public office through contributions from our employee-run political action committees (PACs). Information about federal PAC contributions is available online at [www.fec.gov](http://www.fec.gov), and information about contributions from the company's PACs in Michigan, Ohio, Texas and Virginia is available from the state sites. In 2008, we spent approximately \$1.8 million on lobbying activities on a number of issues at the federal, state and local levels and made \$195,500 in corporate political contributions.

### INTERNATIONAL ENGAGEMENT

We are active on the international front as well. AEP is a member of the World Business Council for Sustainable Development and participated in the U.N. Climate Change Conference in Poland in December 2008. We recently co-authored a report with our industry peers in the international electric utility sector, *Power to Change*. This report outlines the public policies and technologies we believe are needed to address global climate change. We expect to be present at the next U.N. Climate Change Conference in Copenhagen, Denmark, in December 2009. ■

### USEFUL WEB LINKS:

[www.awea.org](http://www.awea.org) • [www.fec.gov](http://www.fec.gov)  
[www.wbcsd.org](http://www.wbcsd.org)

CHALLENGE	GOAL	2008 PROGRESS
Current rate-making models incorporate too much lag and do not account for the large investments necessary by utilities to replace existing facilities, expand capacity and modernize the grid.	Promote alternative rate-making models that reduce the time from investment to return on investment and help facilitate societal goals, such as energy conservation.	AEP has been working with regulators and legislators to explore several models, including future test years, Construction Work in Progress, riders and trackers and formula rates.
The state of the nation's transmission grid is inadequate to meet future needs. We need an EHV transmission grid overlay, which requires modernization of siting processes and an interconnectionwide planning protocol.	Lead the national policy effort to establish federal siting authority and broad-based planning procedures and cost allocation.	<p>Announced plans for EHV transmission projects that total 2,600 miles.</p> <p>Presented our vision for new transmission planning, siting and cost allocation methodologies in several state and federal venues, including FERC, Department of Energy, Congress, National Conference of State Legislatures, Midwest Governors Association and others.</p> <p>Conducted 25 siting meetings to seek public input for the PATH line in West Virginia. More than 2,400 people attended.</p>
To delay the need for new generation, AEP will promote energy efficiency and demand response programs in all 11 states to lower both the demand for power and the amount used.	Reduce or offset 1,000 MW of demand through energy efficiency programs by the end of 2012.	Conducted or began market studies in 10 of our 11 states. Increased staff dedicated to developing and implementing energy efficiency and demand response programs throughout the system. Identified 561 MW of the 1,000 MW demand reduction goal.
	Work with state governments to implement components of the American Recovery and Reinvestment Act of 2009 related to energy efficiency and demand response.	N/A (New Goal)
	Reduce energy consumption by 2,250,000 MWh by the end of 2012.	N/A (New Goal)
Renewable energy standards (RES) are becoming a popular tool for government to bring more renewable forms of energy into the market. A RES has been implemented in four of AEP's 11 states, with virtually all others considering some kind of legislation. (New)	Ensure that RESEs are achievable and appropriate for the states where AEP operates. Participate in developing legislation at the federal level for a national RES.	AEP has worked with the Obama administration regarding the development of a federal RES and expects to be involved as the discussion continues.
	Develop plans to meet individual state RES requirements.	RES development plans are under way.
As carbon capture technology becomes commercially available, there must be regulations in place that permit its safe long-term storage and that deal with long-term liability.	Help shape legislation that creates a mechanism to fund long-term storage and limit liability.	AEP has developed model legislation and started reviewing the costs of storage and potential for liability insurance.

“It’s important for AEP, like other corporations, to deploy life cycle assessment in making decisions about fuel mix. For too long, corporate America has externalized the costs of air pollution, public health and ecosystem services. We now add to that list the current difficult but critical issue of greenhouse gas emissions and climate change. When the cost of all of those things is internalized into the cost of electricity, we will have a very different view of the comparison between coal and wind, for example, or maybe coal and photovoltaics. We can’t depend on prices that are low for us now at the expense of the health and well-being of future generations.”

Nick Brown, Ph.D., executive assistant for sustainability,  
University of Arkansas and AEP stakeholder





## CLIMATE CHANGE

48.7

(in billions)

Cubic meters of water that pass through AEP's  
17 hydroelectric projects annually

90%

Percentage of electricity generated  
daily by AEP from fossil fuels

215,000

Trees planted on company-owned  
lands in 2008

63.5

(in millions)

Trees planted by AEP between  
1944 and 2008

The decisions made in the next year or two on climate policy may well change the way we produce and use energy for decades to come. As the largest coal-burning electric utility in the Western Hemisphere, AEP must lead the way. We respect that some of our stakeholders disagree with us on fundamental climate policy issues, such as emission reduction targets and allowance allocations, and that they feel we should have been more aggressive addressing those issues. We believe it is time to focus on narrowing our differences, emphasizing areas of commonality and moving forward. In that spirit, this section discloses AEP's

views on the full range of issues related to climate change.

### OUR VIEW ON PUBLIC POLICY & CAP-AND-TRADE

AEP wants a federal energy policy that addresses the future energy needs and energy security of the United States and a separate climate change policy that addresses greenhouse gas (GHG) reductions through a federal cap-and-trade system. While we believe that climate and energy policy need to be addressed at the same time, some of our stakeholders prefer that energy issues be addressed as part of a climate bill. We agree with some of our stakeholders that climate change is best addressed through legislative action and not regulated through the existing Clean Air Act.

The United States needs an interstate extra-high voltage (EHV) transmission system that is more efficient and can facilitate the delivery of clean energy from where it is generated to where it is needed. Today's transmission system is built around the location of power plants. In a carbon-constrained world, we need

to integrate substantial new renewable and other resources into the grid. Renewable resources, such as solar and wind, often are located in remote areas. A new EHV transmission system must be built to bring this energy to the more populated areas where it is needed. The grid is not configured to

handle a substantial shift to more diverse fuels and must be improved if we are to maximize those resources.

We support adoption of an economy wide cap-and-trade GHG reduction program that allows us to provide reliable, reasonably priced electricity to our customers while fostering international participation to address climate change. This program should include:

- A cap that applies to all sectors of the economy and covers all GHGs;
- A framework to maximize flexibility and minimize cost;
- Targets for reducing emissions that match available technology and could decline over time as technology becomes available and can be deployed;
- Unrestricted use of real and verifiable domestic and international emissions

### TOP 5 CLIMATE CHANGE ISSUES RAISED BY STAKEHOLDERS

- Auction versus allocation — climate legislation
- National renewable portfolio standard
- Energy efficiency
- The future of coal
- Research and development and innovation



AEP Ohio installed 70-kilowatt solar panels on two of its service centers to learn more about their installation and operation.

offsets, such as methane capture from agriculture or landfills;

- Allowance allocations to local electric distribution companies and other sources based on historical emissions and retail sales;
- Incentives for early voluntary actions or investments to reduce emissions;
- Long-term public and private funding to develop commercially viable technologies, such as carbon capture and storage;
- Elimination of legal and regulatory barriers to the use of low- or no-carbon technology processes (e.g., carbon capture, nuclear, wind);
- Regulatory approval of simultaneous cost recovery for effective energy efficiency and demand response programs. We believe this is a key part of the climate solution;
- A price ceiling (safety valve) on CO<sub>2</sub>

allowances to limit the economic burden on emitters and on the economy as a whole; and

- An appropriate trade measure to equalize the conditions of global trade should other countries fail to reduce their GHGs.

### OUR VIEW ON PENDING LEGISLATION

AEP still supports two pieces of climate change legislation introduced or developed within the 110th Congress: The Low Carbon Economy Act of 2007 (S. 1766) introduced by Sens. Jeff Bingaman, D-N.M., and Arlen Specter, R-Pa., and a draft bill issued by Reps. Rick Boucher, D-Va., and John Dingell, D-Mich. Both pieces of legislation called for economywide cap-and-trade programs that included moderate initial emission reduction targets to allow for the development and deployment of critical low-carbon technology.

Both proposals included favorable options for allowance allocations and contained language on international action and cost-containment mechanisms that were developed by AEP and the International Brotherhood of Electrical Workers. While these proposals are unlikely to be reintroduced in the current Congress, AEP hopes that some of the key elements will be retained.

AEP also supports the Carbon Capture and Storage Early Deployment Act (HR 6258) that was introduced by Rep. Boucher in 2008. This bill would provide funding for development and early deployment of systems to capture and store CO<sub>2</sub> emissions from fossil fuel generation. It would levy a small charge on distribution utilities based on the fossil energy and relative CO<sub>2</sub> emission rate of the energy used to supply their

customers. This bill would provide approximately \$1 billion in annual funding for development and deployment of this technology.

Recently, a climate bill with energy provisions was introduced that would establish a nationwide GHG cap-and-trade program, sharply increase renewable energy production and revamp the energy efficiency of the U.S. economy. We are concerned about the aggressive targets and timetables and the prescriptively high levels of renewable energy and energy efficiency standards that go beyond what we think realistically and cost effectively could be achieved.

### OUR VIEW ON ALLOCATIONS VERSUS AUCTIONS

Emission allowances will have significant monetary value, and the decision about whether to allocate or auction them has enormous financial ramifications, from the smallest residential customers to the largest businesses. We believe that auctions would place an unfair cost burden on customers of utilities whose power comes from coal and would likely cause significant damage to AEP's manufacturing customer base, possibly creating significant job losses.

We are passionate about our position supporting allocations because we have an obligation to our customers and the communities we serve. This is not about making profits for shareholders; it is about doing what's best for our customers and the environment. In fact, because our rates are regulated, our profitability is not affected.

Some stakeholders have suggested that the government should collect money from customers and give it to

companies to make required environmental improvements. Our skepticism that utilities would actually receive those funds is based on the billions of dollars customers have already paid to the federal government over many years to build a permanent nuclear waste storage facility at Yucca Mountain, which still does not exist. The projected federal budget deficit makes us even more concerned about this idea. Although we disagree fundamentally with some stakeholders on the issue of allocation versus auction, we are committed to work toward a solution.

#### OUR VIEW ON USCAP

Last year, we explained why AEP has not joined the United States Climate Action Partnership (USCAP). USCAP recently issued a more detailed blueprint for climate policy. We have carefully reviewed the revised USCAP proposal, which offers more detailed recommendations on key elements of climate policy, and found it is now much closer to AEP's position. It includes a moderate initial cap, large allocations to the electric sector, significant commitment to technology development, limited restrictions on offsets and the use of an international pool of allowances as a cost containment mechanism. USCAP's new recommendations also acknowledge that allocation is necessary to provide a smooth transition for consumers, transform the economy and modernize energy infrastructure. It also explicitly notes the need for a full allocation of allowance value, at least initially, to local electric distribution companies to help cushion the rate impacts that will occur from a climate program.

Though the USCAP blueprint doesn't contain an explicit price-based safety

valve (or cap on price) that AEP supports, it includes language that will help contain costs, including tropical rain forest preservation credits that can be released into the allowance trading system to help contain sharp price hikes. Many of these cost containment principles are in the Dingell-Boucher draft bill from late 2008, which AEP has supported.

While we still don't agree with the cap beyond 2020 and the level and severity of reductions required, we are in basic accord with most of the principles in USCAP today. Some of our stakeholders want AEP to join USCAP or support its recommendations. We are in much closer alignment on key issues than we were a year ago, and we are considering these possibilities carefully.

#### OUR VIEW ON ENERGY EFFICIENCY

America's conservation ethic is not what it should be; we are 5 percent of the world's population and consume 25 percent of its natural resources, including fossil fuels. Even though much of this is driven by our high standard of living that includes larger homes and vehicles and all manner of electronics and appliances, our lifestyles could be far more energy efficient.

Because we have some of the lowest electric rates in the country, the push for energy efficiency programs historically was not strong within our service territory, except where they were mandated. But as the cost of electricity and the cost to build new power plants increases, energy efficiency and demand response programs become essential.

We recently completed market potential studies in most of our states and have noted that public support is grow-

“Climate change is a significant global challenge. We recognize that legislation to address it will have a profound effect on how we operate our primarily fossil-fueled power plants and could redefine our entire resource planning process. AEP's sustainability in a carbon-constrained world will be measured by our ability to translate the real-world issues of technology advances, customer cost impacts and construction and financial risks into federal and state policy objectives. We strongly believe in the importance of coal to America's energy future and will continue to advance technologies that allow us to use it more acceptably. Energy efficiency, renewables, clean coal, nuclear, transmission and our gridSMART<sup>SM</sup> initiative will all be needed to ensure our energy security.”

Nicholas Akins, executive vice president,  
AEP Generation

ing. We were disappointed by a recent decision in Indiana that was critical of our energy efficiency efforts. We failed to provide sufficient supporting data to justify the programs we proposed. We intend to work with stakeholders in the ongoing collaborative to develop comprehensive programs with measurable, verifiable goals. We are committed to meeting the commission's and our stakeholders' expectations for energy efficiency and demand response programs.

To raise awareness on this issue, we launched a campaign to educate and provide tools for our employees to become better stewards of energy at work and at home. In a recent survey, 87 percent of employees said energy efficiency is very important or extremely important for America's energy future. When asked how energy efficient they are at home, 56 percent said cost is what keeps them from doing more, while 95 percent said cost savings is their strongest motivation.

Our stakeholders asked us to set efficiency goals that include both a reduction

in energy use and a reduction in demand. As a result, we set a first-time goal to reduce energy consumption by 2,250,000 megawatt hours (MWh) by the end of 2012. This goal would equal 1 percent of our energy sales in the year 2012, or the equivalent electricity to power 200,000 homes for a year. We set this goal based on an Electric Power Research Institute study that found that U.S. energy efficiency programs could realistically reduce the rate of consumption growth by 22 percent and achieve a 3.3 percent absolute reduction in consumption by 2020. However, when all of our market potential studies are completed, we will reevaluate our goal to better align it with those studies. We must still receive regulatory approval for the energy efficiency programs that will help us achieve this goal, and we will look to our stakeholders for their support.

Stakeholders asked AEP about the potential to hire staff to conduct energy audits. Typically, we conduct energy audits and other energy efficiency programs through third-party vendors.

## MOVING FORWARD IN OUR STATES, IN OUR BUILDINGS

In 2007, we set a goal to reduce demand by 1,000 MW by 2012. We have identified 561 MW of potential reductions through customer programs. This, plus a new goal to reduce energy consumption by 2,250,000 MWh by 2012, is a realistic goal that we believe we can attain, and we will work with our regulators in our 11 states to gain their support.

In Oklahoma, Public Service Company of Oklahoma implemented

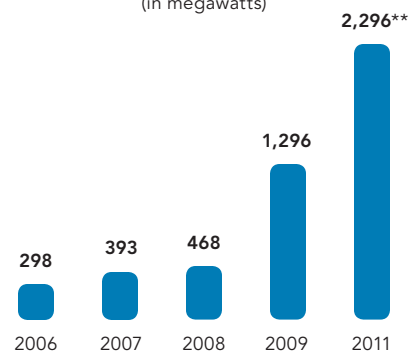
several "quick start" programs that include recruiting customers to reduce usage during peak periods and partnering with the Oklahoma Department of Commerce, the Choctaw Indian Nation and Rebuild Together Tulsa on a low-income weatherization program. We see early positive results that will improve over time. Arkansas also initiated "quick start" programs last year. (For a state-by-state update on energy efficiency and demand response programs in AEP's service territory, visit [www.AEP.com/cr](http://www.AEP.com/cr).)

We are using metered electricity more efficiently within our own facilities. In 2008, we set an energy consumption reduction goal of 3 percent over 2007. We achieved a systemwide energy consumption reduction of 4.2 percent. Our goal is to reduce internal energy consumption by 8.5 percent by the end of this year, and 20 percent by 2012 by installing temperature controls, new heating and cooling equipment and changing lighting. We also made significant changes to our Corporate Data Center, a large consumer of electricity, resulting in

AEP is testing two Plug-in Hybrid Electric Vehicles to learn more about their range and performance characteristics.



**AEP REGULATED  
RENEWABLE ENERGY PORTFOLIO\***  
(in megawatts)



\* Includes purchased power agreements

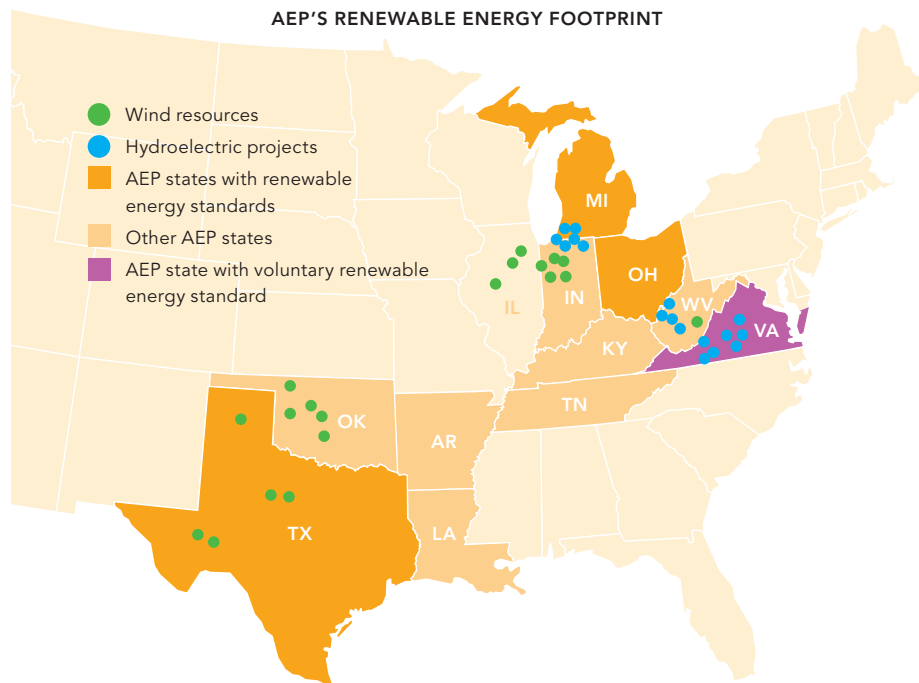
\*\* Goal to add an additional 1,000 MW of renewable energy by the end of 2011

a 9.6 percent reduction in energy use by modifying how we operate and by using new virtualization technology that is more energy efficient. Lower energy consumption reduces cooling requirements for the data center. The annual savings is estimated at \$22,000 and avoids 489,000 pounds of carbon emissions per year.

#### OUR VIEW ON THE IMPORTANCE OF VOLUNTARY ACTIONS TO REDUCE EMISSIONS

As a founding member of the Chicago Climate Exchange (CCX), AEP committed to cumulatively reduce or offset 48 million metric tons of CO<sub>2</sub> emissions from 2003 to 2010. Through 2008, we reduced or offset 51 million metric tons of CO<sub>2</sub> — exceeding our target. We've done this in a number of ways, such as improving power plant efficiency, replacing or retiring less efficient and higher emitting units, increasing our use of renewable power, reducing SF<sub>6</sub> emissions and investing in forestry projects in the United States and abroad. For example, we have signed contracts to add 903 MW of wind capacity in the past two years — about 90 percent of our goal toward adding 1,000 MW of wind by 2011. Consequently, we will double this goal and add a total of 2,000 MW of renewable energy by the end of 2011, with regulatory support. This will help us to further diversify our fuel portfolio. Our upcoming integrated resource plan likely will contain a minimal 10 percent renewable energy target by 2020. We already are planning to go beyond our initial commitment.

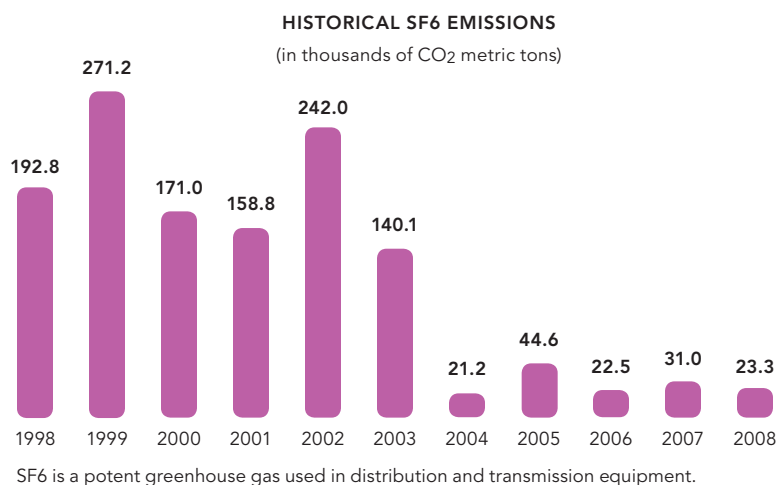
AEP has made significant progress in reducing a potent GHG — SF<sub>6</sub> — which is found in some electrical equipment. When AEP joined the Environmental



Protection Agency's (EPA) SF<sub>6</sub> Emission Reduction Partnership in 1999, our SF<sub>6</sub> leakage rate was 10 percent. In 2008, this rate had been reduced to 0.38 percent based on total system capacity, falling well below a self-imposed goal to achieve a maximum 2.5 percent leak rate from 1996 levels. We did it by employing a combination of technologies such as putting new breakers on lines to lower rates

of SF<sub>6</sub> leakage, investing in leak detection cameras and training field crews on SF<sub>6</sub> gas handling procedures.

Our post-2010 strategy is to voluntarily reduce or offset an additional 5 million tons of CO<sub>2</sub> per year by purchasing offsets from projects such as forestry, reducing methane from agriculture, adding more renewable energy in our portfolio and improving the efficiency of our





power plants. The investments we have made in our coal-fired power plants make them more efficient than the national average for coal plants. Between 2001 and 2007, these improvements helped us to avoid burning 16.2 million tons of coal, preventing the release of 39 million tons of CO<sub>2</sub>.

AEP owns and operates 16 hydro-electric and one pumped storage plant. These plants, which operate on six rivers, generate more than 1 million MWh of mostly emissions-free electricity each year and are important to the diversity of our overall fuel portfolio.

#### OUR VIEW ON EMISSION OFFSETS

AEP believes that verifiable offsets must be part of any climate legislation. AEP is a founding member of the Coalition for Emission Reduction Projects, which seeks to educate policymakers and the general public about the benefits of using offsets to meet compliance obligations under a

federal GHG regulatory program.

Forestry must play a major role if we are to have any chance to stabilize the atmosphere at a level sufficient to avoid dangerous climate change. To ensure forestry offsets are fully included in domestic and international climate policy, AEP joined with conservation groups and other energy companies to develop The Forest Carbon Principles. Since 1944, AEP has planted 63 million trees in the United States; we also have invested in reforestation and forest conservation projects in Belize, Bolivia, Brazil and Guatemala.

#### OUR VIEW ON COAL & CLIMATE CHANGE

AEP consumes approximately 77 million tons of coal and 103 billion cubic feet of natural gas annually. Approximately 90 percent of the electricity we produce comes from fossil fuels, and the remainder comes from nuclear, hydroelectric and wind power. As we strive toward achieving a sustainable electricity future, we must

recognize and take into account certain realities — that about 50 percent of the nation's daily electricity comes from coal; that hundreds of thousands of jobs in hundreds of communities across the country depend on coal, with no other near-term means of support; and that we do not yet have the technologies or resources needed to make a wholesale transition away from coal. We also must recognize that coal is a relatively abundant, inexpensive, domestic source of energy, which raises additional economic, social, political and national security issues.

We know that coal, as plentiful as it is, is not a sustainable resource and comes with an environmental cost. We expect coal and other fossil fuels to be in the political crosshairs in the push for 'green collar' jobs to increase America's renewable energy production. We support this push for technology and believe that it must include carbon capture and storage and new infrastructure, such as an EHV interstate transmission grid, that can efficiently deliver electricity from both renewable and non-renewable resources.

Our stakeholders challenge us to see "beyond coal." The immediate need, and where AEP can do the most good, is to focus on developing and deploying advanced coal technologies, such as carbon capture and storage, that allow us to use coal in a more environmentally acceptable way.

We are asking our stakeholders to help us persuade legislators, regulators and policymakers to support policies and incentives that accelerate advanced coal technology. Many of them have agreed to do so. At the same time, we recognize we will be retiring older, inefficient coal units sooner, increasing the percentage

As more renewable energy becomes available, AEP will become less dependent on coal.





The carbon capture equipment being installed at the Mountaineer Plant is expected to begin operations in fall 2009.

of renewable energy we buy, making conversions in some plants to co-fire biomass and possibly increasing the capacity at our nuclear units. We expect that approximately 20 percent of our coal-fired fleet will be retired within the next 15 to 20 years.

#### OUR VIEW ON ADVANCED COAL TECHNOLOGIES

Technology holds the key to coal's future, and to AEP's future. In 2008, we received approval from three states to build a new, ultra-supercritical pulverized coal plant in southwest Arkansas. The 600-MW John W. Turk Jr. Plant, once online in late 2012, will burn approximately 2 million fewer tons of coal during its lifetime than a comparably sized supercritical unit. Because less coal will be consumed, emissions of sulfur dioxide, nitrogen oxide, mercury, CO<sub>2</sub> and particulate matter will be

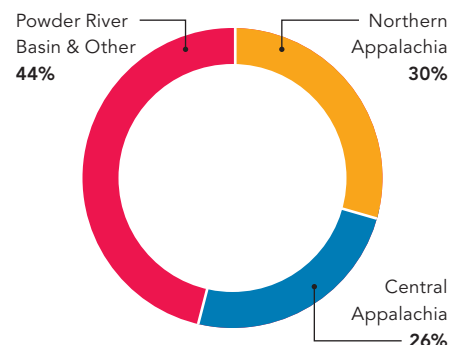
reduced. The plant is designed to be retrofitted in the future with carbon capture and storage technology.

We expect that a 20-MW CO<sub>2</sub> capture Process Validation Facility (PVF) under construction at our Mountaineer Plant in West Virginia will be operational this fall. The PVF is based on Alstom's chilled ammonia process technology and will capture approximately 100,000 tons of CO<sub>2</sub> per year. The CO<sub>2</sub> will be compressed and stored in saline formations located approximately 8,000 feet below the earth's surface. We are seeking funding from the U.S. Department of Energy to build a new commercial-scale version of this technology to capture carbon dioxide from a 235-MW flue gas stream of the 1,300-MW Mountaineer Plant. If approved (a decision on funding is due this summer), we expect the commercial scale technology to have a 90 percent capture rate, or approximately 1.5 million tons of carbon dioxide per year.

The need for underground storage of CO<sub>2</sub> is growing. Natural gas has been safely and effectively stored underground for decades, so we have good reason to believe that CO<sub>2</sub> also can be stored safely. The U.S. EPA has proposed regulations for a new class of underground injection wells for CO<sub>2</sub> to ensure that they are appropriately located, built, tested, monitored and ultimately closed with proper funding. A draft permit to store CO<sub>2</sub> underground has been granted by the West Virginia Department of Environmental Protection; a final permit is anticipated later this year.

The U.S. Department of Energy's GHG reduction program has three components that AEP strongly supports because they advance the technologies

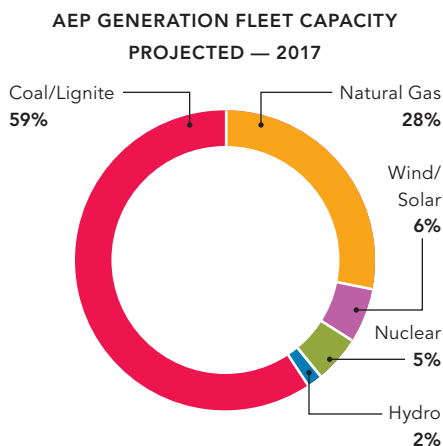
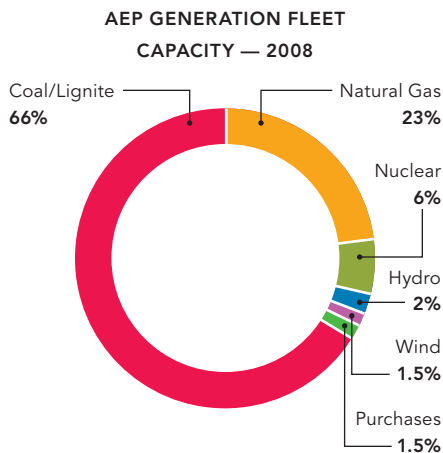
#### PROJECTED 2009 COAL PROCUREMENT



needed to achieve CO<sub>2</sub> reductions from coal. They include research and development; the Clean Coal Power Initiative; and the preservation of the FutureGen near-zero emissions plant in Mattoon, Ill. We believe the government's decision to revisit FutureGen reflects an important step forward for carbon capture and storage technology in an advanced gasification power plant. Another way AEP promotes advanced coal technologies is through the American Coalition for Clean Coal Electricity.

The prospects for our proposed Integrated Gasification Combined Cycle (IGCC) plants in Ohio and West Virginia are uncertain. Without full support from regulators and legislators in Ohio, West Virginia and Virginia (the West Virginia plant also would serve customers in Virginia), we cannot make the massive investments needed to build this technology, especially when cash flow is tight and access to credit is difficult and expensive. We continue to talk with our regulators and legislators about these options because we believe this technology is critical.

Some stakeholders have asked us if we figure the cost of carbon into decisions on new technology, new facilities and other business decisions; we do



this through our integrated resource planning process.

### OUR VIEW ON INTERNATIONAL COLLABORATION ON CLIMATE

The power sector recognizes its front-line role in addressing climate change on a global basis. Through the World Business Council for Sustainable Development (WBCSD), AEP and seven of the world's largest electric utilities have endorsed a strategy that includes:

- National and international policies

to support low- to no-carbon technologies;

- Investment in transmission and distribution;
- Realistic pricing of electricity;
- Policies that allow countries to continue using their indigenous resources, including fossil fuels, to ensure their energy security; and
- A long-term international framework for emissions reductions and promotion of low-carbon technologies and energy efficiency programs by all major economies.

Through our leadership in the International Emissions Trading Association (IETA), AEP and 170 other multinational companies have helped to promote the development of worldwide, cost-effective cap-and-trade systems.

AEP agrees that the United States can and should lead the way toward a global climate change solution. However, the environment will not improve if developing economies do not take action alongside the developed economies. We will continue working through organizations such as the WBCSD, IETA, e8 and the Asia-Pacific Partnership to promote a global response that includes developing and sharing new technologies.

AEP supports "A Call for U.S. Leadership on Forests and Climate Protection," an international business initiative that recognizes the importance of protecting tropical forests. The initiative urges the United States to give priority in climate legislation and foreign policy to end tropical deforestation, because of the many benefits of forest conservation to climate protection, economic growth, international security, poverty alleviation and biodiversity protection.

### OTHER WAYS WE'RE REDUCING OUR CARBON FOOTPRINT

Among the other steps AEP is taking to reduce its CO<sub>2</sub> impacts are:

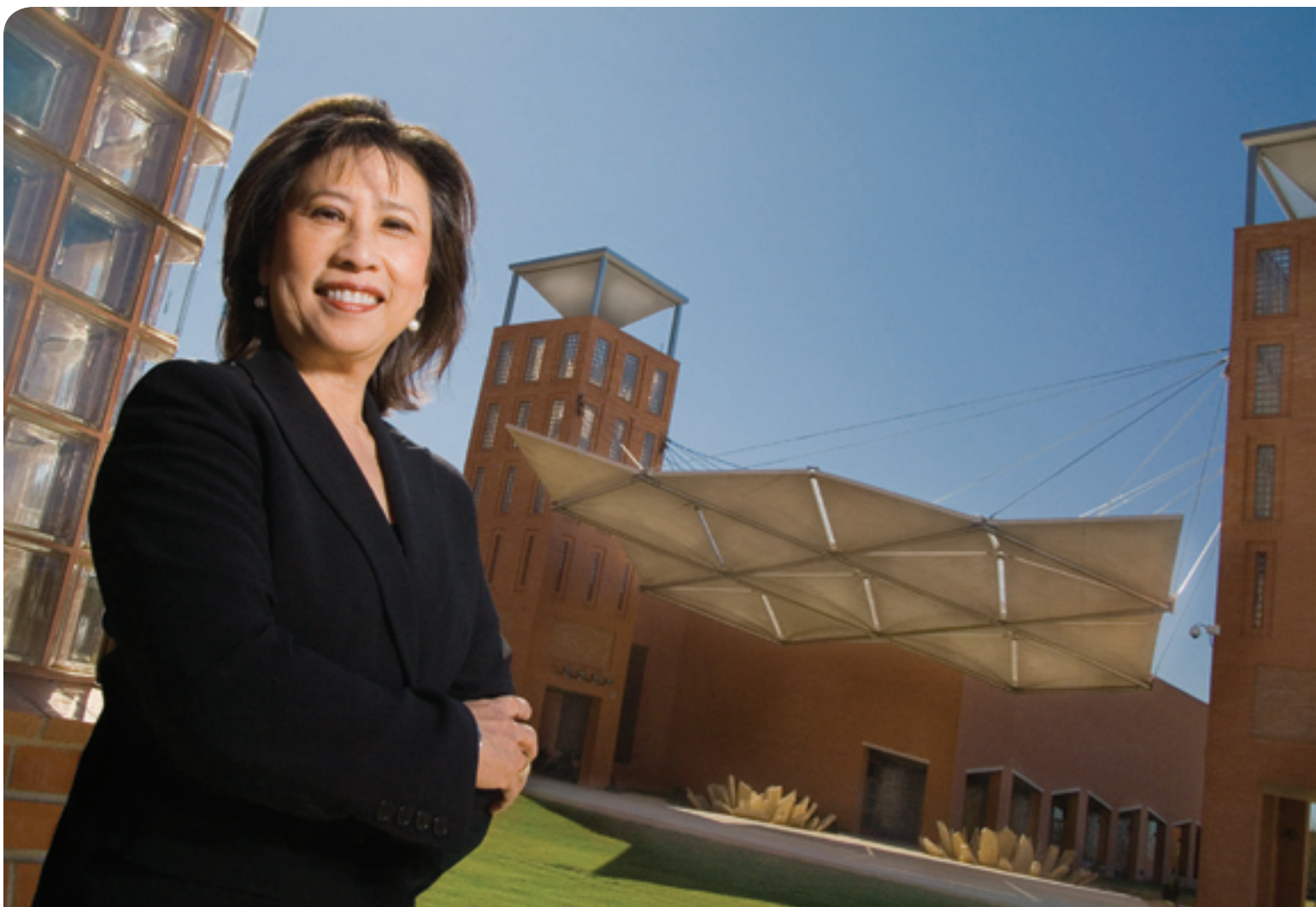
- Setting energy conservation goals within our largest metered buildings and making our power plants more efficient;
- Avoiding the need to landfill 60,000 pounds of electronic waste as a result of an e-waste recycling day;
- Requiring that all company computers purchased be ENERGY STAR compliant;
- Setting all office printers to double-sided printing, which has saved more than 89,000 pounds of paper and 760 trees. Human Resources is on target with a goal to reduce paper use by 1 million sheets on an ongoing basis by using the intranet to provide benefit information, pay stubs, online program enrollment and other services to employees;
- Added 110 flex-fuel vehicles, 28 hybrid cars, two plug-in hybrid vehicles, one plug-in hybrid bucket truck and 18 regular hybrid bucket trucks to our mobile fleet and three new, fuel-efficient tow boats to our barge fleet;
- Seeking Leadership in Energy and Environment Design (LEED) certification for three AEP facilities;
- Becoming a SmartWay Transport Partner, an EPA program that identifies products and services that reduce transportation-related emissions. AEP is the first utility to receive this recognition; and
- Installing two, 70-kilowatt solar systems at two service centers in Ohio. ■

### USEFUL WEB LINKS:

[www.chicagoclimateexchange.com](http://www.chicagoclimateexchange.com)  
[www.cleancolusa.org](http://www.cleancolusa.org) • [www.ieta.org](http://www.ieta.org)

CHALLENGE	GOAL	2008 PROGRESS
Reduce or offset approximately 48 million metric tons of carbon dioxide equivalent emissions between 2003 and 2010, in spite of uncertainty about how these voluntary reductions will be treated under federal climate legislation.	Meet our CCX commitment through 2010 with a broad portfolio of actions: <ul style="list-style-type: none"> <li>• Power plant efficiency improvements.</li> <li>• Renewable generation.</li> <li>• Off-system GHG reduction projects.</li> <li>• Direct purchase of emission credits through CCX.</li> </ul>	Through 2008, reduced or offset CO <sub>2</sub> emissions by approximately 51 million metric tons with: <ul style="list-style-type: none"> <li>• Power plant efficiencies.</li> <li>• Purchased offsets from CCX.</li> <li>• Retirement of older inefficient generation.</li> <li>• Forestry.</li> </ul>
With no further actions, AEP's emissions will continue to increase.	We will implement our post-2010 strategy to reduce approximately 5 million metric tons of carbon dioxide equivalent emissions per year through: <ul style="list-style-type: none"> <li>• Bringing new advanced coal technologies to commercial operation.</li> <li>• Increasing renewable energy.</li> <li>• Carbon offsets, including agricultural methane, forestry, and market-based credit purchases.</li> <li>• Making efficiency improvements to power plants and retiring less efficient, older plants.</li> </ul>	<ul style="list-style-type: none"> <li>• Mountaineer Plant 20-MW chilled ammonia carbon capture and storage project to begin operation fall 2009.</li> <li>• Turk Plant approved, construction started.</li> <li>• Signed contracts for 903 MW of wind.</li> <li>• Through 2008, contracted for 0.6 million tons per year of livestock methane offsets that begin in 2010.</li> </ul>
Implement cost-effective energy efficiency and demand response programs that motivate customers to reduce energy consumption.	Continued commitment to Leadership Group of National Action Plan for Energy Efficiency and to working with other stakeholders.  Complete market potential studies in all 11 states.  Reduce demand by 1,000 MW by 2012.  Reduce energy use by 2,250,000 MWh by 2012.	<ul style="list-style-type: none"> <li>• Market potential studies completed or ongoing in 10 of 11 states.</li> <li>• Collaborative in Oklahoma resulted in early 'quick start' program implementation. Quick start programs started in Arkansas.</li> <li>• For complete state-by-state information on 2008 EE/DR activities, please visit <a href="http://www.AEP.com/cr">www.AEP.com/cr</a>.</li> <li>• 561 MW of energy efficiency programs identified.</li> </ul> N/A (New Goal)
Reasonable and achievable carbon controls that encourage other nations to participate as described in AEP's climate change policy.	A market-based economywide federal cap-and-trade program that rewards early action, allows GHG offsets, supports public and private funding for technology development, includes a safety valve on the price to purchase allowances that protects the economy and allocates allowances based on historical emissions and retail sales with only a small number of allowances auctioned or set aside for public benefit.	<ul style="list-style-type: none"> <li>• Supported Low Carbon Economy Act of 2007 (Bingaman-Specter) and Legislative Discussion Draft (Boucher-Dingell).</li> <li>• Supported Carbon Capture and Storage Early Deployment Act.</li> <li>• Helped write and signed second WBCSD climate report on technology and policy.</li> <li>• Signed Forest Carbon Principles.</li> </ul>
To lead by example, we must improve our own use of energy, reduce or offset emissions from our mobile fleet, improve the efficiency of our facilities and infrastructure and reduce the office waste stream.	<p>2009 goal — reduce energy use 8.5 percent; 20 percent by end of 2012. New behaviors and equipment will support this goal. Challenge could be budget support for equipment.</p> <p>Reduce AEP's mobile fleet consumption of petroleum-based products by 5 percent in 2009 through vehicle inventory reductions, use of advanced technology applications to reduce vehicle routing and idling, and conversion to alternative-fueled and powered vehicles.</p> <p>Offset or reduce GHG emissions from mobile fleet, including corporate jet.</p> <p>Build all facilities and improve efficiency of existing buildings using Leadership in Energy and Environment Design (LEED) standards, where appropriate. Seek LEED certification.</p> <p>Enhance recycling to reduce office waste.</p>	<p>Reduced energy consumption 4.2 percent in 2008 systemwide; reduced power use by corporate Data Center 9.6 percent from peak.</p> <p><b>Fuel consumption/vehicles</b>  2008 — 5.6 million gallons gasoline; 5.2 million gallons diesel; 163,563 gallons B20 biodiesel.  2007 — 5.5 million gallons gasoline; 5 million gallons diesel; 283,000 gallons B20 biodiesel.  2006 — 5.5 million gallons gasoline; 4.7 million gallons diesel; 324,000 gallons B20 biodiesel.  2005 — 5.5 million gallons gasoline; 4.7 million gallons diesel; 4,000 gallons B20 biodiesel.</p> <ul style="list-style-type: none"> <li>• Mobile fleet emissions offset through market-based carbon credits purchased through CCX.</li> <li>• Added 28 hybrid cars, 110 flex fuel vehicles, 18 hybrid bucket trucks and three PHEVs to fleet.</li> </ul> <p>Three facilities awaiting LEED certification.</p> <p>Program implemented at all large office facilities.</p>





“Sustainability is an all-encompassing concept that raises our consciousness in the way we work, play and live. Imagine that we all live in a closed system that has finite resources. In this context, we would make decisions based on scarcity rather than abundance. We would likely be more frugal and economical; we would allocate our collective resources wisely. We will likely consume with care and waste naught. In the practice of architecture, applying sustainability principles is a matter of good design. We can design buildings that consume less, last longer and are in harmony with people and their context — creating more smart, livable spaces and places.”

Elizabeth Chu Richter, FAIA, Corpus Christi, Texas;  
chief executive officer, Richter Architects and AEP stakeholder



## ENERGY SECURITY, RELIABILITY & GROWTH

212,781

Miles of overhead & underground  
distribution lines in 11 states

2.25

(in million megawatt hours)

Energy reduction goal by the end of 2011

4.2%

Energy consumption reduction in  
AEP facilities in 2008

2,116

Total circuit miles of 765 kV  
transmission lines

AEP's basic services are to generate and deliver reliable, safe and reasonably priced electricity and to plan for how we will continue doing that in the future. When our customers flip the switch, they expect the lights to turn on. To provide this essential service, we operate and coordinate three complex systems — generation, transmission and distribution.

### GENERATION OF ENERGY

With 38,000 megawatts (MW) of generating capacity, AEP is proud to provide secure, low-cost power to millions of users. Our fuel mix is 66 percent coal, 23 percent natural gas, 6 percent nuclear and 5 percent hydro, wind and pumped storage. We expect to further diversify this mix in the future with more renewable and possibly more nuclear power.

We use a

resource planning process to plan generation needs for many years out. This process, which is conducted annually and updated continuously, considers projected growth in demand, peak consumption, fuel and commodity prices, economic conditions, legislative and regulatory mandates and other factors to develop energy solutions at the lowest cost for our customers. This process guides the development and seeks to ensure the reliability of our energy supply.

Daily energy needs are planned through our commercial operations

group, which manages the dispatch of our plants in conjunction with regional transmission organizations to meet the demand for power on a regional basis.

With the widespread use of air conditioning and the addition of the four Southwestern states of Arkansas, Louisiana, Oklahoma and Texas in 2000, AEP has largely become a summer peaking system. The energy efficiency and demand response programs we are developing will thus be geared toward reducing demand

during the summer cooling season.

To meet projected demand in the fast-growing Southwestern Electric Power Company (SWEPCO) service territory, in late 2008 we began construction of the 600-MW John W. Turk Jr. ultra-supercritical coal plant in southwest Arkansas. SWEPCO received the final air quality permit from

the Arkansas Department of Environmental Quality in November 2008. Construction should be complete at the end of 2012. This plant will serve the base load needs of customers in Arkansas, Louisiana and Texas. See the section on Climate Change for more information about the Turk Plant.

SWEPCO also is building the 500-MW J. Lamar Stall combined-cycle natural gas unit at the existing Arsenal Hill Plant in Shreveport, La. It is scheduled for completion in 2010 and will help to meet intermediate needs.

### TOP 5 ENERGY SECURITY, RELIABILITY & GROWTH ISSUES RAISED BY STAKEHOLDERS

- Plug-in hybrid electric vehicles — impact to grid, environment
- Energy efficiency and conservation standards
- Siting of new infrastructure
- Marry energy security with environmental responsibility
- Educate, inform consumers more effectively

#### TRANSMISSION LINE MILES BY OPERATING COMPANY

Company	Total	765 kV
AEP Appalachian Power	30	—
Appalachian Power	6,741	734
Indiana Michigan Power	5,344	615
Kentucky Power	1,234	258
AEP Ohio	9,232	509
Public Service Company of Oklahoma	3,592	—
Southwestern Electric Power Company	3,530	—
AEP Texas	9,356	—
<b>AEP System</b>	<b>39,059</b>	<b>2,116</b>

AEP first proposed an interstate transmission superhighway, similar to the nation's interstate highway system, in 2006.



In our East region, the outage of the 1,055 MW Unit 1 at the Cook Nuclear Plant in Bridgman, Mich., on Sept. 20, 2008, was caused by the failure of low-pressure turbine blades that damaged the unit's main turbine and generator, causing a fire that resulted in additional damage. There were no emissions of radioactive materials and no injuries. The earliest the unit may be returned to service is September 2009.

The Cook Nuclear Plant has implemented a program, based on industry guidelines, to meet a 2010 industry goal for fuel reliability. This includes items such as fuel surveillance and inspection and mitigation of debris. These actions allow the plant to operate more efficiently, achieve maximum fuel performance, minimize high radiation and contamination levels in the plant and reduce radioactive waste.

#### TRANSMISSION

Transmission refers to the high-voltage system of power lines that move electricity from the point of generation to where it is transformed into lower-voltage energy for safe delivery into homes, offices and factories. We have 39,000 miles of lines that deliver power in our 11 states.

We believe it is critical for the United States to build a new, interstate extra-high voltage (EHV) transmission system to ensure future energy reliability. The existing transmission grid, while functional, cannot handle the existing traffic efficiently and concurrently bring large quantities of renewable power from where it can be produced to the nation's population centers. Transmission system shortfalls have been more frequent and larger — the 2003 blackout caused 50 million people

to lose their power within a minute.

According to the North American Electric Reliability Corp. (NERC), the United States will need 14,500 miles of new transmission lines by 2016 to deliver all sources of electricity to these population centers. The siting challenges alone make this nearly impossible; opposition to siting a 90-mile transmission line from West Virginia to Virginia dragged out the completion of one AEP project for 16 years.

A new interstate grid also will help us to address the challenges of climate change and the need for greater energy independence by facilitating the transmission and encouraging the development of renewable energy. Transmission siting depends almost entirely on state approval. We believe that new EHV lines of 345 kV and higher should be regulated similarly to natural gas pipelines — by the federal government through the Federal Energy Regulatory Commission (FERC). (See the section on Public Policy for more information.)

We are encouraged by the introduction of federal legislation that will grant the FERC transmission siting authority, but we are concerned about provisions that would restrict these new lines to transmitting power from mostly renewable sources. This restriction would be unworkable and would deny the nation the flexibility it needs to meet future energy demands. This is an area of intense interest, and AEP expects to be fully involved as legislation moves forward. Some of our stakeholders would support a modern grid only if it is used for renewable energy. We disagree and oppose this position. It would be like exclusively allowing only plug-in electric vehicles on the nation's highways. This

is not practical or viable; neither companies nor regulators would invest in such a limited system.

Regardless of the regulatory system that is selected, as the nation enacts new mandates on the use of renewable energy, policymakers must recognize that EHV transmission will be required to efficiently and cost effectively bring that renewable energy to market. We support investor T. Boone Pickens' energy independence plan ([www.PickensPlan.com](http://www.PickensPlan.com)) that calls for more wind energy, a modern grid and shifting parts of the transportation sector to alternative fuels, such as natural gas and electricity. We agree with him that a robust EHV transmission system is needed to bring energy created by wind on the Western plains to market.

To spur the development of transmission, AEP Transmission Company, a wholly owned subsidiary, has entered into several joint ventures and expects to be involved in more. Creating a separate transmission company gives us more flexibility in structuring projects.

## DISTRIBUTION

Distribution refers to the system that delivers electricity from the high-voltage transmission system into homes, offices or factories. Three key indices represent-

### SYSTEMWIDE RELIABILITY PERFORMANCE

	2005	2006	2007	2008
SAIFI	1.546	1.518	1.519	1.468
SAIDI	197.7	191.4	189.8	198.0

SAIFI indicates the number of sustained outages the average customer experienced during the year.

SAIDI indicates the amount of time the average customer was without service due to sustained interruptions during the year, measured in minutes. Target is 186.4

### CAUSE OF OUTAGES

(number per year)

	2004	2005	2006	2007	2008
Equipment Failure	32,551	41,725	41,672	45,762	46,252
Vegetation Inside Right of Way	25,117	24,057	23,527	22,294	23,485
Vegetation Outside Right of Way	9,592	10,534	13,717	14,246	16,704

ing electric delivery system reliability are the average number of outages in a given time period, the frequency of interruptions (SAIFI), and the amount of time that the average customer is without power (SAIDI). During the past five years, AEP's systemwide SAIFI has improved, SAIDI has trended in a slight negative direction, and the number of outages has increased.

Our performance data indicate that our reliability varies widely from company to company. For example, the average customer in Texas was without power 107 minutes in 2008 (excluding major storms), whereas the average customer of Kentucky Power was without power for almost 500 minutes. This range reflects factors such as terrain, climate, vegetation, customer density and staffing. Since 2004, distribution equipment failures have replaced vegetation inside the right of way as the number one cause of customer interruption time.

We would like to say that our outage numbers will improve, but our ability to invest in reliability is limited. We are talking with regulators and legislators about alternative rate-making arrangements to better facilitate the investments we need to improve reliability. Our long-term goal is to move to the next generation of smart grid technology to bring about significant improvements. We continue to uncover ways to optimize our vegetation management spending.

“When we ask, ‘What is our mission as a company?’, there is one answer that I think stands above all others: Our job is to provide comfort, protection and opportunity to our customers. So reliability and energy security aren't just abstract principles. They are core values that also define in practical terms what our 22,000 employees are expected to do, every single day.”

Susan Tomasky, president,  
AEP Transmission

## CAPITAL & HUMAN RESOURCES CONSTRAINTS

In response to the recession and credit crisis, we reduced the distribution capital budget by 39 percent, from \$1.1 billion to \$686 million in 2009. Less money will be available for preventive maintenance and equipment upgrades. These cuts mean AEP will not be able to make any significant investments in new distribution technology or system upgrades in 2009. Some employees and labor leaders have

### THE SOUTH BEND PILOT — gridSMART<sup>SM</sup> AT WORK

Beginning in late 2008, about 10,000 AEP customers in South Bend, Ind., began participating in our first major rollout of gridSMART<sup>SM</sup> technology.

Through the use of automated communications equipment, new smart meters and time-of-day rates, these customers are participating in a pilot program that will help determine if electricity users are ready to take more control over their usage and their energy bills.

The concept is that, given timely information and the ability to postpone some energy usage to a period of lower rates, customers will actively manage how much power they use and when they use it. The \$7 million experiment, approved by the Indiana Utility Regulatory Commission, will allow customers to see how much energy they consume on a near real-time basis. Their meters, which incorporate state-of-the-art data collection and communications technology, will transmit customer usage to AEP daily. Customers will be able to see how much power they used per hour the previous day by calling up their account information online. By providing customers with more frequent and accurate information, we believe they will make better energy choices.

A critical part of the pilot is the availability of time-of-day rates. Residential customers can remain on a fixed-rate plan of 6.75 cents per kilowatt hour, or switch to time-of-day pricing. Under time-of-day rates, the off-peak rate is 5.981 cents per kilowatt hour while the peak rate will be 17.637 cents per kilowatt hour. Peak hours are from 2–6 p.m. Monday through Friday from May through September.

In addition to saving customers money, the pilot will test our ability to install and manage new equipment that will allow us to better control our distribution grid. Service interruptions, for example, can be reported automatically. Meters will no longer need to be read manually. Start and stop service requests can be handled more quickly and at lower cost. Outages generally will be restored faster.

But there's more. Up to 500 customers are being solicited to participate in a program that allows AEP to control the customer's cooling system from 2–6 p.m. weekdays from May through September. AEP would have the ability to raise the customer's thermostat in two-degree increments, up to four degrees a day, or cycle off the central cooling unit for up to one-half of every hour of a load management event. In exchange, participating customers would receive \$5 monthly credits toward their bill. We believe this will demonstrate our ability to reduce peak demand during heavy use periods, allowing us to defer new generation and distribution system upgrades.

AEP will run the pilot for one year to determine the costs and benefits of deploying this technology on a broader scale.



Pilot participants can view usage on an AEP Web site.

expressed concern with this strategy even though they understand the circumstances that led to these decisions.

The company's aging work force might also adversely affect reliability. While we hired approximately 575 line workers in the last five years to replace retiring employees, including distribution linemen, our new employees will not be as productive as the more experienced workers they are replacing until they gain more job experience.

Our goal for 2009, therefore, is to maintain our current reliability levels through more effective use of crews and equipment. We are planning process improvements such as how we locate and dispatch crews, as well as continuing our replacement program for porcelain cutouts with high failure rates in our eastern companies and using heavy-duty, tank-mounted lightning arresters on our new service transformers.

### gridSMART<sup>SM</sup>

The answer to the aging infrastructure is to deploy 21st century smart grid technologies. AEP's gridSMART<sup>SM</sup> project will reduce energy losses in our own equipment, lower operating costs, provide new services to customers, and allow them to better control energy usage and costs.

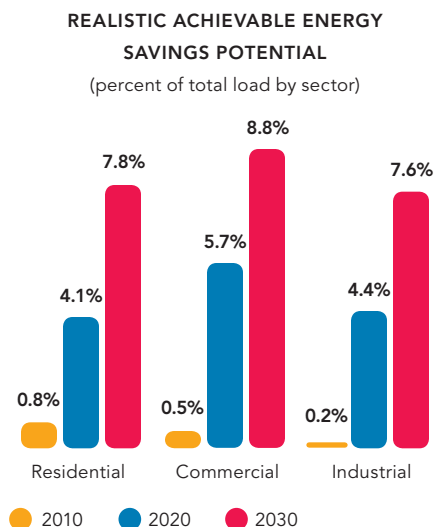
A pilot program involving 10,000 customers to test gridSMART<sup>SM</sup> technology in South Bend, Ind., is under way. Our goal is to install 5 million smart meters throughout our service territory by 2015, but to do so we must receive regulatory approval for cost recovery. In Texas, we are deploying 1 million smart meters during the next several years. Nationwide, smart grid technologies could directly create up to 280,000 jobs and even more

jobs indirectly. The transition to an advanced grid will enable new technologies such as plug-in hybrid electric vehicles, distributed renewable energy resources, smart appliances, and home automation software and hardware, according to a report from the Gridwise Alliance, of which AEP is a member ([www.gridwise.org](http://www.gridwise.org)).

### ENERGY EFFICIENCY & DEMAND RESPONSE PROGRAMS

Energy cost increases during the last two years have put more attention than ever on energy efficiency and demand response programs. Studies increasingly indicate that the United States can meet a significant portion of its energy needs by adopting efficiency and demand response programs. Our own industry research organization, the Electric Power Research Institute (EPRI), has determined that energy efficiency programs can reduce the rate of growth in the use of electricity nationwide by 22 percent per year from 2008 to 2030, a reduction in consumption of 236 billion kilowatt hours by 2030 from the base 2008 forecast.

Two years ago, AEP set a goal to reduce demand by 1,000 MW by 2012. We have identified customer programs to achieve more than half — 561 MW — toward this goal. We will complete market potential studies in most of our 11 states this year to identify other demand response and energy efficiency opportunities. And, in response, we are setting a new goal to reduce energy consumption by 2,250,000 megawatt hours (MWh) by 2012. This represents 1 percent of energy sales and is the equivalent of the electricity needed to power 200,000 homes for a year. It is based on the EPRI study, but once we have all of our market potential



Source: *Assessment of Achievable Potential from Energy Efficiency and Demand Response Programs in the U.S. (2010–2030)*, Electric Power Research Institute, January 2009.

studies completed, we will re-evaluate it. We also are making progress reducing our energy use within our own facilities. In 2008, we reduced consumption by 4.2 percent over 2007.

### THE RECESSION IS AFFECTING OUR CUSTOMERS

The economic crisis is seriously affecting our customers. As job losses increase, more of our customers are unable to pay their bills. Net charge offs, or the amount of revenues the company classifies as uncollectible, began to increase in the second half of 2008 after decreasing for five years.

We want to keep uncollectibles in check because when customers can't or don't pay, those costs are spread among the rest of the customer base. We had aggressively reduced uncollectibles from a high of 0.5 percent in 2003 to less than 0.25 percent in the first half of 2008, but this has recently risen above 0.39 percent

and is climbing. An increase in net charge offs, along with the average number of days that bills are outstanding, which also is increasing, are indicative of the weakening economy.

We are better protected against large losses by having strengthened our policies regarding customer deposits. Also, federal funding of LIHEAP — the Low Income Home Energy Assistance Program — almost doubled for 2009 to \$5.1 billion in recognition of the difficult economy. To help expedite disbursement of LIHEAP funds, AEP is developing a secure Web site for government agencies to make pledges on behalf of our customers.

### IMPROVING CUSTOMER SERVICE

We can improve our customers' overall experience, operate more efficiently and reduce energy and paper use by increasing the volume of online billing and other transactions. AEP mails about 53 million bills a year to customers. Converting these bills to electronic statements would save significant amounts of paper and trees in addition to the accompanying costs for printing and mailing of bills and allow us to use those resources to meet other needs.

As of December 2008, approximately 261,000 residential customers received their bills electronically, and approximately 1.3 million paid their bills electronically. Our goal is to shift approximately 1.5 million customers to receiving their bills electronically by 2013. Achieving this goal would yield a potential cost savings of approximately \$3.9 million annually.

### SYSTEM SECURITY & COMPLIANCE

As the world moves further toward Internet-based transactions and comput-



er-driven networks, computer security is becoming an increasingly important component of sustainability. We have rigorous cyber security measures in place at AEP. Among the risks to the company are harm to the power grid; theft of data, including employee or customer personal information; and the unauthorized use of our computer resources.

Network perimeter protection with firewalls, intrusion detection and prevention systems and Internet content filtering provide an excellent first line of defense. We augment these with desktop and laptop computer versions of anti-virus and intrusion prevention. To better protect our business and personal information, we have implemented mobile computer data encryption and will complete an e-mail encryption project in 2009.

Other projects such as Identity and Access Management address the need for centralized access controls and more efficient access management throughout the company. We continue to pursue new security technology solutions, design repeatable and sustainable business data protection processes and give our employees the knowledge and security awareness that is critical to maintaining network security.

AEP has strong governance dedicated to compliance, including the FERC-approved reliability standards. Following the 2003 blackout, the U.S. Energy Policy Act of 2005 authorized creation of an Electric Reliability Organization under the FERC's oversight. NERC became the Electric Reliability Organization in the United States and Canada and has focused efforts to establish uniform reliability standards for the bulk electric system across North America. In 2007, NERC delegated

#### CUSTOMER SATISFACTION SURVEY — 2008

Company	Overall Satisfaction	Reliability Satisfaction	Power Quality Satisfaction
<b>Residential Customers</b>			
Appalachian Power	86%	88%	84%
Kentucky Power	86%	87%	87%
Indiana Michigan Power	86%	89%	86%
AEP Ohio	86%	87%	86%
Public Service Company of Oklahoma	77%	82%	82%
Southwestern Electric Power Company	89%	91%	90%
AEP Texas	80%	85%	84%
<b>AEP System</b>	<b>84%</b>	<b>87%</b>	<b>85%</b>
<b>Small Commercial Customers</b>			
Appalachian Power	90%	91%	89%
Kentucky Power	93%	93%	91%
Indiana Michigan Power	92%	92%	87%
AEP Ohio	87%	90%	87%
Public Service Company of Oklahoma	89%	83%	83%
Southwestern Electric Power Company	92%	94%	92%
AEP Texas	86%	90%	86%
<b>AEP System</b>	<b>88%</b>	<b>90%</b>	<b>87%</b>

authority for enforcement to eight regional groups. Compliance with these regulations is overseen at the executive level.

We continually conduct self-assessments of activities supporting these reliability standards and have self-reported a few incidents of noncompliance to the appropriate regional organization. As part of this self-reporting process, we have developed and put in place plans to correct the issues that were identified. ■

#### USEFUL WEB LINKS:

[www.ferc.gov](http://www.ferc.gov) • [www.nerc.com](http://www.nerc.com)  
[www.PickensPlan.com](http://www.PickensPlan.com)

CHALLENGE	GOAL	2008 PROGRESS
A variety of factors such as aging infrastructure, terrain and weather, affect the reliability of our distribution system in varying degrees. Our ability to fund major improvements is limited without regulatory support.	Improve the average number and duration of customer outages.	Developed strategies to improve deployment and staffing strategies of distribution personnel.
We need an EHV transmission system that integrates and interconnects all sources of electricity, including new renewable resources, as efficiently as possible, and that is regulated similarly to other forms of interstate commerce, ideally by the FERC.	<p>Continue to explore possibilities for new EHV transmission projects.</p> <p>Shape and advocate for policies that provide for an EHV transmission system that is regulated by the FERC.</p>	<p>Conducted 25 siting meetings to seek public input for the PATH line in West Virginia. More than 2,400 people attended.</p> <p>Announced plans for EHV transmission projects that total 2,600 miles.</p> <p>In February 2009, AEP endorsed the Pickens Plan to encourage development of wind-powered electricity and accompanying EHV transmission infrastructure.</p>
Develop a diverse portfolio of energy sources to ensure that we are able to meet the demand for energy by our customers in the immediate future and beyond.	Add 2,000 MW of renewable energy by the end of 2011.	<p>Through 2008, added 903 MW new wind power — more than 90 percent of goal. In March 2009, doubled renewable energy goal to 2,000 MW.</p> <p>In 2008, generating capacity for coal reduced from 68 to 66 percent as other resources increased (gas, wind, etc.).</p>
Providing customers with more tools to allow them to better manage their energy usage and demand can help delay or reduce the need for new power plants. Energy efficiency is an excellent tool to help customers manage usage and keep bills steady. The challenge will be to obtain regulatory support to fund these programs.	<p>Deploy 5 million smart meters by 2015, pending regulatory support, including 1 million meters in Texas.</p> <p>Obtain regulatory support for gridSMART<sup>SM</sup> initiative, including traditional energy efficiency and demand response programs, new digital grid and smart metering technology.</p>	<p>Initiated 10,000-meter pilot of gridSMART<sup>SM</sup> technology in South Bend, Ind. Further deployment will depend on regulatory support.</p> <p>Formed partnership with IBM for technology integration support.</p> <p>For a state-by-state rundown of energy efficiency and demand response programs, visit <a href="http://www.AEP.com/cr">www.AEP.com/cr</a>.</p>

“AEP displayed great strides in inviting a wide range of interested parties to participate in the stakeholder meetings. I feel that these meetings have the potential to provide a significant insight into the needs of the stakeholders. I trust that AEP will recognize that, while a significant environmental movement has always been in place, times have changed and many parties now demand that business create change. The stakeholder meeting clearly identified the need for big business to change how they operate their business models.”

Chris Bayne, electrical maintenance manager, Roanoke Cement Co.;  
AEP customer and AEP stakeholder



## STAKEHOLDER ENGAGEMENT

395

Number of consecutive quarterly dividends paid to shareholders

8

Number of people physically displaced by new or expansion projects related to AEP's generation and transmission operations

30%

Amount of corporate giving dedicated to environmental organizations

110

Permanent jobs created when the Turk ultra-supercritical plant is operational

Sustainability is not only about performance, it also is about being transparent and accountable to those who have a stake in the activities of your organization. Our decision to be more transparent, to listen and to consider others' viewpoints involved a significant culture change for us, which has helped to make us a better, stronger and more resilient company. Our stakeholder engagement process has influenced our thinking, altered business decisions and strengthened our daily operations. We are once again reporting on our work with stakeholders. This year, we agreed to publish an unedited letter from our Ceres stakeholder team. We appreciate the dialogue we have had with all of our stakeholders — we are a better company for it.

### OUR DIALOGUE WITH STAKEHOLDERS

We held 10 formal stakeholder meetings during the past year, using our 2007 and 2008 Corporate Sustainability Reports or the development of this year's report as a springboard for discussions. No subject was off-limits: we talked about the future of coal and mountaintop mining, climate change policy and energy efficiency, coal ash ponds, the impact of the recession on our company, and other issues. We worked with stakeholders not only on the national level but also within the communities we serve to discuss regional and local issues of mutual concern. We included a more diverse range of customers, businesses, community organizations, environmental organizations, regulatory agencies and academic institutions than in past years. We also invited young professionals and university students to hear their unique views and ideas.

The discussions focused primarily

on AEP's material issues — work force, climate change and other environmental challenges, including the growing stress on water and water supply, and energy security and reliability. We talked beyond the report about our current programs and our vision for the future. For the first time, we held some of the meetings at AEP plants and facilities to give stakeholders a closer view and understanding of our business. These meetings included tours of our Northeastern Plant in Oklahoma and the Dolan Engineering Laboratories in Ohio.

Also for the first time, we conducted a survey of stakeholders who participated in our meetings to help us identify high-priority issues and to understand their perceptions of AEP prior to and following the meetings. We worked with Sustainability, a London-based sustainability consulting firm, to create and compile survey results and to facilitate each meeting with the highest regard for objectivity and neutrality.

Stakeholders generally gave us positive marks for our willingness to listen and to incorporate their feedback. Some stakeholders were positive about our leadership on issues such as energy policy and new technologies.

We were asked to describe with more specificity what we are doing to advance renewable energy, environmental protection and energy efficiency. Some stakeholders believe we should be doing far more, particularly when it comes to energy efficiency. Most participants understood and accepted that coal will remain an important element of AEP's fuel sources well into the future. However, most of our stakeholders generally believe that we should work harder to



Stakeholders visit AEP's Dolan Engineering Laboratories in Groveport, Ohio.

decrease the percentage of coal that comprises our fuel mix, eliminate use of mountaintop-mined coal, and increase renewable energy as a percentage of our fuel mix.

Stakeholders unanimously urged us to do a better job educating the general public, regulators and politicians about the value and real cost of electricity. They also asked us to be an industry leader in addressing issues such as mountaintop coal mining.

We are integrating structured stakeholder engagement into the operation of our business units. For example, Southwestern Electric Power Company hosted a meeting that modeled our approach to stakeholder engagement to discuss the company's integrated resource plan for its Arkansas customers. Members of the Arkansas Public Service Commission, the Arkansas Energy Office and the Attorney General's office participated as well as independent power producers and renewable energy project developers.

## ENGAGING WITH OUR INVESTORS

As an investor-owned company, our shareholders expect us to increase the value of their investment. Their confidence in our ability to provide a reasonable and consistent rate of return is critical to our ability to pursue sustainability. Our challenge is that many investors and analysts are focused on quarterly earnings and not long-term performance related to sustainability. Analysts are beginning to pay more attention to sustainability issues, but they are not yet factoring them into their recommendations with any regularity, unlike socially responsible investors (SRIs). We are working on a research project with other companies to better integrate sustainability with investor expectations.

Our Investor Relations (IR) team is charged with regularly talking with potential and current investors about our sustainability-related strategies and actions. We continue to press our sustainability agenda with mainstream investors and have begun to increase outreach with many SRIs.

Our IR team participated in 24 conferences and in-person forums, hosted 17 investor visits to Columbus, and met face-to-face with approximately 500 inves-

tors in five countries in 2008. These meetings focused on concerns about legislative and regulatory uncertainties in our states, the impact of the credit crunch and banking crisis on our ability to conduct business, and the anticipated opportunities, challenges and financial implications associated with forthcoming environmental policy changes around climate change.

## ENGAGING WITH OUR COMMUNITIES

### Employee Volunteerism

In 2008, our employees donated nearly 92,000 hours of volunteer service. We support these activities with grants for the non-profit organizations or schools where our employees volunteer through our "AEP Connects" program. These grants totaled \$122,250 in 2008. Our employees' contribution represents a direct economic value of more than \$1.7 million (using the Independent Sector estimated value of volunteer time of \$19.50 per hour) and an indirect contribution of much more.

### Disaster Relief

In addition to serving local non-profit organizations, many AEP employees respond voluntarily to local community disasters such as ice storms, floods, hurricanes, tornados or other events. AEP Ohio partnered with the American Red Cross of Greater Columbus in 2008 to support its "Ready When the Time Comes" program that maintains a network of well-trained volunteers who can mobilize quickly in response to a disaster. More than 100 employees have undergone training.

To assist our own employees who have been adversely affected by a disaster, we support an AEP Emergency Disaster Relief Fund that grants up to \$3,000 to each employee or retiree to provide food,

East Texas employees annually collect Christmas trees and use them to restore fish habitat in local lakes.





## A LETTER FROM THE CERES STAKEHOLDER TEAM

**Background:** American Electric Power (AEP) asked Ceres to lead a process to obtain multi-stakeholder feedback on the company's sustainability plans, performance and disclosure, based on the company's 2009 Corporate Sustainability Report. Ceres convened a group, including shareholders and representatives from labor, environmental and social NGOs. As a part of this process, the group met with the company twice (on January 21 and March 2, 2009) and once independently to have a robust discussion about AEP's overall sustainability approach and key issues. This statement represents the highlights of the stakeholder feedback provided as a part of this process, and is not a consensus-based statement.

Stakeholders appreciate that AEP had its senior executives meet extensively with diverse constituencies to engage in an open and candid dialogue on the company's efforts to address key issues such as climate change, energy efficiency, coal supply and water use. Stakeholders also acknowledge the company's overall responsiveness to the feedback and recommendations provided by the group.

### BUSINESS STRATEGY

Stakeholders acknowledge the constraints posed by the current economic downturn on AEP's business and encourage the company to continue to strengthen its commitment to sustainability as a part of its business planning and performance. The company's business model and operating practices must adapt to the market and regulatory changes already happening in the utility industry. How will AEP's plans for continued reliance on coal affect the company in an increasingly carbon constrained economy, including risks, opportunities and adjustments? Stakeholders recommend that AEP outline a bold business strategy that responds to these changing times with aggressive programs on energy efficiency, renewable energy and distributed generation.

### GOVERNANCE & ACCOUNTABILITY

AEP has built a clear structure for governing sustainability through its planning and decision-making processes. How will proposed national policies that impose a cost on carbon impact business decision making at all levels within the company? Going forward, AEP should publicly disclose more information (specifically quantitative analysis) about the financial impacts associated with key sustainability risks, including climate

change, as these are materially relevant to the company's financial performance.

### CLIMATE CHANGE

Climate science and the projected economic costs of inaction clearly indicate that there is a need for immediate, bold steps to address climate change. Because AEP is the largest CO<sub>2</sub> emitter in the United States, many stakeholders view climate change as the most significant challenge that the company should address. Stakeholders acknowledge AEP's resolve to work towards overcoming differences and identifying commonalities with the environmental community on climate policy, and advocate rapid action in this regard. Some stakeholders suggest that the company consider options to align with U.S. Climate Action Partnership (USCAP). Given the recent change in U.S. political leadership, federal climate policy may include a provision to auction a significant portion of emission allowances. AEP should disclose how this would impact its business, including customers and shareholders. AEP should also outline a set of conditions that specifically ties free emissions allocations to investments for climate mitigation. While stakeholders acknowledge the need for investment in transmission systems for enhanced reliability and efficiency, a cost on carbon may be needed to ensure that the investments support the increased transmission of renewable energy. Many stakeholders appreciate AEP's willingness to develop and rapidly deploy advanced technology, including carbon capture and storage (CCS). The company could clarify that some forms of this technology (for example, CO<sub>2</sub> capture with gasification, CO<sub>2</sub> storage in oil and gas formations) are developed and commercial. However, other stakeholders stress the challenges associated with the scaled deployment of CCS, including cost and infrastructure, and encourage the company to invest aggressively in resources beyond coal. The benefits and challenges of these technology options should be discussed in the report.

### ENERGY EFFICIENCY

Energy efficiency and conservation are cost effective strategies to help address climate change and have the potential to create jobs and reduce energy bills during these difficult economic times. Stakeholders recommend that AEP take a leadership position on this issue, including setting strong companywide targets, proposing far-reaching programs, engaging and educating customers to reduce energy consumption, and proactively supporting strong energy efficiency policy at the federal and state levels.

The group appreciates that AEP has set an energy consumption reduction target, following stakeholder feedback. However, this target should be more aggressive to match or exceed standards in place in the states in which AEP operates and to align with federal proposals on this issue. Stakeholders recognize that there are some implementation hurdles to energy efficiency at the consumer level. Also, actions are constrained by state-level regulatory policies. These barriers, however, are starting to come down in states in which AEP operates. Some stakeholders are interested in working with the company to advocate for appropriate financial incentives for energy efficiency at the state level based on cost-recovery, performance-based earnings, and being kept whole for fixed costs.

#### **COAL**

AEP's generation is largely coal-based and some stakeholders are concerned about the company's plans to build new coal plants. Others note the importance of projects that address the impacts of coal generation using advanced technologies. Fuel-based supply chain issues are a critical component of AEP's overall sustainability footprint. While the group commends the company's commitment to develop a sustainability scorecard for its coal suppliers following stakeholder feedback on this issue, stakeholders strongly feel that this process should drive AEP to phase out the use of coal derived from mountaintop mining, which has significant impacts on land, water, biodiversity and communities. Many stakeholders look forward to providing input on the scope of the process, indicators and implementation plan.

#### **WATER**

Electricity generation requires access to large quantities of water, and some of the technology alternatives that AEP is considering, including nuclear power and CCS, are particularly water intensive. Stakeholders applaud the company for proactively working on a strategy to identify and address some of the risks posed by this issue. This strategy should consider water impacts when making decisions on issues such as technology, siting and fuel sources.

#### **OTHER ISSUES**

The aging work force issue continues to be a concern for stakeholders, who recommend that the company move forward with programs to maintain a trained and skilled work force.

Stakeholders applaud the company's continued emphasis on safety, including contractor safety. The group also appreciates AEP's efforts to integrate sustainability in its supply chain, and looks forward to data on the impacts of the process.

#### **DISCLOSURE**

AEP's sustainability reports, which include candid discussion of several challenging issues, have evolved over the past few years and have clearly been influenced by the company's several stakeholder engagement processes. AEP's commitment to provide semiannual updates of its performance would demonstrate a best practice in the industry. The company should also work to educate the investment community about sustainability issues, by raising it in quarterly earnings calls, annual meetings and continuing to discuss the business impacts of sustainability issues in financial filings.

#### **PARTICIPATING STAKEHOLDERS**

Please note that the stakeholders agreed to participate in this process as individuals and experts, rather than as representatives of their respective organizations, and this statement is not an endorsement of the company or its operations. The group did not participate in formal verification or assurance processes regarding the accuracy and completeness of information in this 2009 Corporate Sustainability Report.

Don Kirshbaum, Connecticut State Treasurer's Office

Andrew Brengle, KLD Research & Analytics

Julie Fox Gorte, Pax World Management Corporation

Mark Brownstein, Environmental Defense Fund

Kurt Waltzer, Clean Air Task Force

Nolan Moser, Ohio Environmental Council

Mary Ann Hitt, Sierra Club

Brad Crabtree, Great Plains Institute

Rebecca Stanfield, Natural Resources Defense Council

Michael Webber, University of Texas — Austin

Leslie Lowe, Interfaith Center on Corporate Responsibility

William Somplatsky-Jarman, Presbyterian Church

Jim Hunter, IBEW International

Dan Bakal, Ceres

Dan Mullen, Ceres

Andrea Moffat, Ceres

Veena Ramani, Ceres

shelter and other basic needs. In 2008, AEP employees generously gave approximately \$140,000 through payroll deductions and special giving to this fund, which is administered by the Salvation Army.

### CREATING ECONOMIC DEVELOPMENT

AEP has a significant impact on the economic vitality of the communities we serve — from providing electric service to retaining and creating jobs to paying millions of dollars in federal, state and local taxes. Our impact is magnified by our economic development teams that partner with local, regional and state organizations to recruit and retain local businesses. The teams help to simplify the business site selection process by coordinating and providing information that businesses need about electricity costs, service availability and local infrastructure issues. In 2008, we contributed \$1.2 million in economic development grants and contributions and assisted more than 360 organizations. In recognition of these efforts, AEP was named one of the top utilities in the nation in economic development by *Site Selection* magazine.

Some of our operating companies provide grants to local and regional economic development organizations. AEP Ohio's Economic Grant Assistance Program provides financial grants to projects that retain and create manufacturing investment and jobs. During 2008, the program provided \$59,000 to 20 organizations, which in turn will support the creation of an estimated 3,200 local jobs.

Other major economic development projects in 2008 included the development of a handbook by the Public Service Company of Oklahoma to assist communities with creating economic development

Web sites as a marketing tool. AEP Texas continued to facilitate and fund Economic Development Summits to bring elected officials and key community stakeholders together with state and federal agencies. Many of the communities attending these events have gone on to receive thousands of state and federal dollars as grants or low-interest loans. AEP also became a major sponsor of the International Economic Development Council's *Climate Prosperity Handbook* that is designed to help communities pursue sustainable development and respond to climate change.

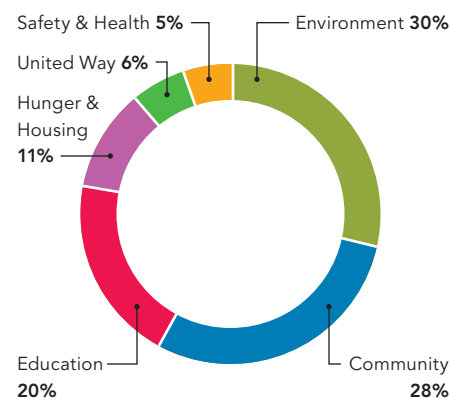
### CORPORATE GIVING

As the communities we serve struggled to meet growing demand for social services in 2008, we understandably saw an increase in requests for charitable gifts. Recognizing the increased importance of our support, we kept philanthropic funding levels constant despite a decreased corporate budget. AEP's charitable giving in 2008 totaled nearly \$23.6 million, including \$11.9 million in corporate philanthropy and \$11.7 million in combined giving to 75 organizations by the American Electric Power Foundation.

### STAYING CONNECTED TO EMPLOYEES

Employee engagement is important to AEP in good times and in bad. Our employees are our most important resource and our best, most passionate ambassadors. We are using technology more strategically and effectively to communicate and stay connected with them. We host six internal blogs that allow employees to read and respond to thoughts and opinions about significant issues by company leaders, including those of AEP Chairman Michael Morris and other AEP company

GIVING BY AREA OF FOCUS — 2008



### TOTAL PHILANTHROPIC GIVING

State	2008
Arkansas .....	\$333,922
Indiana .....	\$1,375,892
Kentucky .....	\$311,648
Louisiana .....	\$487,884
Michigan .....	\$608,933
Ohio .....	\$14,280,517
Oklahoma .....	\$1,020,588
Tennessee .....	\$69,295
Texas .....	\$1,796,040
Virginia .....	\$727,442
West Virginia .....	\$1,310,754
*Other .....	\$1,276,984
<b>Totals .....</b>	<b>\$23,599,899</b>

\*Giving to organizations outside AEP's service area or those that benefit multiple states

presidents. In early 2009, we began a sustainability blog, too. We also produced 33 live webcasts with senior leaders to update employees about earnings, major public policy issues and other topics.

In 2008, our intranet site, "AEP Now," launched new collaborative and interactive features, including enhanced news stories to which employees can immediately submit reactions. This interactivity not only has enriched the content

“One of the biggest failures of companies and people is not listening to others. We cannot be sustainable as a company if we are convinced that only our way is the correct way.”

Dennis Welch, executive vice president,  
Environment, Safety & Health and Facilities

of stories, but also has reinforced a shift in our culture to be more inclusive of diverse views and perspectives. Employees visited our intranet site 9.5 million times in 2008, about 12 percent more visits than in 2007.

### ENGAGING POLICY LEADERS

As a highly regulated business, it is vital that we remain in close contact with public policy leaders at the local, state and federal levels. Our engagement with legislators, regulators and advocates is even more important during difficult economic times because they are under more pressure to address rates and other issues that are of concern to working families and businesses. Read more about how we are engaging policy leaders and the issues we are addressing in the Public Policy section of this report.

### REACHING OUT TO CUSTOMERS

We strive to be readily accessible when customers need us to answer questions, respond to outages or provide service assistance. In 2008, AEP's call centers received more than 18 million customer calls — a 5 percent increase over the total number received in 2007. We attribute this increase to more hurricanes and ice storms

#### AMOUNT OF ASSISTANCE PROVIDED TO HELP CUSTOMERS PAY THEIR ELECTRIC BILLS

Company	Government Programs	Private Programs	Total Funds
Appalachian Power	\$13,777,521	\$248,452	\$14,025,973
Kentucky Power	\$2,172,576	—	\$2,172,576
Indiana Michigan Power	\$6,629,281	\$133,574	\$6,762,855
AEP Ohio	\$14,327,569	—	\$14,327,569
Public Service Company of Oklahoma	\$3,938,175	\$1,915,586	\$5,853,761
Southwestern Electric Power Company	\$1,726,667	\$324,598	\$2,051,265
<b>Totals</b>	<b>\$42,571,789</b>	<b>\$2,622,210</b>	<b>\$45,193,999</b>

and an increase in credit-related calls due to the recession. In addition to these 18 million calls, 750,000 online self-service transactions were completed on our company Web sites — double the amount completed online in 2007. Those who did call in waited an average of 47 seconds to speak to an AEP employee. According to our surveys, customer satisfaction improved across the AEP system, in all customer segments, from 83.5 percent in 2007 to 84.6 percent in 2008, putting us in the top quartile for performance benchmarks nationally.

In January 2009, JD Power and Associates' Electric Utility Business Customer Satisfaction Study named Appalachian Power the third-highest ranking utility in the eastern United States for customer satisfaction among business customers. The company scored high for its proactive communications with customers; other measurements included power quality and reliability, billing and payment, corporate citizenship, price and customer service.

AEP recognizes the tremendous burden the recession is having on our customers' ability to pay for basic needs, including electricity. In 2008, we had a 7 percent increase in our delinquent residential customer account balances and a more than 6 percent increase in delin-

quent nonresidential account balances.

This reflects the financial strain customers are experiencing. We understand these hardships and recognize our responsibility to work one-on-one with customers to provide a range of payment options and payment assistance.

AEP maintains relationships with all federally funded Low Income Home Energy Assistance Programs (LIHEAP) to assist eligible low-income and other vulnerable customers in paying heating and cooling bills. We work to make sure that LIHEAP assistance dollars are credited to customers' accounts on a timely basis and provide information on our company Web sites about payment assistance, including a link to LIHEAP. Some of our companies also have company-sponsored "fuel funds" that are generally funded through a combination of company and customer contributions and provide low-income payment assistance. In 2008, we contributed nearly \$300,000 and received in excess of \$45 million from various government and private agencies for residential customer bill payment assistance, 8.6 percent more than in 2007. ■

#### USEFUL WEB LINKS:

[www.ceres.org](http://www.ceres.org) • [www.jdpower.com](http://www.jdpower.com)  
[www.liveunited.org](http://www.liveunited.org)

CHALLENGE	GOAL	2008 PROGRESS
Engage our stakeholders regularly to build relationships in the communities and states where we operate. We need to be more than a good neighbor; we need to be actively involved with all of our stakeholders.	<p>A fully developed stakeholder outreach plan, in partnership with business units, that is integrated with existing community outreach activities and creates shared value of sustainable development objectives.</p> <p>Hold regular stakeholder briefings with environmental, social and community-based NGOs.</p> <p>Integrate an inclusive stakeholder process with development of annual corporate sustainability report.</p> <p>Engage investment community in sustainability issues.</p>	<p>SWEPCO held a stakeholder engagement meeting to receive guidance for its integrated resource plan.</p> <p>Conducted CEO “Future of Energy” University Listening Tour at six college campuses across the United States; reached out to Net Impact at The Ohio State University and Tulsa Young Professionals.</p> <p>Worked collaboratively to address NGO concerns related to an energy efficiency collaborative.</p> <p>Held 10 stakeholder meetings, a conference call briefing and several other individual meetings with stakeholders throughout the year.</p> <p>Integrated a stakeholder survey and facility tours in stakeholder meetings.</p>
Without continued employee involvement in the community, AEP’s message may not be heard and relationships would not be as strong.	Encourage and support employee community involvement; continue \$150 volunteer grant award opportunities.	In 2008, 815 grants of \$150 each were made on behalf of active and retired employees who collectively performed nearly 92,000 hours of volunteer service, an economic value of more than \$1.7 million.
Communities suffer when the economy causes corporate giving to be scaled back.	Continue philanthropy and corporate giving, even in economic downturns when the support is needed most. Our support is critical to having successful communities and improving quality of life.	<p>\$11.9 million donated through corporate giving in 2008.</p> <p>Contributed \$2.87 million in support of colleges and universities. This included matching dollar-for-dollar gifts of more than 760 active and retired employees to 300 institutions of higher learning and related foundations.</p> <p>AEP employees gave approximately \$140,000 to the AEP Emergency Disaster Relief Fund for employees, retirees and others.</p> <p>The AEP Foundation donated \$11.7 million to 75 organizations in 2008.</p>
Continue to grow support for United Way and other forms of giving, even in economic downturns when support is needed most.	Continue partnership with IBEW for United Way campaign and other community service initiatives.	In 2008, employees contributed \$2.34 million to United Way; AEP added \$1.17 million.
Increase energy and environmental knowledge of the public, teachers and children in AEP states through educational programs. Achieve the same goal through customer communications.	Increase awareness and understanding of issues such as electricity prices, energy efficiency and anticipated carbon regulations.	<p>Started an education series on “Energy, Environment and You” through customer newsletters on topics such as energy efficiency, carbon capture and storage, paperless billing and hybrid vehicles.</p> <p>In 2008, 1,186 schools, reaching more than 360,000 students, taught electrical safety using AEP’s Louie the Lightning Bug theater.</p>
Foster regular, open and inclusive communications with employees.	<p>Ensure employees remain informed in a timely manner about company issues.</p> <p>Provide opportunities to engage, learn and network.</p>	<p>Created and implemented plan for greater awareness and understanding of sustainability business strategy using Internet, direct mail, videos and webcasts.</p> <p>Held first systemwide Environment, Safety &amp; Health Leadership Meeting.</p> <p>Six internal blogs launched, including a CEO blog and a sustainability blog.</p>



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## Key:

CSR 2009 = Report Page Number

CW = Corporate Web Site

EU = Electric Utility Sector Supplement

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## GLOSSARY OF TERMS

**Advanced Coal Technologies:** Includes supercritical, ultra-supercritical, circulating fluidized bed, carbon capture and storage and integrated gasification combined cycle technologies.

**Ash:** Impurities consisting of silica, iron, alumina, and other noncombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect its burning characteristics.

**Baseload Capacity:** The generating equipment normally operated to serve loads on an around-the-clock basis.

**Capacity:** The amount of electric power delivered or required for which a generator, turbine, transformer, transmission circuit, station or system is rated by the manufacturer.

**Cap-and-Trade:** A market-based system of limiting emissions in which a limited number of emissions permits are issued in the aggregate (cap); these permits are then freely exchanged in markets (trade).

**Carbon Capture and Storage (CCS):** The capture, compression, transport and storage of CO<sub>2</sub> emissions.

**Carbon Dioxide (CO<sub>2</sub>):** A colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of fossil fuel combustion as well as other processes. It is considered a greenhouse gas because it traps heat radiated by the earth into the atmosphere.

**Chicago Climate Exchange (CCX):** Currently North America's only legally binding rules-based greenhouse gas (GHG) emissions allowance trading system, and the world's only global system for emissions trading based on all six greenhouse gases. Members make voluntary commitments to meet annual GHG emission reduction targets; those who reduce below the target have surplus allowances to sell or bank; those who emit above the targets comply by purchasing CCX Carbon Financial Instruments contracts. AEP is a founding member of CCX.

**Climate Change:** Changes in climate that depart from normal variability, representing significant changes in averages or extremes.

**Congestion:** A condition that occurs when insufficient transfer capacity is available to

implement all of the preferred schedules for electricity transmission simultaneously.

**Demand:** Rate at which electric energy is delivered to or by a system or part of a system, generally expressed in kilowatts or megawatts, at a given instant or averaged over any designated period of time.

**Demand Response (DR):** The planning, implementation and monitoring of utility activities designed to encourage consumers to modify their patterns of electricity usage.

**Emissions:** Anthropogenic releases of gases to the atmosphere. In the context of global climate change, they consist of greenhouse gases.

**Energy Efficiency:** Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatt hours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technically more advanced equipment to produce the same level of end-use services (e.g., lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives and heat recovery systems.

**Extra-high Voltage (EHV):** The electric utility industry generally considers EHV to be any voltage of 345 kV or higher.

**Fossil Fuels:** Hydrocarbon fuels derived from fossils: specifically coal, petroleum and natural gas.

**Greenhouse Gas (GHG):** Collective term for gases such as carbon dioxide that trap heat in the atmosphere and contribute to climate change.

**Grid:** An interconnected network of electric transmission lines and related facilities.

**Independent System Operator:** An independent, federally regulated entity that coordinates regional transmission in a non-discriminatory manner and ensures the safety and reliability of the electric system.

**Load:** An end-use device or customer that receives power from the electric system. Load should not be confused with demand, which is the measure of power that a load receives or requires.

**Plant Efficiency:** The percentage of total energy content of a power plant's fuel that is converted into electricity. The remaining energy is lost to the environment as heat.

**Portfolio Standards:** Guidelines or requirements that total electricity supply include one or more set minimum for particular sources, such as renewable energy.

**Rate-making Authority:** A utility commission's legal authority to fix, modify, approve or disapprove rates, as determined by the powers given to the commission by a state or federal legislature.

**Reliability:** The degree of performance of the elements of the bulk electric system that results in electricity being delivered to customers within accepted standards and in the amount desired. Reliability may be measured by the frequency, duration and magnitude of adverse effects on the electric supply. Electric system reliability can be addressed by considering two basic and functional aspects of the electric system — adequacy and security.

**Renewable Energy Resources:** Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include: biomass, hydro, geothermal, solar, wind, ocean thermal, wave action and tidal action.

**Transmission System:** An interconnected group of electric transmission lines and associated equipment for moving or transferring electric energy in bulk between points of supply and points at which it is transformed for delivery over the distribution system lines to consumers, or is delivered to other electric systems.

**Wind power plant:** A group of wind turbines interconnected to a common utility system through a system of transformers, distribution lines and (usually) one substation.



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