

**FILE**

EXHIBIT NO. \_\_\_\_\_

BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of )  
Columbus Southern Power Company for )  
Approval of its Electric Security Plan; an )  
Amendment to its Corporate Separation )  
Plan; and the Sale or Transfer of Certain )  
Generating Assets )

and )

In the Matter of the Application of )  
Ohio Power Company for Approval of )  
its Electric Security Plan; and an )  
Amendment to its Corporate Separation )  
Plan )

Case No. 08- 917-EL-~~UNC~~SSO

Case No. 08- 918-EL-~~UNC~~SSO

**PUCO**

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DIRECT TESTIMONY  
OF  
JOSEPH HAMROCK  
ON BEHALF OF  
COLUMBUS SOUTHERN POWER COMPANY  
AND  
OHIO POWER COMPANY

Filed: July 31, 2008

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INDEX TO DIRECT TESTIMONY OF  
JOSEPH HAMROCK  
PUCO CASE NO. 08-917-EL-UNC  
PUCO CASE NO. 08-918-EL-UNC

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1                                   BEFORE  
2                   THE PUBLIC UTILITIES COMMISSION OF OHIO  
3                   DIRECT TESTIMONY OF  
4                   JOSEPH HAMROCK  
5                   ON BEHALF OF  
6           COLUMBUS SOUTHERN POWER COMPANY AND  
7           OHIO POWER COMPANY  
8           PUCO CASE NO. 08-917-EL-UNC  
9           PUCO CASE NO. 08-918-EL-UNC  
10

11   **INTRODUCTION**

12   **Q.    WHAT IS YOUR NAME AND BUSINESS ADDRESS?**

13   A.    My name is Joseph Hamrock. My business address is 850 Tech Center Drive,  
14           Gahanna, OH 43230.

15   **Q.    BY WHOM YOU ARE EMPLOYED AND IN WHAT CAPACITY?**

16   A.    I am employed by the American Electric Power Service Corporation (AEPSC). I am  
17           President and Chief Operating Officer – AEP Ohio. I am directly responsible for the  
18           day-to-day operations of Columbus Southern Power Company (CSP) and Ohio Power  
19           Company (OPCO), collectively known as AEP Ohio (or the Companies).

20   **Q.    WHAT IS YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL**  
21           **EXPERIENCE?**

22   A.    I earned a bachelor of engineering degree in electrical engineering in 1985 from  
23           Youngstown State University. In 1999, I earned a master's degree in business  
24           administration from the Massachusetts Institute of Technology in Cambridge where I  
25           was a Sloan fellow.

1 I joined AEP in 1986 as an electrical engineer in transmission and distribution  
2 planning at OPCO in Steubenville, Ohio, where I also served in commercial and  
3 industrial customer services. I am a registered professional engineer in Ohio.

4 In 1993 I transferred to CSP in Columbus, Ohio to supervise the commercial  
5 marketing and customer services staff. Since that time, I have held several other  
6 positions with AEPSC, including Director – Strategic Development, Executive  
7 Assistant to E. Linn Draper Jr. (AEP's former Chairman, President and Chief  
8 Executive Officer), Senior Vice President, General Services and Senior Vice  
9 President and Chief Information Officer (CIO).

10 I have served in my role as President and Chief Operating Officer since  
11 January 2008.

12 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE A**  
13 **REGULATORY AGENCY?**

14 A. Yes. I submitted testimony before the Public Utility Commission of Texas in PUC  
15 Docket No. 33309.

16

17 **PURPOSE OF TESTIMONY**

18 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

19 A. I am AEP Ohio's overall policy witness in this case. My testimony will address a  
20 number of areas including the following:

- 21 • AEP Ohio's vision for the future;
- 22 • Objective and components of the Electric Security Plan (ESP) filing;

- 1                   • Economic Development;
- 2                   • Witnesses in the case and the subject matters of their testimony; and
- 3                   • AEP as an industry leader.

4   **Q.    ARE YOU SPONSORING ANY EXHIBITS?**

5   A.    Yes. I am sponsoring EXHIBIT JH-1 which is the 2008 AEP Corporate Sustainability  
6       Report. As a part of the AEP System, AEP-Ohio is committed to the goals set forth  
7       in this report.

8

9   **AEP OHIO'S VISION FOR THE FUTURE**

10   **Q.    WHAT IS AEP OHIO'S VISION FOR THE FUTURE?**

11   A.    AEP Ohio's vision is to continue to provide our customers with reliable and  
12       affordable electric service with a focus on environmental stewardship. For over 100  
13       years, AEP has been a leader in technical innovation that has provided our customers  
14       and communities the benefit of affordable, reliable electricity. Changes underway in  
15       the global energy sector as well as the new statutory and regulatory environment in  
16       Ohio present unique opportunities that require AEP Ohio to re-think the traditional  
17       ways of providing service to its customers:

- 18                   • Technology offers new opportunities to transform customer service and to  
19                   further optimize the complex systems and processes that the Companies  
20                   use to produce and deliver electricity.
- 21                   • Renewable energy resources are becoming more viable.
- 22                   • Dynamic wholesale markets provide clear indications of the time-  
23                   differentiated value of electricity.

- Costs of many of the inputs to electricity production and delivery are increasing with unprecedented speed. For example, Central Appalachian coal prices have increased by 151% in nine months. Natural gas prices have increased by more than 69% since the beginning of 2007. These two fuels are used in approximately 90% of AEP's production capability. Structural steel prices have increased more than 100% since the beginning of this decade. Copper prices have increased by 160% since 2004 and are up 21% in 2008 already. Aluminum prices have increased by 53% since 2004. And as we all know, the price of gasoline and diesel fuel have increased substantially in the past year, an average of 38% for AEP's vehicle fleet.
- As the Companies replace aging infrastructure there is an opportunity to modernize systems rather than simply replacing like-for-like using last generation technologies and systems.
- Customer attitudes appear to be changing as well, though AEP Ohio has much to learn in this area. The Companies believe:
  - Customers expect higher service reliability and power quality than ever before in our digital economy and life style
  - Environmental awareness and sensitivity is growing
  - Price sensitivity is heightened due to the pressures consumers are feeling from increasing costs of many essential goods and services
- Development of new generation supply takes longer than ever before to permit, construct and interconnect to the grid.

Simply put, customers and regulators expect: better power quality and reliability, economical and environmentally-friendly baseload generation, and additional programs that offer more opportunities for customers to actively shape their energy consumption patterns.

**Q. PLEASE DESCRIBE AEP OHIO'S PLAN TO MEET CUSTOMER AND REGULATORY EXPECTATIONS.**

A. AEP Ohio's plan represents the next steps in the evolutionary journey to deliver more value to its customers. Specifically, AEP Ohio's plan encompasses the strategy for:

- 1           • *commitment to the development of renewable energy and advanced energy*  
2           *technologies;*
- 3           • *innovative economic development programs* offering an economic  
4           development rider for business attraction, expansion and retention, which  
5           can include businesses supporting energy efficiency and demand response  
6           products and services;
- 7           • *deployment of advanced technologies* to provide customers with greatly  
8           improved information and control of their energy consumption through  
9           modern grid management (gridSMART<sup>SM</sup>);
- 10          • *investments in comprehensive targeted power quality and reliability*  
11          *initiatives* that will help modernize and improve the reliability of the energy  
12          delivery system;
- 13          • *implementation of energy efficiency programs* and development of  
14          additional energy efficiency, demand response and alternative energy  
15          programs through a collaborative process; and
- 16          • *a transparent recovery mechanism for fuel* and other variable costs used to  
17          provide electricity production.

18   **Q.   HAS AEP OHIO TAKEN INTO CONSIDERATION THE COST TO**  
19   **CUSTOMERS OF IMPLEMENTING ITS PLAN?**

20   **A.**   Yes. AEP Ohio recognizes that Ohioans are experiencing increasing costs in nearly  
21   every aspect of their lives and the Companies remain consistently responsive to this  
22   fact. AEP Ohio's leadership has a heightened commitment to meet customers'  
23   growing expectations for better power quality and reliability, along with complying  
24   with new environmental regulations and a sensitivity to find better ways to offset or  
25   delay the need to acquire new baseload generation. Our leadership in providing  
26   secure, reliable and affordable energy will continue to support economic development  
27   and a high standard of living in the communities served.

1           In addition, I have authorized a \$75 million "Partnership With Ohio" fund  
2           from shareholder money that will help mitigate the impact of rate increases for AEP  
3           Ohio's low-income customers and promote economic development. A portion of this  
4           "Partnership With Ohio" fund will specifically be used to assist low-income  
5           customers to mitigate the effects of rising electricity costs. AEP Ohio stands ready to  
6           partner with the State of Ohio to ensure these funds are targeted to their highest and  
7           best uses.

8       **Q. PLEASE BRIEFLY SUMMARIZE HOW AM. SUB. S.B. 221 (S.B. 221)**  
9       **IMPACTS AEP OHIO IN ACHIEVING ITS PLAN FOR THE FUTURE?**

10      A. S.B. 221 provides the means for AEP Ohio to implement new programs to meet the  
11      changing environment in which we all live. S.B. 221 addresses advanced metering  
12      capabilities which are a part of the Companies' proposed gridSMART program that  
13      provides customers with more choices to actively and effectively manage their energy  
14      consumption. It also sets out benchmarks concerning advanced energy resources,  
15      renewable energy resources, and energy efficiency and peak demand reduction  
16      programs. These components of S.B. 221 are included in our plan thus providing  
17      environmental and economic benefits for our customers and the communities served.  
18      S.B. 221 also addresses economic development and job retention. AEP Ohio's plan  
19      addresses this important topic and expands our existing practices which in recent  
20      years alone have led to new business development, job creation and retention that has  
21      been vital to Ohio's economic well-being.

1 Finally S.B. 221 addresses an issue of importance on a day-to-day basis: the  
2 reliability of our distribution service. S.B. 221 permits the inclusion, in the ESP of  
3 provisions for distribution infrastructure and modernization incentives for electric  
4 distribution utilities. Overall, our ESP expands the proud tradition of the AEP  
5 System's record of innovation that provides our customers and communities with  
6 secure and reliable electricity at affordable prices.

7  
8 **OBJECTIVE AND COMPONENTS OF THE ESP FILING**

9 **Q. WHY IS AEP OHIO MAKING THIS FILING?**

10 A. This is a critical time for AEP Ohio and all of the investor-owned Ohio electric  
11 distribution utilities. The new electric restructuring legislation brings novel  
12 challenges of blending rates based on competitive market forces with elements of  
13 governmental regulation. Ohio's investor-owned electric distribution utilities have  
14 largely been in a continual state of transition since the time that Ohio's last electric  
15 restructuring legislation was passed in 1999 and there has been and will likely  
16 continue to be significant regulatory uncertainty.

17 AEP Ohio is submitting only an ESP because AEP Ohio believes it has the  
18 opportunity to balance the interests of its customers and its shareholders. It is,  
19 however, more than just a rate plan. As described below, AEP Ohio's proposed  
20 ESP incorporates commitments and programs that benefit customers and are  
21 consistent with AEP Ohio's long-term vision for the future, while also promoting  
22 the state policies outlined in S.B. 221.

1           To this end, the Companies have approached their ESP in a comprehensive  
2 manner, consistent with S.B. 221, addressing a range of issues that are broader than  
3 simply focusing on the Standard Service Offer (SSO) price for competitive retail  
4 electric services.

5 **Q. PLEASE SUMMARIZE MAJOR COMPONENTS IN AEP OHIO'S ESP**  
6 **FILING.**

7 A. AEP Ohio's ESP filing consists of the following major components:

- 8       • A fuel adjustment clause (FAC);
- 9       • Non-fuel base generation annual rate adjustments including environmental  
10       capital carrying costs;
- 11       • A Provider Of Last Resort (POLR) charge;
- 12       • A base distribution rate adjustment for enhanced reliability and gridSMART;
- 13       • An energy efficiency and demand reduction rider;
- 14       • An economic development rider; and
- 15       • Recovery of previously authorized distribution regulatory assets.

16           These components comprise the key objectives of AEP Ohio's ESP  
17 discussed earlier in my testimony, which are to provide an adequate supply of  
18 energy and capacity for its customers, while incorporating advanced energy options,  
19 to improve its customers' service experience, while maintaining reasonable and  
20 predictable rates and stimulating economic development.

21 **Q. WHAT WILL BE THE IMPACT TO THE CUSTOMER?**

1 A. The adoption and implementation of AEP Ohio's ESP will limit the overall price  
2 increases to all customer classes for 2009, 2010 and 2011 to approximately 15% per  
3 year. The Companies are aware that as the eight-year period of rate increase  
4 restrictions comes to a close, the impact of the other rate increases resulting from the  
5 ESP, when coupled with the incremental FAC costs being phased-in, still suggests  
6 that it is in the interest of customers to limit increases over the next three years.

7 To achieve this, the Companies will defer incremental FAC expenses so that  
8 for each year of the ESP no customer rate schedule will experience an increase in  
9 excess of approximately fifteen percent. Since transmission cost adjustments are  
10 recoverable through the Companies' Transmission Cost Recovery Riders and cost  
11 increases associated with new government mandates are expected to be recovered  
12 through Commission-approved rates, an absolute cap on increases cannot be ensured.  
13 In addition to being consistent with provisions within S.B. 221 authorizing phase-in  
14 of rate increases, this proposal advances the policy outlined in Section 4928.02(A),  
15 Ohio Rev. Code, to help ensure reasonably priced retail electric service.

16 **Q. PLEASE BRIEFLY DESCRIBE THE GENERATION COMPONENTS**  
17 **LISTED ABOVE.**

18 A. As described in Companies' witness Mr. Baker's testimony, a major generation-  
19 related component change in AEP Ohio's proposed ESP is a request to adjust the  
20 price for generation service to reflect current fuel-related costs, including variable  
21 environmental costs, purchased power, and renewable energy costs. AEP Ohio is

1 requesting to implement a FAC as described by the Companies' witness Mr.  
2 Nelson.

3 **Q. PLEASE BRIEFLY DESCRIBE THE PROPOSED PROVIDER OF LAST**  
4 **RESORT (POLR) CHARGE.**

5 A. The Companies are proposing a POLR charge that is based upon an option  
6 valuation methodology described by Mr. Baker.

7 **Q. PLEASE BRIEFLY DESCRIBE THE DISTRIBUTION COMPONENTS**  
8 **CONTAINED IN THE PLAN.**

9 A. CSP's regulatory transition charge is eliminated in the proposed ESP rates. The  
10 proposed base distribution increase is designed to reflect the cost of the Companies'  
11 proposal for enhanced distribution reliability initiatives and gridSMART programs.  
12 The Companies also propose to amortize previously approved deferrals related to  
13 customer choice implementation and education, Monongahela Power Company  
14 acquisition costs, line extension costs and other regulatory deferrals approved by  
15 the Public Utilities Commission of Ohio (PUCO). In addition, the Companies  
16 propose a rider to recover the costs of implementing the energy efficiency and  
17 demand reduction requirements of S.B. 221. Finally, a rider is proposed to recover  
18 costs associated with Commission-approved economic development and job  
19 retention initiatives. In addition to being consistent with provisions within S.B. 221  
20 that authorize recovery of such costs, the Companies' ESP proposal advances the  
21 policy outlined in Section 4928.02(N), Ohio Rev. Code, to facilitate the state's  
22 effectiveness in the global economy.

1   **Q.   WHAT IS AEP OHIO'S PLAN TO ADDRESS THE STANDARDS FOR**  
2   **RENEWABLE RESOURCES?**

3   **A.**   AEP has significant experience with the development and advancement of renewable  
4   resources and is committed to continued leadership in this area. Building on that  
5   history, AEP Ohio has developed projections of the requisite amounts of renewable  
6   resources, specifically wind and solar energy resources, the Companies will need to  
7   secure relative to the requirements set out in Section 4928.64 (B) (2), Ohio Rev.  
8   Code. AEP Ohio plans to secure those levels of renewable resources, and provides a  
9   general overview of a range-of-magnitude estimate of the costs that would be  
10   encountered in order to secure those resources.

11   **Q.   DOES AEP OHIO PLAN TO CONTINUE ITS VOLUNTARY GREEN**  
12   **PRICING OPTION PROGRAM AFTER 2008?**

13   **A.**   No, however, the Companies intend to offer a new green tariff option during the  
14   ESP period. AEP Ohio's current Green Pricing Option is scheduled to end  
15   December 31, 2008 in accordance with the stipulated agreement filed and approved  
16   by the PUCO in Case No. 06-1153-EL-UNC. Customers who voluntarily  
17   subscribed to the program did so with the understanding that their participation was  
18   scheduled to end December 31, 2008. With the Alternative Energy Portfolio  
19   benchmarks in S.B. 221 all AEP Ohio's customers will have a portion of their  
20   generation supply sourced through green resources.

1   **Q.   PLEASE DISCUSS THE ADDITIONAL PROGRAMS THAT ARE**  
2   **IMPORTANT TO THE COMPANIES' PLANS UNDER THE ESP.**

3   A.   There are a number of programs, riders and proposed tariffs which are important  
4       factors in the ESP. These programs include a net metering tariff for hospitals that  
5       utilize customer-owned generators, governmental aggregation options, economic  
6       development programs for retention of existing customers or for new or expanding  
7       customers, and programs applicable to an energy efficiency production facility, as  
8       well as others. Additionally, AEP Ohio proposes changes to the existing terms and  
9       conditions regarding residential and non-residential line extensions.

10

11   **ECONOMIC DEVELOPMENT**

12   **Q.   HOW DOES AEP OHIO VIEW ECONOMIC DEVELOPMENT IN OHIO?**

13   A.   Economic development is more important than perhaps at any time in Ohio's recent  
14       history. While AEP Ohio has contributed too many successes in Ohio attracting new  
15       business, there's much more work to be done. To achieve any successful economic  
16       development objective, it should be first recognized that economic development is not  
17       the responsibility of any single entity. It will truly require a team effort - a partnership  
18       and collaboration among State leadership, AEP Ohio and others to create transparent  
19       incentives to attract and retain diverse businesses. AEP Ohio stands ready to work  
20       with state officials and community leaders in its service territory to expand economic  
21       development efforts.

1   **Q.   PLEASE DESCRIBE AEP OHIO'S COMMITMENT TO ECONOMIC**  
2   **DEVELOPMENT.**

3   A.   AEP Ohio supports economic development and will continue to commit resources to  
4   advance that goal. During the ESP period, the Companies will continue to build their  
5   comprehensive economic development program that strengthens relationships at state,  
6   regional, county, city and other local levels of government through support of their  
7   economic development activities and initiatives. Two new components of this  
8   program are the creation of an economic development rider schedule and the  
9   establishment of AEP Ohio's \$75 million "Partnership With Ohio" fund.

10   **Q.   PLEASE DESCRIBE THE ECONOMIC DEVELOPMENT RIDER (EDR)**  
11   **THE COMPANIES ARE PROPOSING AS A PART OF ITS ECONOMIC**  
12   **DEVELOPMENT PROGRAM.**

13   A.   The proposed EDR schedule sponsored by Mr. Roush will be a tool to increase the  
14   effectiveness of the economic development process. The EDR is intended to benefit  
15   all stakeholders by attracting new or expanding businesses within AEP Ohio's service  
16   territory thereby creating job opportunities. AEP Ohio, its customers, the  
17   communities it serves and the State of Ohio benefit from job creation. The EDR will  
18   encourage not only new development, but urban and brownfield redevelopment as  
19   well.

1 **Q. HOW WILL POTENTIAL CANDIDATES OR PROJECTS BE SCREENED**  
2 **TO PARTICIPATE IN THE EDR?**

3 A. My counsel has informed me that the PUCO in pending Case No. 08-777-EL-ORD  
4 (Chapter 4901:1-38) is establishing rules that address special arrangements and  
5 economic development schedule(s). AEP Ohio believes that the State of Ohio should  
6 be the leading party in the effort to identify and screen potential candidates or projects  
7 that would qualify for a special arrangement and that qualify for the EDR.

8 **Q. PLEASE DESCRIBE IN GREATER DETAIL THE "PARTNERSHIP WITH**  
9 **OHIO" FUND YOU PREVIOUSLY MENTIONED.**

10 A. I have authorized AEP Ohio's economic development organization, as part of the  
11 Companies' ESP, to establish the "Partnership With Ohio" fund which will be  
12 focused on low income customers and economic development. AEP Ohio has  
13 committed, over the ESP period, \$75 million to this fund which will target the "at risk  
14 population" (low income customers) and economic development. The economic  
15 development portion of this fund will be used to attract and retain businesses within  
16 AEP Ohio's service territory, which will include increased support to local economic  
17 development organizations, continued support for regional and state economic  
18 development organizations, development of a learning/educational component, and  
19 research and marketing establishment of an economic development grant fund. AEP  
20 Ohio is eager to work with state and community leaders to identify the best utilization  
21 of these funds.

1   **Q.   DO YOU HAVE ANY PARTICULAR PROGRAMS IN MIND?**

2   **A.**   Yes. The Companies, through the Commercial Operations division of the AEP  
3   Service Corporation, propose to sponsor forums for political subdivisions within their  
4   certified service territories and for state entities to discuss energy price risk  
5   management contracts.

6           While the Companies will not offer assistance with the negotiation of any  
7   particular energy price risk management contract, the content of the forums will  
8   enable state entities and political subdivisions to make a more informed decision  
9   regarding energy price risk management contracts. The Companies would not assess  
10   any fee for attending such a forum.

11           Further Section 3318.112, Ohio Rev. Code, requires that the Ohio School  
12   Facilities Commission adopt rules prescribing standards for solar-ready equipment in  
13   school buildings under its jurisdiction. The rules must include standards regarding  
14   roof space limitations, shading and obstruction, building orientation, roof loading  
15   capacity and electric systems. These rules can be an important foundation for the  
16   development of solar-ready equipment in school buildings. Not only can such  
17   equipment be financially beneficial for school systems facing constant budget  
18   constraints, but it can help the Companies meet the renewable energy and solar  
19   benchmarks included in Section 4928.64(B), Ohio Rev. Code.

20           Once the rules have been promulgated the Companies will offer to work with  
21   school districts within their certified service territories to analyze the potential  
22   benefits and costs of installing such equipment in existing and new school facilities.

1           Finally, Section 4928.621, Ohio Rev. Code, permits Edison Technology  
2           Centers to receive assistance pursuant to Section 4928.62, Ohio Rev. Code, creating  
3           an advanced energy manufacturing center.

4           In addition, Section 4928.621, Ohio Rev. Code, also authorized universities in  
5           Ohio that conduct research on advanced energy resources and not-for-profit  
6           corporations formed to address issues affecting the price and availability of electricity  
7           and having members that are small businesses to receive assistance under Section  
8           4928.62, Ohio Rev. Code, for the purpose of encouraging research in Ohio regarding  
9           innovation in, or refinement of such resources or encouraging education outreach  
10          regarding resources. Assistance under Section 4928.62, Ohio Rev. Code, also is  
11          available to any independent group located in Ohio whose express objective is to  
12          educate small business in Ohio regarding renewable energy resources and energy  
13          efficiency programs or to educate any small business in Ohio that utilizes an advanced  
14          energy project or participates in an energy efficiency program. The Companies will  
15          set aside a portion of the "Partnership With Ohio" fund to provide complementary  
16          grant money to recipients within their service territories for financial assistance under  
17          Section 4928.62, Ohio Rev. Code. These grants will be distributed to recipients in the  
18          order of their approval for financial assistance by the Director of Development.

19   **Q.   PLEASE BRIEFLY EXPLAIN THE ECONOMIC DEVELOPMENT**  
20   **BENEFITS THAT THE AEP SYSTEM, INCLUDING AEP OHIO, PROVIDES**  
21   **BY DOING BUSINESS IN THE STATE.**

1     **A.**     In Ohio, AEP employs more than 7,000 people in 2007. AEP Ohio's economic  
2             development and community contributions for 2007 were approximately \$15 million.  
3             AEP Ohio owns and operates a power generation fleet that includes eight coal,  
4             generating stations in Ohio. AEP Ohio purchases more than half of the coal produced  
5             on Ohio. In addition, the Companies spent \$1.1 billion on purchased goods and  
6             services which included almost \$700 million through Ohio-based business contracts,  
7             with local and state taxes totaling almost \$300 million.

8             AEP Ohio expects that a number of the ESP initiatives (*e.g.*, gridSMART,  
9             enhanced power quality and reliability initiatives, advanced energy, and renewables)  
10            will generate for Ohio similar additional economic benefits as discussed above.

11

12     **WITNESSES IN THE CASE AND SPONSORED TESTIMONY**

13     **Q.     HOW IS THE ESP FILING ORGANIZED?**

14     **A.**     Summarized below are the eleven AEP Ohio witnesses along with a general  
15             description of their testimony.

| General Subject Area                                                                                                             | Witness           | General Description of Testimony                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overall Policy Witness                                                                                                           | Joseph Hamrock    | <ul style="list-style-type: none"> <li>• AEP Ohio's vision for the future</li> <li>• the critical nature of this rate filing and the components of the filing</li> <li>• Organization of the rate filing, and witness list</li> <li>• AEP Ohio industry leadership</li> <li>• Economic development</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Fuel Clause Policy<br>Environmental Investment<br>Provider Of Last Resort (POLR)<br>IGCC Plans<br>Excessive Earnings<br>Phase-in | J. C. Baker       | <ul style="list-style-type: none"> <li>• fuel clause, POLR charge, and proposed phase-in plan related to their rate impacts,</li> <li>• rationale for excluding certain economic development loads from the three-year average baseline as provided for in S.B. 221</li> <li>• corporate separation plans, and the related request for authority to sell or transfer certain generating assets</li> <li>• AEP Ohio's plan concerning the construction of an Integrated Gasification Combined Cycle generating facility</li> <li>• "significantly excessive earnings" determination that will be made after each year of the ESP</li> <li>• potential future benefits of pursuing a securitization program as a means to reduce customer costs associated with the deferral of FAC expenses</li> <li>• environmental capital carrying costs recovery</li> </ul> |
| FAC Mechanism<br>Environmental Costs                                                                                             | Philip Nelson     | <ul style="list-style-type: none"> <li>• implementation of a cost recovery mechanism for fuel, purchased power and environmental costs consistent with provisions of S.B. 221</li> <li>• recovery of capital carrying costs on environmental additions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Enhanced Service<br>Reliability Plan                                                                                             | Karl Boyd         | <ul style="list-style-type: none"> <li>• overview of AEP Ohio's current power quality and service reliability programs</li> <li>• proposal of enhanced power quality and reliability initiatives</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Grid SMART Initiatives<br>Energy Efficiency<br>Peak Demand Reduction                                                             | Karen Sloneker    | <ul style="list-style-type: none"> <li>• advancements in technology and the implementation of AEP Ohio gridSMART<sup>sm</sup> initiatives</li> <li>• creation of a collaborative group to develop energy efficiency and peak demand reduction initiatives</li> <li>• propose energy efficiency programs and peak demand reduction initiatives and related costs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Regulatory Accounting Treatment                                                                                                  | Leonard Assante   | <ul style="list-style-type: none"> <li>• regulatory accounting for the proposed phase-in of the incremental FAC cost recovery and on-going FAC true-ups</li> <li>• accounting/ratemaking for generating units that may be retired early</li> <li>• accounting/ratemaking for the amortization/recovery of existing regulatory assets</li> <li>• accounting for the proposed gridSMART program and DSM programs</li> <li>• accounting for economic development rider</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 |
| Rider & Tariffs                                                                                                                  | David M. Roush    | <ul style="list-style-type: none"> <li>• net metering tariff for hospitals that are customer-generators</li> <li>• governmental aggregation options</li> <li>• proposed rate schedules for economic development programs for retention of existing customers or for new or expanding customers</li> <li>• energy efficiency applicable to an energy efficiency production facility</li> <li>• enhanced power quality and reliability initiative recovery</li> <li>• alternate feed service, energy efficiency and demand response riders</li> </ul>                                                                                                                                                                                                                                                                                                            |
| Requirements of Renewables,<br>Energy Efficiency and Peak<br>Demand Reductions                                                   | William K. Castle | <ul style="list-style-type: none"> <li>• projections of the requirements for renewable resources, energy efficiency and peak demand reductions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| "Significantly Excessive"<br>Earnings Test                                                                                       | Dr. Makhija       | <ul style="list-style-type: none"> <li>• appropriate peer group and how the term "significantly excessive" as used in S.B. 221, should be interpreted</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Line Extension Proposal                                                                                                          | Gregory A. Earl   | <ul style="list-style-type: none"> <li>• proposes cost recovery for residential and non-residential line extensions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

1     **AEP AS AN INDUSTRY LEADER**

2     **Q.   HOW DOES AEP MAINTAIN INDUSTRY LEADERSHIP IN A**  
3     **CHALLENGING ENVIRONMENT?**

4     A.   For more than a century, AEP has created new ways to provide power for today while  
5         preparing for the needs of tomorrow. One of the most significant issues moving  
6         forward for the electric generation sector is environmental stewardship. AEP is  
7         helping to lead the discussion to find a reasonable, achievable approach for state and  
8         federal energy policy that properly addresses environmental concerns in a manner  
9         which is realistic in time frame and does not seriously harm the economy. On the  
10        clean coal technology front, we are pursuing technologies including integrated  
11        gasification combined cycle and ultra-supercritical pulverized coal generating  
12        facilities. Electricity production is only part of the equation. It is critical to harness  
13        new resources where economically available such as wind, biomass and solar and to  
14        have the ability to deliver electricity across state and regional boundaries to where it is  
15        most needed. As for actions towards environmental stewardship, AEP contracted to  
16        reduce methane emissions from livestock farms and have planted millions of trees  
17        across the U.S. AEP also has extensive international forestry projects and is a charter  
18        member of the Chicago Climate Exchange (CCX). Starting in 2006, AEP has  
19        demonstrated leadership among corporations in the area of environmental  
20        sustainability and advanced energy development through issuance of its sustainability  
21        reports. EXHIBIT JH-1 is a copy of the AEP 2008 Corporate Sustainability Report.

1 **CONCLUSION**

2 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

3 A, Now and for the foreseeable future, AEP Ohio is facing a changing landscape.  
4 Customers expect greater service reliability and better power quality more than ever  
5 before due to the digital world we now live in. Environmental awareness and  
6 sensitivity is growing both from our customers and regulators. Price sensitivity is  
7 high, perhaps higher than ever before due to the pressures consumers are feeling  
8 from increasing costs of many essential goods and services. Costs for system  
9 components and fuels continue to rapidly escalate due to increasing global demand.  
10 Development of new supply takes longer than ever before to permit and construct  
11 new environmentally-friendly generation. Infrastructure is aging. All of these signs  
12 indicate that the Companies must change the business model in ways that require  
13 new thinking for all of us.

14 Utilities need more transparent and collaborative approaches to developing  
15 and deploying innovative technologies and customer offerings, while working with  
16 regulators to promote innovation and create an environment that encourages  
17 investment while carefully managing risks. AEP Ohio is eager to work  
18 constructively with all stakeholders to achieve a balanced approach for meeting  
19 Ohio's electricity needs in the short and long-term. In submitting this ESP, AEP  
20 Ohio believes that the programs in the Companies' proposed ESP will achieve those  
21 objectives.

1 Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes, it does.



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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. That Committee met twice in the past year with company management to review 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 their environmental, social and financial impacts. While pleased with progress to date, the Board expects and requires higher performance in the future. 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 specifically the commitments in this report.



**Lester A. Hudson, Jr.**  
Presiding Director of the AEP Board of Directors  
April 2008



# Leadership, Management & Strategy

DEAR FRIENDS & COLLEAGUES,

Imagine a world where electricity is assured; where technologies enable power plants to run cleaner and help consumers to use energy more efficiently; where nations come together to address climate change and where economies and communities prosper and grow. Imagine a world in which you control the amount, timing and price of the electricity you use.

At American Electric Power (AEP), we are not just imagining this world, we are working toward it. And sustainability is our road map.

Electricity is necessary for a modern society, yet its very production has adverse impacts on society. AEP produces more greenhouse gases than most electric companies in the United States, so we have an increased responsibility to be part of the climate change solution, internationally, nationally and locally.

For more than a century, AEP has created new ways to provide power for today while preparing for the needs of tomorrow. While others may watch and wait, we move aggressively to meet those challenges in new and exciting ways. We maintain our leadership by innovating and by turning responsibility into opportunity through technology and efficiency.

Our employees play a key role in leading us forward and their well-being is our paramount concern. We accomplished a goal in 2007 that had eluded us for 10 years: no AEP employee lost his or her life while working. I am profoundly thankful and relieved about this, and I am determined that we continue to do more to prevent fatalities and injuries in this year and in the future.

I am unhappy to report, however, that last year we had more recordable injuries and more safety inspections and fines from the Occupational Safety & Health Administration than in 2006. Our goal is to be "best in class" by 2010 and we must intensify our commitment to get there. We also must insist that our contract work force improve their safety performance, or they will not be allowed to work for AEP.

Safety and health are a personal obligation and a collec-



tive responsibility, one that we must embrace and share. I will never stop making that point. We must not take shortcuts or unsafe actions that can have dire consequences to us, our co-workers or our families.

We took a major step toward creating a sustainable future last year by obtaining a far better understanding of how our stakeholders want us to measure, manage and account for the full range of our impacts, both positive and negative. Technology can and will provide

many solutions, but not without the support and trust of our stakeholders, who have to live with the results of that technology. We must be allowed to test and validate these new technologies and we need their support for this.

Stakeholder engagement is making AEP a better company. This year we engaged many more stakeholders in the process. These thoughtful discussions gave us a greater understanding of who we are and what is expected of us, much of which is reflected in this report.

Scientific evidence has led us to conclude that human activity has contributed to global warming. We will continue to be part of local, national and international efforts to find a reasonable, achievable approach to carbon controls. We are working to develop federal legislation that combines a mandatory cap-and-trade program with provisions to ensure the participation of all countries. We believe strongly that carbon caps must have broad bipartisan support and not cause serious harm to our economy. Federal climate policy must recognize coal's vital role in our nation's energy independence; we cannot afford to turn our back on this abundant, domestic resource. We support a more diversified and domestic-based energy supply mix, increased energy efficiency and greater investment in new energy technologies.

We took a leading role in addressing climate change on the international stage last year. AEP was one of 10 global companies that worked with the World Business Council for Sustainable Development's Electricity Utilities Sector Project to identify short- and long-term technology solu-

tions and to call for international public policies to promote them. This WBCSD report was presented to leaders from more than a dozen countries at the United Nations' international climate negotiations in Bali, Indonesia.

For AEP's part, we are working to bring advanced coal technologies, including carbon capture and storage, ultra-supercritical pulverized coal and Integrated Gasification Combined Cycle (IGCC) to commercial operation. We are pleased that the West Virginia Public Service Commission recently approved our proposed 629-MW IGCC plant, a decision that recognizes the importance of this technology to our future energy security. We hope for a similar decision from the Virginia State Corporation Commission.

We are disappointed that a recent decision of the Ohio Supreme Court on our proposed IGCC plant rejected a PUCO-approved mechanism for timely recovery of future costs of the project. We remain hopeful we can resolve this issue.

Meanwhile, we will complete a validation project for carbon capture at our Mountaineer Plant in West Virginia in 2009. We plan to have the equipment and permits we need this year to drill the underground wells that will permanently store the carbon dioxide. We also received some approvals for one of our advanced clean-coal plants—the Turk Plant in Arkansas—but, unfortunately, Oklahoma rejected the other.

We were disappointed with the Department of Energy's (DOE) decision to end its funding of the FutureGen project—the first near-zero emissions coal power plant. The DOE has restructured the FutureGen project funding, giving us an opportunity to receive funds to support our carbon capture and storage initiatives, and we are pursuing that option.

Electricity production is only part of the equation. It is critical to harness new sources such as wind, biomass and solar and to have the ability to deliver electricity across state and regional boundaries to where it is most needed. We believe an extra-high voltage interstate transmission system regulated at the federal level, similar to natural gas pipelines, is in the nation's best interest. The existing transmission system simply cannot meet the growing demand for energy, including energy efficiency and renewable energy.

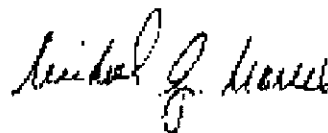
We envision an enhanced electric distribution system, giving our customers far more control and choice over their electricity, much like they now decide which mobile phone plan to buy. Freedom of choice will be an enormous benefit to our customers, enabling them to reduce consumption, control costs and limit their individual environmental impacts.

This distribution system, part of our gridSMART<sup>SM</sup> initiative, will also provide data to improve service reliability, increase efficiencies on our system and reduce customer outage times. Our agreement with the General Electric Co. to deploy equipment and technology programs is an important component of our plan to supply our 5.2 million customers with "smart meters" by 2015 to give them the information needed to control their electricity use.

We continue to be challenged by an aging work force: 18 percent of our employees are eligible to retire today and 10 percent of our employees are likely to do so in the next four years. This is significant because it takes years to train employees to operate power plants or work on the electric transmission and distribution system. Our employees have shared their concerns about this challenge and we are working to provide more information about our plans. We must continue to have a stable, diverse, knowledgeable and motivated work force in the future in order to meet our business goals.

We see a world in which energy transmission is facilitated and climate change is addressed; a world in which electricity is created from more diverse and cleaner sources and used more efficiently with far more control in the hands of users. We see a senior management team and work force that is prepared and eager to lead this change, with the ability and commitment to make it happen. Working with others, we have the power and the talent to make it happen.

Thank you for your interest in American Electric Power.  
Sincerely,



**Michael G. Morris**

Chairman, President & Chief Executive Officer

## DEAR STAKEHOLDERS,

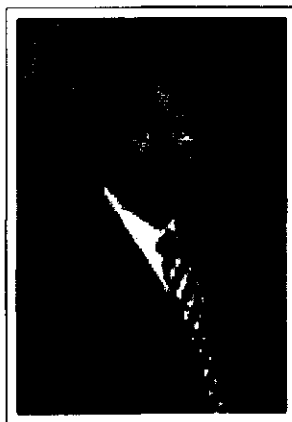
At AEP we are trying hard to balance meeting the needs of shareholders, customers, employees, communities, the environment, public health and the world in which we live. The better we strike this balance, the better we will do as a business.

We live and work today in an interconnected world, side-by-side with many different stakeholders: advocates and community groups, neighbors, customers, investors, regulators and national and international political leaders. They often have different points of view from ours and from one another. We are starting to discover that by simply listening to each other and working together, we all make more informed and better decisions. AEP does not have all the answers to climate change or any other issue. But we are more likely to find the right answers by working closely with others to build knowledge, trust, mutual awareness and respect for each others' needs. It is also vitally important that each of these groups interact in the same way with us.

We have committed to you to be candid and transparent about our business. Last year we reached out to many of our stakeholders and collaborated with them throughout the year about climate change, technology, energy efficiency and transmission siting. Our first sustainability report gave us a meaningful vehicle for those discussions and we hope this one will as well. What we learn not only helps to shape this report but also to influence the decisions we make, the programs and practices we implement and our fundamental understanding of who we are and what we are about.

I cannot emphasize enough that we view this document as much more than a "report"; rather, we see it as a road map for the future, guiding our actions and bringing us closer to our stakeholders.

As a result of these discussions, we have become more aggressive about our own energy conservation and have begun to reduce the demand for electricity from our customers; we have started to work with our coal suppliers and others



to improve their environmental, safety and health practices; we have become more engaged internationally, as well as nationally, in the drive to find achievable solutions for global climate change; and we continue to engage more of our stakeholders on a wider range of issues.

Sustainability is a journey for AEP, but it must be a personal journey for our management and our employees, too. One of our continuing challenges is to spread our

vision for sustainability throughout the company so that we all understand and embrace it and are aware of our personal roles in leading AEP into the future. We are developing a plan that will raise awareness among employees and embed sustainability within training, leadership communications, new employee orientation and day-to-day operations.

Our employees and company have succeeded for more than 100 years by being innovative and bringing new technologies forward to address challenges. One of today's greatest challenges is climate change and the solutions will affect AEP and our industry far into the future. As Mike Morris has said, we believe that advanced technology combined with an enlightened public and responsible regulation are the essential elements in addressing climate change. We are prepared to do our part.

If we are to achieve a reasonable solution to global climate change, we have to significantly increase investments in new technologies and energy efficiency programs. Our job is to convince our customers and regulators that these investments are necessary and appropriate. We work continuously with our federal regulators, state public utility commissions, customers and legislators to convey our message and points of view.

It is gratifying to hear from so many of our stakeholders that they believe we are making progress. But we know our actions speak much louder than any document and we recognize there is much more to do. Our environmental compliance performance was excellent in 2007; we made tremen-

dous progress toward achieving our ultimate goal of zero environmental enforcement actions. We had fewer incidents of non-compliance last year than in 2006 and, more importantly, when something did occur we reached out to regulators and advocates to work with them to prevent future incidents.

It would be wrong for AEP to advocate energy efficiency as part of the climate change solution and not practice it ourselves. With more than 400 facilities in 11 states, we have a unique opportunity to be more energy efficient and to demonstrate the value and cost-effectiveness of "green" buildings, especially in an industrial setting. Through the Clinton Global Initiative we committed that, as we invest approximately \$100 million during the next five years to build or update existing facilities, we will do so according to Leadership in Energy and Environmental Design (LEED) standards as those opportunities arise. We are also working toward achieving greater efficiencies through more efficient electrical transformers, heating and cooling equipment and other initiatives.

We settled our New Source Review litigation in 2007, enabling us to move forward with plans to lessen our environmental impacts over time. The settlement provides for a broad range of environmental projects: reducing emissions from our coal-fired power plants, adding more hybrid cars and trucks to our automotive fleet, converting our river fleet to ultra low-sulfur diesel fuel and developing land conservation and restoration programs.

The safety and health of our work force, our customers and the general public are always our top concern. We are very grateful that we had no AEP fatalities last year—the first time since 1997 and only the second time since 1970. We know we can work safely when we stay focused and look out for each other. Unfortunately, contractors working for us and members of the public were fatally injured after coming in contact with electrical facilities.

We are concerned about the growing number of accident near-misses that are occurring within AEP, too. We must work harder to take the "luck factor" out of safety and health and replace it with the "on purpose" factor, which entails

aggressive, relentless preventive action. Our focus on hazard recognition is changing how and when employees and contractors think about the risks associated with their jobs. By identifying all hazards and risks associated with any job, we can change tools or procedures and influence behaviors to prevent injuries and occupational illnesses from happening. That sounds easy, but we all know that changing human behavior is often a difficult challenge.

We have renamed this report the *AEP Corporate Sustainability Report* based on stakeholder feedback. While similar to our first Corporate Responsibility Report, we believe the new title better reflects its content and orientation. Also, several stakeholders suggested we identify it as the 2008 report, rather than the 2007 report, because we look forward as much as we review past performance.

Sustainability is a process of continuous change and improvement. We are on a pathway that bends and turns as we work with others to address the issues that face us. With hard work and dedication, we will move forward on that path so that we can be proud of what we have accomplished and give the next generation the ability to meet its needs.

The constructive tension between non-governmental organizations, such as environmental groups, and the business community has helped each of us to improve who we are as people, as organizations and as corporations. What's changed is that we now collaborate more frequently because we are more willing to listen to each other and have productive discussions on issues of mutual interest.

We enjoy and continue to learn from our ongoing dialogue and collaboration with our stakeholders and I thank them for their efforts. To those who are new to us, we welcome your comments and invite you to join us—and to challenge us—as we move forward.

Sincerely,



**Dennis E. Welch**  
 Executive Vice President,  
 Environment, Safety & Health and Facilities

## About This Report

### OUR CORPORATE VISION

We seek to maintain our leadership as one of the largest generation and transmission companies in the United States and 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 enters its second century committed to operating responsibly, efficiently and profitably for customers, shareholders, employees and communities. We will safely provide reliable, reasonably priced electric power while working to protect people and the environment. We will engage stakeholders and continue our role in making people's lives better today and for generations to come.

### MATERIALITY

Like last year's report, this report covers seven material issues identified by management and our Board of Directors that (1) have a significant impact on the finances or operation of the company; (2) have significant impact on the environment or society now or in the future; or (3) substantially influence the assessments and decisions of stakeholders.

Our seven 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 meet our sustainability vision.
- **Environmental Performance:** Although environmental laws and regulations are complex and change frequently, we must comply at all times, and we have made significant investments in order to do so. Our challenge is to continually

achieve compliance and to reduce risks to the environment and the health of our communities.

- **Work Force Issues:** Protecting our employees' safety and health and ensuring that we have a skilled, diverse work force to build, operate and maintain new generation, transmission and distribution technologies are imperative if we are to remain an industry leader.
- **Public Policy:** We must actively engage policymakers, employees, community leaders and other stakeholders to ensure that public policy, laws and regulations allow us to

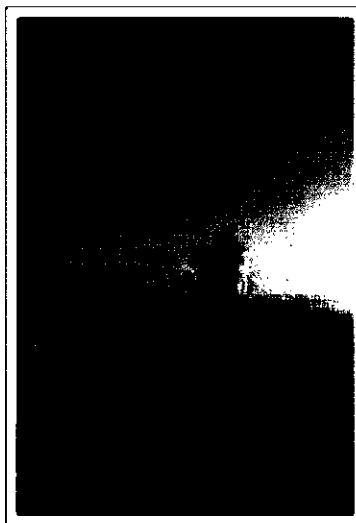
continue to serve our customers, reward our shareholders and pursue our vision for sustainability.

- **Climate Change:** We are one of the largest greenhouse gas emitters in the Western Hemisphere. Our sustainability and financial stability, and the economic well-being of our service territory, are at risk if we are not able to prosper with the proposed passage of a U.S. climate policy. Our success will be based on our ability to work with technology providers to bring new technologies to commercial scale.

### • Energy Security, Reliability & Growth:

Our electric delivery system must be modern, reliable and keep pace with customer demand with a diverse fuel supply. This requires us to collaborate with regulators, legislators and other stakeholders not only to create and maintain such a system, but to ensure timely regulatory cost recovery.

- **Stakeholder Engagement:** We need to work closely with our numerous stakeholders, such as investors, customers, employees, regulators and policymakers. If we are to be sustainable, we must be transparent and listen to all points of view while measuring and holding ourselves accountable for our impacts.



Rockport Plant, Indiana

### STAKEHOLDER REVIEW OF THIS REPORT

American Electric Power conducted eight stakeholder meet-

**Top 10 Issues Raised by Stakeholders**

- Safety and health in the workplace – leading versus lagging indicators
- Climate change – policy position, technology
- Cost of electricity – more consumer education
- Energy efficiency – part of the climate change solution
- Mountaintop mining – position, environmental impacts
- Mercury issues at power plants – CAMR ruling
- Aging work force – plan to address
- Transmission growth and the need for it
- Supply chain performance, accountability
- Environmental effects/impacts – water, air, waste

ings in the process of preparing this report, enabling us to engage many more stakeholders than in the past. Our operating companies and power plants, as well as senior management, participated in this process.

We worked with SustainAbility, a highly regarded sustainability firm, to facilitate most of our stakeholder meetings. We spoke with state and federal regulators, power plant neighbors, environmental and conservation groups, customers, employees, academia and community leaders. We worked again with Ceres, a network of investors, environmentalists and other public interest groups that works with companies and investors to address sustainability challenges. Ceres brought together 17 organizations for this process. A group of investors also met with AEP to talk specifically about sustainability issues. Our discussions are reflected throughout this 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 and regulators

Our 2006 Corporate Responsibility Report won praise from *Corporate Responsibility Officer* magazine.



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

**REPORTING PERIOD & DEVELOPMENT**

This report is based on performance and information for calendar year 2007, but also provides available data for 2005 and 2006 to establish trends against which current performance can be compared. Financial performance is covered in AEP's *2007 Annual Report to Shareholders*. This report contains forward-looking information about our goals and progress.

AEP's Steering Committee for Sustainable Development, co-chaired by the chief financial officer and the executive vice president of environment, safety & health and facilities, guides the company's sustainable development and participated in creating this report. This executive-level steering committee represents every business function at AEP and met periodically throughout the year. The Committee on Directors and Corporate Governance of AEP's Board of Directors reviewed the report and its content. The full Board of Directors also reviewed the report and voted to approve it.

AEP joined SustainAbility's Engaging Stakeholders Program, which conducted a benchmark of last year's report. The benchmark study offered several suggestions for improvement, such as to make a clearer business case for climate change action and to show how sustainability is being integrated within the company. The study also found the report to be comprehensive, candid and transparent.

Last year's report was reviewed by *Ethical Corporation* magazine, which said: [our] "approach to corporate responsibility reporting is proportionate in size yet without verbosity or hype." The review offered thoughtful suggestions for improvement that we considered in developing this report.

### CHANGES IN REPORTING

This report includes metrics for each material issue within each section of the report relating to that issue, eliminating the need for an overview section (formerly entitled "*Challenges, Goals, Progress*"). Many of our stakeholders asked for a shorter summary report and we will publish one starting this year.

AEP is participating in the Global Reporting Initiative (GRI) Electric Utility Sector Supplement Pilot designed to identify relevant performance indicators for the electric utility industry globally. This report incorporates more of the Supplement's indicators than did last year's report.

### COMPLETENESS,

### RELIABILITY & ACCURACY OF REPORTING

Through AEP's Enterprise Risk and Insurance Department and oversight by the Risk Executive Committee, AEP established a formal information collection and reporting process for GRI indicators that allows us to track our progress against our commitments. Reports to the Risk Executive Committee are made twice a year and are reported to the Board of Directors. Each business unit collects and verifies data for which it is responsible. Some of the data presented are required to be filed with other entities (e.g., Chicago Climate Exchange, U.S. EPA) and are verified accordingly. We continue to develop a more complete information management system as part of our sustainable development initiative.

### REPORTING PRINCIPLES & GUIDANCE

We continue to follow GRI's G3 Reporting Principles in an effort to provide a balanced and reasonable representation



of AEP's sustainability performance. These principles are materiality, stakeholder inclusiveness, sustainability context, completeness, comparability, accuracy, timeliness, clarity, reliability and boundary setting.

### CONTACT FOR QUESTIONS ABOUT THIS REPORT

For additional information about this report, the GRI infor-

mation on AEP's web site or the company's sustainability initiatives, please contact Sandy Nessing at [smnessing@AEP.com](mailto:smnessing@AEP.com).

## Strategy & Management

### OUR STRATEGY FOR SUSTAINABILITY

Our corporate Vision, Mission, Strategy & Values statements outline the principles that guide our business. Our effort to integrate corporate sustainability with our business strategy and daily decision-making has prompted us to take a wider view of what a sustainable future looks like for AEP. For more details on AEP's vision, mission and values, please visit [www.AEP.com/about](http://www.AEP.com/about).

We strive to put people first—the health and safety of our employees and contractors working for AEP and the welfare of the communities in which we operate are very important to us. AEP elevated oversight of environment, safety and health to the executive vice president level in 2007 to underscore the critical importance of safety and environmental sustainability to the company's future and the increasing stature of AEP as a leader in corporate sustainability.

Our customers and communities rely on us to meet their energy needs in ways that improve their quality of life and protect the environment today and for future generations. Our challenge is to help our customers understand the true value of electricity—from the raw materials to the impacts on the environment—and offer ways to encourage energy efficiency and give them greater control over use and cost. We also have to obtain adequate and timely recovery of AEP's costs and earn a reasonable return for our shareholders on the investments we make in the company.

### OUR CHALLENGES & OUR OPPORTUNITIES

Our ability to address climate change will require new technology coupled with policies and regulations to support its deployment; legislative and regulatory support for energy efficiency programs and initiatives to help our customers decrease their demand and usage; expansion of the transmission grid to facilitate fuel diversity; renewable energy growth and

reliability; continued availability of greenhouse gas offsets; and additional plant efficiencies. Before we invest in these solutions we collaborate with our stakeholders to ensure that we can recover our costs from these investments while meeting any new mandates.

Our projected earnings growth rate of 5 percent to 9 percent per year through 2010 is based on making capital investments and securing timely regulatory recovery. Our business strategy is based on the idea that sustained capital investment supports earnings growth. We have delivered on this strategy in 2006 and 2007 and will do so again.

Our capital investment outlook presents opportunities from the short to the long term. We are investing \$2.5 billion per year to improve plant efficiency and reliability to keep our coal plants economically viable. Concurrently, we are completing our \$5.4 billion environmental retrofit program to comply with current mandates; investing \$1.3 billion in new generation facilities to meet growing demand within our service territory; and conducting research and feasibility studies on carbon capture and storage technology. With regulatory approval, we intend to invest \$1 billion to \$2 billion to modernize our electric distribution infrastructure through gridSMART<sup>SM</sup>.

Our long-term vision is for an interstate transmission system that will minimize environmental impacts, reduce land use and provide electricity more reliably and efficiently. We intend to have a carbon retrofit solution commercially available for our coal plants, have advanced coal plants commercially operational, and possibly pursue a nuclear construction and operating license within the next decade. For more information, visit [www.AEP.com/investors/annrep](http://www.AEP.com/investors/annrep).

#### MANAGING OUR RISK

AEP uses an enterprisewide approach for risk management that encompasses all business units and aligns with our major business functions. Our objective is to review the company's total risk profile to assure accountability for the identification, measurement, evaluation and management of risk.

The Risk Executive Committee, which includes AEP

senior leadership and risk managers, approves and monitors key risk factors and ensures they are integrated in strategic planning. This includes climate change, which we consider to be a potential high-impact risk. The committee determines which risks require an independent assessment and which risk factors are best measured through the business units. The Audit Committee of the Board of Directors regularly receives summary reports regarding the company's risks.

#### ETHICS & COMPLIANCE

AEP's commitment to high ethical standards comes from the collective ethics, character and integrity of our employees. We are committed to do what's right, at the right time, all of the time. We regularly survey and discuss AEP's ethical standards with our employees and, while there is opportunity for improvement, they give the company high marks. Our employees generally believe that the company's leaders will do what's right, not just what's profitable. Employees have also told us that they see AEP managers living the company's values of safety, justice and fairness, trustworthiness, responsibility, environmental stewardship, citizenship, respect and caring.

AEP requires all employees to abide by its *Principles of Business Conduct*. We provide a 24-hour, toll-free anonymous concerns line for reporting and receiving help with ethical issues. We communicate the numbers and types of concerns that are raised and how we resolve them and continually look for new ways to allow employees to raise and discuss ethical questions because we understand that keeping our values in the forefront is the key to maintaining an ethical culture.

Ethics and compliance are areas of ongoing focus for the company. We are committed to strengthening our programs and continuing to instill high standards of integrity and behavior throughout the company. ■



# Environmental Performance

Our success as a company is based on many factors, one of which is executing excellent environmental programs that address a variety of issues. This section presents those programs and their results—of which we are quite proud, but which we constantly seek to improve.

We have recently taken first steps toward expanding our environmental efforts to include our use of natural resources and the activities of our suppliers. From our “green” building initiative announced in conjunction with the Clinton Global Initiative to our focus on working with our suppliers on sustainable initiatives, we are leveraging our resources and expertise as broadly and deeply as we can.

## COMPLIANCE

For AEP, compliance is both a legal requirement and a social responsibility—it is a fundamental expression of our regard for society. It is unacceptable for us to be out of compliance at any time and we are dedicated to achieving our goal of zero environmental enforcement actions. During 2007, we were cited with two formal environmental enforcement actions, compared with nine in 2006. One was related to a landfill issue at our Mountain-  
 eer Plant in West Virginia and the other to our inability to meet a new water quality permit limit at the Comanche Plant in Oklahoma.

In 2007, federal, state and local regulatory agencies conducted 112 inspections of our power plants, 15 inspections of our utility operations facilities and 344 inspections of our fuel operations facilities. These resulted in one of the two formal enforcement actions received last year. That does not mean we were perfect all but a couple of times; these inspections point out general areas where improvement is needed. Understanding the requirements and expectations of regulatory agencies is a critical part of our environmental program, and these inspections provide an important feed-

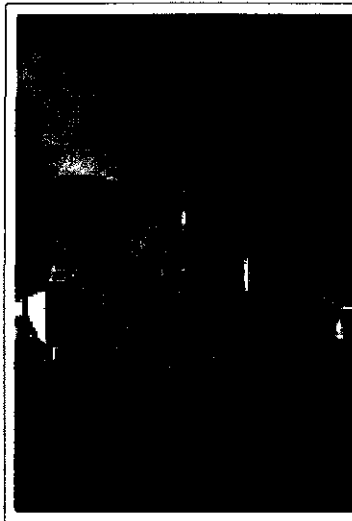
back mechanism for our employees and executives. We set internal environmental goals each year that are tied directly to the company’s incentive compensation program.

We also conduct our own environmental audits, covering both federal and state requirements. In 2007 we audited five service centers and 31 power plants to assess their environmental compliance and capacity to remain in compliance. Our internal reviews generally showed our environmental programs to be functioning effectively at all locations visited. While overall performance has improved, the audits

identified opportunities both to correct and enhance our environmental programs. By year end, all corrective actions identified were complete or in process. Our primary challenge now is to communicate individual audit results more effectively across business units so they can become shared learning, in order to prevent similar occurrences elsewhere.

Managing Environment, Safety & Health (MESH) is an initiative to conform to the international environmental management system standard ISO 14001, and to increase knowledge and awareness to drive continuous performance improvement. Through MESH, 12 power

plants are improving management of their significant environmental aspects. This includes improving heat rates to operate the plants as efficiently as possible and subsequently reduce air emissions, and improving preventive maintenance on pollution control equipment to minimize environmental impacts. We are also working with regulators to manage water resources by using water for cooling and cattle and livestock use. We are improving storm water outflows to prevent soil and erosion run-off and improving the identification and management of environmental aspects at our construction sites. (See *Work Force Issues* to read about the MESH initiative’s work to improve safety and health management.)



AEP uses a variety of methods to deliver coal, including trucks, barges and rail.

AEP's underground storage tank (UST) operations are a good example of our proactive approach to compliance. We own and operate more than 230 USTs that contain large amounts of gasoline, diesel fuel and oil. We inspect them, perform leak detection tests and maintain the tanks on a regular basis. In the last three years, there were 59 routine regulatory inspections with no enforcement actions.

#### AIR QUALITY ISSUES

AEP's program to install emissions-reduction controls on existing power plants was the largest within the electric utility industry in 2007 in terms of capital investment and construction. Through this program we installed and brought online pollution controls to reduce sulfur dioxide (SO<sub>2</sub>) emissions on 3,500 MW of generation. Controls to reduce nitrogen oxide (NO<sub>x</sub>) emissions began operating on 1,600 MW of generation.

We have completed more than two-thirds of our \$5.4 billion investment program to reduce airborne emissions from our coal-fired power plants to comply with the federal Clean Air Interstate Rule (CAIR) and the recently-vacated Clean

#### AEP NSR Settlement Facts—By the Dollars

- \$4.6 billion settlement.
- \$15 million for civil penalty.
- \$1.6 billion estimated cost for additional emissions control equipment.
- \$36 million for environmental projects coordinated with the federal government.
- \$24 million to eight states for environmental mitigation.
- \$2.2 million in attorneys' fees.
- Balance for ongoing plant retrofits.

Air Mercury Rule. This program significantly reduces emissions and provides compliance with more stringent environmental requirements while allowing these low-cost facilities to continue to meet our customers' needs for energy.

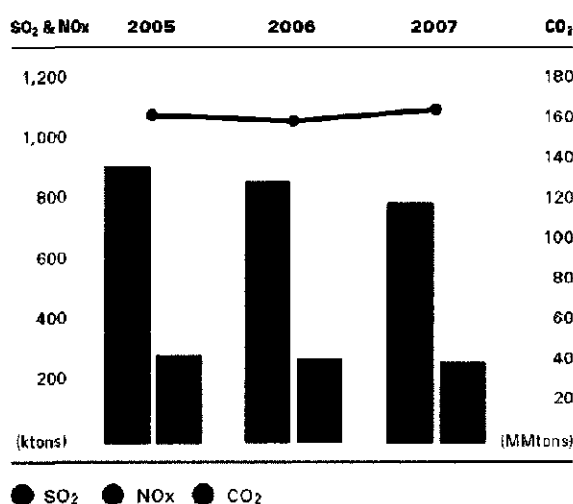
AEP's court-approved settlement of the New Source Review (NSR) litigation provides us with additional opportunities to reduce our power plant emissions. The complaint by the U.S. EPA and others alleged that AEP had made major modifications at some of its coal-fueled generating units without obtaining the necessary permits and without installing controls required by the Clean Air Act to reduce emissions of SO<sub>2</sub>, NO<sub>x</sub> and particulate matter.

The settlement encompasses all of the environmental retrofits we have already completed as well as those we have planned, while providing for additional controls at our Rockport Plant in Indiana. We also agreed to annual SO<sub>2</sub> and NO<sub>x</sub> emissions caps on our 16 coal-fueled power plants in Indiana, Kentucky, Ohio, Virginia and West Virginia.

As part of the NO<sub>x</sub> reductions, AEP will operate its selective catalytic reduction systems (SCRs) year-round on generating units at three of our eastern coal plants starting in 2008. SCR equipment is currently operated to reduce NO<sub>x</sub> emissions only during the May through September ozone season. Additional environmental controls will be added to several other plants by 2019 as part of the CAIR compliance program.

#### AEP's Annual Emissions Profile

(SO<sub>2</sub> and NO<sub>x</sub> in kilotons, CO<sub>2</sub> in million metric tons)



In 2007, AEP's CO<sub>2</sub> emissions increased 2.8 percent while electricity demand grew 3.6 percent. The decline in SO<sub>2</sub> emissions reflects the success of our environmental programs.

Our efforts will eventually reduce SO<sub>2</sub> emissions from our eastern coal-fired power plants by more than 650,000 tons per year and NO<sub>x</sub> emissions by 159,000 tons per year. The agreement includes \$36 million for environmental projects coordinated with the federal government and \$24 million to the states that were parties to the agreement. AEP also paid a civil penalty of \$15 million. AEP did not admit to wrongdoing by agreeing to this settlement. For a full summary and schedule of NSR settlement commitments, visit [www.AEP.com/cr/nsr](http://www.AEP.com/cr/nsr).

#### MAKING OUR OWN BUILDINGS MORE ENERGY EFFICIENT

According to the World Business Council for Sustainable Development, buildings use about one-third of the world's energy and, if this trend continues, will become the world's primary energy users by 2025. AEP operates more than 400 facilities in the United States, giving us an opportunity to demonstrate the value and cost-effectiveness of energy efficiency within our own buildings.

Through the Clinton Global Initiative, we committed to invest approximately \$100 million during the next five years to build or update AEP facilities using the U. S. Green Building Council's Leadership in Energy and Environmental Design (LEED) building rating system. AEP completed construction in early 2008 on a new facility in Ohio that will seek LEED "silver" certification and will use 15 percent less energy and 20 percent less water than comparable non-LEED buildings. We will also apply LEED standards to renovations or new construction of service centers in Indiana, Texas and Arkansas. Some stakeholders have asked us to consider Green Globes as an alternative to LEED, which we will evaluate.

#### WATER QUANTITY & QUALITY

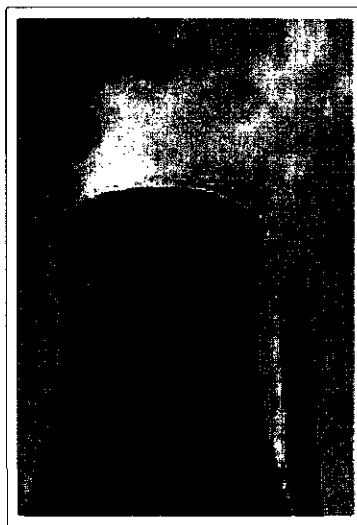
As the population grows, water requirements increase. In

certain areas, domestic needs may come into conflict with the needs of industrial and energy facilities. Climate change can have an adverse impact on water availability. This issue is of great concern to many stakeholders and AEP, so we will be taking a closer look at it going forward.

AEP uses large quantities of water to operate our power plants—roughly 10.5 billion gallons per day to generate steam and to cool plants. Most of it travels through the facility once before nearly all of it is returned to its source, in accordance with our permits. More often than not, the water

is cleaner when it is returned than when it was withdrawn. Compliance with our water quality permits is important to us because they are designed to address known and unintended impacts, including water temperature impacts on fish.

We are concerned about potential changes in Clean Water Act regulations—the federal framework that governs our water use and our impacts on water resources. A court decision issued in 2007 could require many of the nation's power plants to replace existing cooling systems with new cooling towers—restricting the U.S. EPA to allow power plants to use cooling systems other than



Cooling towers, like this one, release excess heat from a power plant to the air, rather than to rivers or lakes.

cooling towers.

AEP owns and operates 18 power plants that could be affected. The EPA estimated the cost to AEP at \$193 million and the cost to the electric industry at billions of dollars to be spent on new capital investments and increased operation and maintenance costs. We are working with the EPA to develop a revised rule that will keep costs reasonable while maximizing environmental benefits.

#### IMPROVING AIR QUALITY CAN

#### AFFECT OTHER ASPECTS OF THE ENVIRONMENT

Environmental controls installed to improve air quality can create other environmental challenges and managing these

trade-offs can be difficult. In some cases, the controls we use to reduce air emissions can adversely affect the quality of our water discharges.

AEP uses the mineral trona to control sulfur trioxide (SO<sub>3</sub>) levels in the flue gas on certain units, including our Mitchell Plant in West Virginia. Unfortunately, when we used trona there, the pH of the fly ash pond increased and heavy metal concentrations rose to levels above the permit limits. We are exploring solutions at Mitchell Plant and will apply the lessons learned to other plants as well.

Another challenge is compliance with fly ash pond discharge limits when SCRs operate year-round. Some of the ammonia used in the pollution control systems ends up in the fly ash ponds. In the summer, bacteria and algae in the ponds absorb or chemically alter ammonia, making it less toxic. But when the SCRs run in the winter, when the water is much colder, biological reactions occur very slowly. In these conditions, ammonia levels can remain high. Fortunately, ammonia is less toxic in cold water, so AEP has worked with state regulators to increase permit limits during the winter. Without these increases, operating SCRs year-round to comply with the NSR settlement and Clean Air Interstate Rule could create compliance problems with our state water permits.

#### WASTE MANAGEMENT

AEP reduces, reuses or recycles as much of its waste as possible and tries to dispose of the remainder with the least adverse effect on the environment. For example, the company has recycled more than 180 million pounds of metal, 5.8 million pounds of paper, 2.6 million gallons of oil and more than 470,000 light bulbs during the last five years. We do not track the total weight of our general refuse but we do track special waste streams, such as hazardous wastes, polychlorinated biphenyl (PCB) and other products that have serious environmental consequences if not properly disposed.

We report to the U.S. EPA under the Toxic Release Inventory Program (TRI) the transfers and releases of toxic chemicals that occur off-site. For AEP this report typically

includes metals found in ash, emissions, waste put in landfills, ammonia and acids. Our TRI report is available on our web site. For a full waste management summary, visit [www.AEP.com/cr/GRI](http://www.AEP.com/cr/GRI).

One of two waste-related enforcement actions AEP received in 2007 related to construction of a landfill at our Mountaineer Plant. After substantial rainfall, landfill runoff inadvertently carried soil and fly ash from the plant into nearby waterways and neighboring properties. There was no fine associated with the Mountaineer enforcement action.

We also self-reported an error we found in how material from the Conesville Plant scrubbers had been disposed of and took corrective action. We conducted a root-cause analysis and changed some of our processes in the short-term while we develop a long-term solution to address these issues and prevent future recurrences.

#### MERCURY

Mercury, a toxic heavy metal, is released when coal is burned. The amount of mercury emitted from our power plants depends on the type of coal and the emission control equipment installed. AEP's Pirkey Plant in Texas was ranked as one of the two highest emitters of mercury in the United States last year, for the third straight year (based on 2005 data), because the lignite it burns tends to have higher mercury levels compared with other types of coal. Pirkey's SO<sub>2</sub> scrubber removes significant amounts of the mercury in the flue gas.

Concerns about the environmental and public health implications of mercury emissions led the U.S. EPA to establish the Clean Air Mercury Rule. AEP has been working toward meeting the requirements of that rule, which had a compliance deadline of 2010. The necessary emission reductions will come largely from installing SO<sub>2</sub> scrubbers and NO<sub>x</sub> SCR systems which, in combination, can achieve significant mercury reductions. Additional controls may be needed as well.

The EPA's mercury rule was challenged by a number of states and environmental groups when it was issued in 2005.

In February 2008, the District of Columbia Circuit Court of Appeals sent the rule back to the EPA for reconsideration. The ultimate impact of this ruling is unclear.

Even with the uncertainty created by the recent legal challenge, we will still make significant mercury emission reductions at our power plants that have been equipped with scrubbers and SCR systems. We will move ahead with installing the mercury monitoring equipment required by the Clean Air Mercury Rule. We expect this equipment to provide detailed information on actual emissions—which may assist in the development of the new regulatory requirements.

Once again, there are trade-offs. One challenge is that removing mercury from air emissions results in higher levels of mercury elsewhere, such as in approved solid waste landfills and in wastewater treatment ponds. AEP's power plants with scrubber systems must manage an increased amount of mercury in wastewater within the limits of their water quality permits. In some states we expect regulators to begin including very low effluent limitations for mercury in renewed or modified wastewater permits. We have accelerated our evaluation of new technologies that might meet these requirements, but they are still in very early stages.

#### PCBs: STILL AN ISSUE

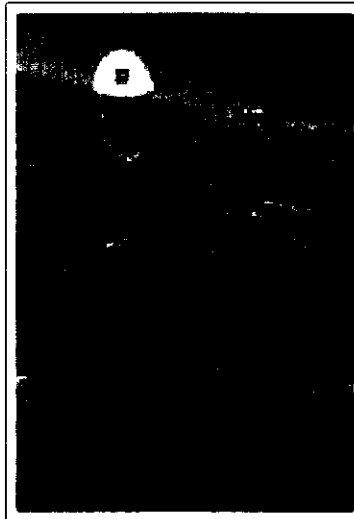
PCBs have been used since the 1930s. However, they are a suspected human carcinogen and are heavily regulated by federal and state agencies. AEP still has equipment in use, such as transformers and capacitors, that contain PCBs. We are eliminating them through planned phase-outs.

Since 2000 we have disposed of more than 12,000 PCB and PCB-contaminated transformers and more than 4,500 PCB capacitors. We will continue to replace known PCB transformers at our power plants during planned outages

and as part of required maintenance during the next decade. We have approximately 427 pieces of equipment to replace. We also have approximately 700 PCB capacitors in service at 11 electrical substations. We are developing plans to remove them.

During all property transactions involving facilities or sites where PCBs were known or could be assumed to have been in use, we conduct a thorough site assessment to determine if there is any PCB contamination. In 2007, AEP conducted 27 site assessments that resulted in eight PCB remediation projects which were completed without incident.

In 2007, we had approximately 1,625 documented spills from oil-filled electrical equipment. A small portion of these (6.2 percent) were significant enough to be reportable to regulatory agencies and an even smaller number (2.3 percent) involved PCBs. Most were small spills caused by downed electrical equipment from car accidents, bad weather, vandalism or equipment failure. We clean these in a timely manner and report them, as appropriate.



AEP conducts thousands of tests each year to ensure compliance with water quality permits.

#### COAL ASH

AEP burns an estimated 76 million tons of coal per year, generating significant quantities of byproducts that need to be recycled or disposed of. As a member of the Coal Combustion Products Partnership, we promote the beneficial use of coal combustion products. Some of these can, for example, be used to treat acid mine drainage and return surrounding land closer to pre-mined condition.

We are working with the Ohio Department of Natural Resources to use coal combustion products (CCPs) to reclaim a 1950s surface mine that was abandoned, leaving behind acid mine drainage and a dangerous 100-foot-high wall. Acid mine drainage is a liability for AEP. While there are costs associated with this reclamation project, it will re-



Members of the Eastern Lands Resource Council visit AEP's Conesville Plant to learn about the company's land management practices.

sult in significant long-term savings compared with the cost of perpetually treating the runoff. It also will improve the water quality of nearby Wills Creek.

In 2006, the most recent year for which data are available, AEP produced nearly 8.4 million tons of coal ash products. Use of CCPs resulted in approximately \$18.6 million in avoided costs that would otherwise have been incurred to build and operate landfills for these byproducts. For more information about coal combustion byproducts and their uses, visit [www.AEP.com/about/coalCombustion/projects.htm](http://www.AEP.com/about/coalCombustion/projects.htm).

Although there are many beneficial uses for coal combustion products, we are reminded by stakeholders that environmental impacts also must be considered when determining how and where this ash will be used. We have heard these concerns and we are listening. We will do a better job of taking these considerations into account.

#### MANAGING NUCLEAR WASTE

Nuclear energy will likely play an increasingly important role in the nation's energy future, especially in a carbon-constrained world. However, the storage of nuclear waste presents a significant challenge.

For example, AEP's Cook Nuclear Power Plant in Bridgman, Mich., generates emissions-free energy. Cook Plant has been shipping its low-level nuclear waste to a storage facility in Barnwell, S.C. However, this option will no longer be available after June 2008 to companies that are not part of the Atlantic Interstate Low Level Waste Com-

pact. Consequently, Cook Plant will need to store its low-level waste on-site in High Intensity Containers (HICs) built in the 1990s. Cook currently generates enough low-level waste to fill seven of these HICs annually, on average, but will implement process improvements designed to reduce the number of HICs needed to four per year, thus reducing our storage needs.

Beginning in 2011, Cook Plant will employ on-site dry cask spent nuclear fuel storage until a permanent facility becomes available. The Cook on-site storage facility was originally designed to hold five years of waste; the changes made recently have extended its life to approximately 20 years—a necessity because a permanent storage facility for spent nuclear fuel and other high-level waste remains elusive.

We are disappointed and frustrated that the federal government has made no significant progress in meeting its obligation to take and store high-level nuclear waste. Since the enactment of the Nuclear Waste Policy Act of 1982, we and other nuclear generator operators have paid into a fund administered by the U.S. Department of Energy (DOE). In exchange, DOE is responsible for licensing, building and operating a permanent high-level nuclear waste storage facility.

The DOE has not met its 1998 deadline to begin taking spent nuclear fuel. We and other utilities have sued the DOE and a court ruled in our favor. The ruling requires that we prove the amount of our damage claims against the DOE periodically. For nuclear power to be a viable, long-term part of our energy future, the current impasse over permanent storage of high-level nuclear waste needs to be resolved.

#### ECOLOGICAL STEWARDSHIP & BIODIVERSITY

The construction and operation of AEP facilities have the potential to affect biodiversity if not well-managed. For example, the installation of pollution control equipment and associated landfills has resulted in the loss of wetland and riparian areas; however, these losses have been mitigated. Some of our hydroelectric facilities operate on waters considered to be of high biodiversity or ecological value.

We have addressed potential impacts through installation of fish ladders and by shutting down operations during spawning season.

On the flip side, many of AEP's power plants and transmission corridor projects are recognized for the habitat they support. Eight power plants and two transmission line corridor projects were recertified by the Wildlife Habitat Council last year as Wildlife at Work programs. Flint Creek Plant in Arkansas received a special award for its pollinator protection efforts.

AEP's investments in forestry not only benefit us by providing carbon storage, they also help to avoid deforestation and provide thriving habitats for endangered species. In the United States, AEP partnered with the U.S. Fish & Wildlife Service and The Conservation Fund to restore bottomland hardwood forests in the lower Mississippi River Valley. The project involved more than 18,000 acres and planting more than 3 million bottomland hardwood seedlings. They will provide habitat for local waterfowl, shorebirds and neo-tropical migratory birds, as well as white-tail deer, cottontail rabbits, river otters and many others. Learn more at [www.AEP.com/cr/ecological](http://www.AEP.com/cr/ecological).

## ENVIRONMENTAL MANAGEMENT—THE CHECKS & BALANCES

We work hard to measure and manage our environmental performance. But how do we keep ourselves in compliance on an ongoing basis? How do we manage and minimize water and energy use, waste and the impact of our daily activities on the environment?

We are implementing an initiative to conform to ISO 14001, an international standard for managing environmental performance, which will supplement our ongoing environmental programs. This is important to ensure that our future work force has the knowledge and access to information needed to maintain compliance. We began implementation of ISO 14001 at 12 power plants in 2007. Seven power plants and 17 hydro facilities will begin Phase One implementation in 2008 as part of our MESH initiative. (See the *Work Force*

*Issues* section to read about the MESH initiative's work to improve safety and health.)

## DEVELOPING A SUSTAINABLE SUPPLY CHAIN

We are looking at how we manage our supply chain in terms of environmental and social performance. We are identifying opportunities to work more closely with suppliers on a range of issues and have begun discussions with many of them. We place a high priority on safety, health and the environment—and we will require our suppliers to share that commitment.

## WORKING WITH OUR COAL SUPPLIERS

Our relationship with our coal suppliers is of particular concern to some of our stakeholders. Our choice of suppliers is determined largely by a least-cost procurement process to enhance our ability to receive full cost recovery from regulators. Because of this dynamic, we would be dependent on our regulators to accept a decision to buy fuel from certain higher cost suppliers even if the costs were higher as a result of better health, safety and environmental performance.

We are developing a process with coal suppliers to measure and track their safety, health and environmental performance, which we hope to implement in 2010. This type of transparency is new to our industry. We invite our peers to join us in working with the mining industry to adopt similar standards.

One issue we have been pressed to address is our position on mountaintop mining. As a regulated utility, we have an obligation to provide reliable electricity to our customers while taking steps to minimize cost. We do not make choices based on mining practices; our focus is on quality of coal and cost. However, we expect our suppliers to make every effort to operate in compliance with all regulations that apply to their industry. When our new process is in place, we will have greater transparency of our coal suppliers' mining operations, allowing us to make more informed decisions that we will share with regulators. Because of today's tight coal market and the duty to serve customers,

we must purchase coal to meet the demand, without exclusion. We recognize the concerns about mountaintop mining and have committed to continue discussions with interested stakeholders, including Appalachian Voices, to find common ground on this issue.

#### BEYOND OUR COAL SUPPLIERS

For the first time, AEP is taking a hard look at what we buy – from utility poles and transformers to chemicals and office paper – to see if there are better alternatives with fewer environmental impacts. AEP was the first electric utility to join the Green Suppliers Network. By the end of 2008 we expect at least five suppliers will have completed the environmental and technical reviews; three have already signed up.

To help us achieve our own goals, we have appointed a manager of Sustainable Supplier Development, who is organizing a process for sharing best practices among utilities that have a similar interest. We are also visiting manufacturers in China who make some of the parts for equipment that AEP buys, in order to learn more about their processes and impacts. This focus is still new to the electric industry, but we are enthusiastic about the opportunities to influence our supply chain and about the interest from our peers in collaborating with us. ■

#### Useful web links:

[www.epa.gov](http://www.epa.gov) • [www.usgbc.org/LEED](http://www.usgbc.org/LEED)  
[www.greensuppliers.gov](http://www.greensuppliers.gov) • [www.wildlifehc.org](http://www.wildlifehc.org)

## Challenges, Goals, Progress { Environmental Performance }

| Challenge                                                                                                                                                                                                                                                                                                                                                       | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Progress                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Achieving environmental compliance, preventing pollution, improving incident response and fostering positive regulatory relationships to enhance performance in an environment of complex regulations.                                                                                                                                                          | Zero enforcement actions.<br><br><b>ISO 14001:</b><br>Complete phase-in of MESH initiative by end of 2012 in all fossil and hydro power plants.<br><br>Target in 2008 – seven fossil plants and 17 hydro plants begin implementation.                                                                                                                                                                                                                                                           | Number of enforcement actions:<br>2007 – 2<br>2006 – 9<br>2005 – 5<br><br><b>ISO 14001:</b><br>2007 – 12 power plants began Phase 1 implementation.<br>2006 – four plants began implementation.                                                                                                                            |
| More stringent internal targets to challenge ourselves to go beyond compliance with environmental performance by tracking measures of air quality, water quality and waste management through an Internal Environmental Performance Index (EPI). Performance is tied to compensation. The EPI sets an annual target of total number of incidents for the index. | 2008 EPI goal = 12 or fewer incidents at generating units:<br><br>1. Opacity – measure of visual appearance of gas exiting power plant stack and is a rough indicator of particulate emissions.<br>2. NPDES (National Pollutant Discharge Elimination System) permit requirements (wastewater exceptions) – a measure of water quality permit compliance.<br>3. Oil and chemical spills – a measure of how we respond to and manage spills.<br><br>Proactive outreach with regulatory agencies. | EPI set a 2007 target of 12 or fewer incidents; 11 occurred.<br><br>Opacity – 1 (2006 – 0)<br><br>NPDES – 7 (2006 – 9)<br><br>Oil & chemical spills – 3 (2006 – 0)<br><br>Ongoing outreach with regulators.                                                                                                                |
| 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.                                                                                                                                                     | Achieve 1,000 MW reduction in demand by 2012 with 15 percent coming from AEP actions, 85 percent from customer programs.<br><br>Reduce AEP's mobile fleet consumption of petroleum-based products.                                                                                                                                                                                                                                                                                              | Installed meters at 95 percent of our facilities to monitor energy usage. Another full year of data will be necessary to have a solid baseline, allowing us to set long-term goals.<br><br><b>Fuel consumption</b><br>2007 – 5.6 million gallons gasoline; 4.9 million gallons diesel fuel; 283,000 gallons B20 biodiesel. |

| Challenge                                                                                                                                                                                                                                                                                       | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2006 ~ 5.5 million gallons gasoline; 4.7 million gallons diesel fuel; 324,000 gallons B20 biodiesel.<br>2005 ~ 5.5 million gallons gasoline; 4.7 million gallons diesel; 4,000 gallons B20 biodiesel.                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                 | Offset or reduce GHG emissions from mobile fleet, including corporate aircraft.                                                                                                                                                                                                                                                                                                                                                                                                                   | Mobile fleet emissions offset through market-based carbon credits purchased through CCX.<br><br>AEP will purchase 66 hybrid cars, 110 flex fuel vehicles, and 24 hybrid bucket trucks.                                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                 | Build all new facilities and improve efficiency of existing buildings using Leadership in Energy and Environment Design (LEED) standards, where appropriate. Seek LEED certification.                                                                                                                                                                                                                                                                                                             | Initiated \$100 million, five-year commitment to invest in green building initiatives across AEP through Clinton Global Initiative. New Transmission Operations Center in Ohio and service centers in Indiana, Arkansas and Texas will be "green" under this initiative.                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                 | Enhance and expand office recycling program to reduce office waste.                                                                                                                                                                                                                                                                                                                                                                                                                               | Contract negotiated for systemwide program in 2007; program rolled out early 2008 to be completed by year-end.                                                                                                                                                                                                                                                                                                                             |
| AEP's environmental compliance requirements drive a \$5.4 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 Clean Air Interstate Rule (CAIR). | Complete environmental compliance program by 2010.                                                                                                                                                                                                                                                                                                                                                                                                                                                | During 2007 installed and brought online pollution controls to reduce SO <sub>2</sub> emissions on 3,500 MW of generation; controls to reduce NOx emissions began operating on 1,600 MW of generation.<br><br>Under AEP's court-approved NSR settlement, additional pollution controls will be installed at other plants. For a full overview of this agreement, please visit <a href="http://www.AEP.com/ci/nsr">www.AEP.com/ci/nsr</a> . |
| 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.                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Nuclear energy will play an increasingly important role in our nation's energy future, but managing nuclear waste storage remains a significant challenge.                                                                                                                                      | Begin on-site dry cask storage of spent fuel at Cook Plant, starting in 2011.<br><br>Reduce storage needs.<br><br>Participate in national effort to develop permanent solution.                                                                                                                                                                                                                                                                                                                   | Decision made to develop on-site storage facilities at Cook Plant.<br><br>Identified process improvements to reduce storage needs.<br><br>Ongoing work with policymakers and others to achieve a long-term storage solution.                                                                                                                                                                                                               |
| Sustainable supply chain development is new to the utility industry but has become increasingly important as we seek to reduce our environmental impacts; will regulators approve cost recovery when costs may be higher because of performance standards regarding sustainability?             | Work with suppliers on a range of issues, including environmental impacts and improving safety and health performance.<br><br>Develop a process for evaluating coal suppliers' environmental, safety and health performance and set expectations. Implement by end of 2010. Work with stakeholders and industry peers.<br><br>Collaborate with industry peers for industrywide changes that have positive environmental impacts and/or improve safety and health for suppliers and for companies. | First utility to join Green Suppliers Network. Three AEP suppliers agreed to participate.<br><br>Began to develop process for evaluating environmental, safety and health practices of coal suppliers. Began discussions with coal suppliers.<br><br>Initiated industrywide, monthly best practices supply chain conference call.                                                                                                          |



## Work Force Issues

The health and safety of people is the most important part of who we are and what we do. Our employees have responded to this philosophy in the most profound and important way possible: we had no employee fatalities in 2007. Through collaboration, mutual care, hard work and a deeply shared commitment, we achieved a goal that has eluded AEP for a decade and that we have accomplished only twice in 37 years.

Our safety goal is simple – no fatalities in any year. We believe so strongly in attaining this goal that, starting this year, all employee and senior management incentive plans will be directly tied to it.

AEP's continued success relies on a healthy, happy, skilled and agile work force that can adapt to rapidly changing work environments without compromising safety or service. As we develop the work force and the culture we need to meet tomorrow's challenges, we must retain our current employees for as long as possible by meeting their needs, too. To this end, we offer 32 different work/life programs, including alternative work schedules.

Our new military leave policy is another important way to meet our employees' needs. We allow employees to take up to 10 days of unpaid leave per year to spend time with family members who are called to or return from active duty.

Transferring knowledge from retiring to new employees remains a high priority for AEP and for the rest of our industry. Our employees are staying in the work force longer, which helps. AEP's average retirement age climbed from 59 in 2003 to 61 in 2007.

Diversity programs also help us grow the strong work force that we need. We are attracting more women and minorities to AEP than ever before, which is good news for AEP and for our future.



Maintaining and operating our electrical system requires years of training and education.

### SAFETY & HEALTH—

#### CHANGING BEHAVIORS, SAVING LIVES

AEP believes in strong safety and health management. We focus on the human side of safety and health: preventing harm and protecting health so that every employee and every person we work with can return home safely every day. Our goal is detect and prevent rather than react and correct.

Accomplishing this requires good policies, training, proper procedures, effective leadership, thorough planning, teamwork and hazard recognition – with reporting and corrective preventive actions as the keys to improvement.

When an injury or near-miss event occurs, we analyze it, learn from it and make changes to prevent it from happening again elsewhere.

Our record, however, is not perfect. In January 2007, an explosion occurred when an AEP supplier was unloading hydrogen at our Muskingum River Plant, killing the delivery driver and injuring nine AEP employees.

A pressure relief device failed prematurely, causing

#### OSHA Citations (resulting in fines)

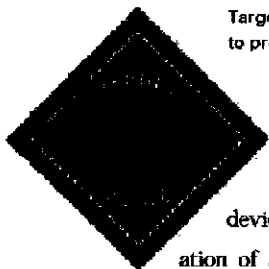
|             | Number of Citations | Fine     |
|-------------|---------------------|----------|
| <b>2007</b> | 6                   | \$60,000 |
| <b>2006</b> | 3                   | \$ 5,500 |
| <b>2005</b> | 1                   | \$85,000 |
| <b>2004</b> | 6                   | \$83,100 |

#### Recordable & Severity Injury Rates

(AEP versus industry peer group\*)

|             | Recordable<br>AEP | Recordable<br>Industry | Severity<br>AEP | Severity<br>Industry |
|-------------|-------------------|------------------------|-----------------|----------------------|
| <b>2007</b> | 1.76              | N/A                    | 42.83           | N/A                  |
| <b>2006</b> | 1.66              | 2.57                   | 31.77           | 29.17                |
| <b>2005</b> | 2.35              | 2.68                   | 43.91           | 28.59                |

\* Industry peer group defined by EEI as an electric utility with 7,000 or more employees.



Target Zero is a safety campaign to prevent injuries from happening.

the event.

We eliminated this type of relief device, performed a comprehensive evaluation of all hydrogen systems to ensure we are controlling the risks better, and developed new procedures for hydrogen unloading. A qualified AEP employee must now observe the unloading process—a step not previously required. The corrective and preventive actions were communicated to all AEP power plants, shared with utilities across the nation and posted to the Occupational Safety & Health Administration (OSHA) web site. AEP settled the case with OSHA and paid a \$55,000 fine, but the real penalty was the loss of life and injuries it caused.

Although every AEP employee is accountable for his or her own safety and health, employees are also asked to look out for each other. AEP encourages employees to speak up when they see unsafe situations in any workplace setting and to share information about near-misses, which can help us prevent harm. Unfortunately, our company culture sometimes inhibits people from coming forward and this must change if we are to succeed. We must do more to encourage and support employees to share information, opinions and ideas while showing concern for each other's safety and health.

AEP has initiated Significant Event conference calls with business units and safety and health leaders to ensure that information is shared across business units when a significant event or near-miss occurs. We conducted five of these calls in 2007 and found them to be effective in

communicating important information to prevent similar events from occurring elsewhere.

Last year we began a welding survey to identify possible health hazards to employees. Because of the potentially harmful fumes associated with welding, we expect to prescribe some control measures for specific types of welding processes in 2008. Our sampling of various types of welding processes and metals will help us learn whether these exposures could create health risks for long-term welders and, if so, what precautions should be taken.

"I was really amazed at the candor. I like that you talk about specific enforcement actions, what you learned from them, what you did with those lessons and that you shared them with other utilities. I would like to see more leading indicators, or proactive safety activities. Injury and illness rates, or lagging indicators, do not give the full picture of safety and health performance."

Sandra Taylor, deputy regional administrator, OSHA

#### RECOGNIZING HAZARDS: SCAN+IDENTIFY +PREDICT+DECIDE+ACT

If you don't recognize a hazard, you can't take action to prevent being harmed. That rationale underlies our initiative to empower employees with the skills and tools they need to recognize and eliminate on-the-job hazards.

Hazard recognition training across AEP helps our employees to be proactive and take preventive actions. We seek to eliminate conditions or situations that could lead to unintended events: machinery left unguarded or poorly



AEP's Line School provides hands-on, ongoing safety training and education to those who maintain our system.

maintained; confined spaces that increase exposure to ergonomic or other health hazards; material handling that could lead to slips, trips or falls; long-term exposure to dusty or dark conditions that affect breathing or eyesight; exposure to continued noisy equipment and conditions that could contribute to hearing loss; and conditions of physical risks related to working around electricity.

As a result of training, we are seeing positive changes: employees are identifying hazards they never before considered and are eliminating them. We believe so strongly in hazard recognition as a first-line defense against injury that we shared our training with our contractor work force. We are now taking this focus to the next level to include risk assessment and ensuring the adequacy of risk controls for our employees and contractors.

Climbing, loading and digging around utility poles present hazards to utility crews every day. Working with and around utility poles is a leading cause of injury: between 2004 and 2006 we had 50 pole-related incidents resulting in 2,500 lost or restricted work days.

Cross-functional teams of front-line workers and contractors from our distribution and transmission divisions launched a Pole Safety initiative whose objective is to reduce the causes of pole-related injuries by 50 percent by the end of 2008 and 100 percent by the end of 2010. Teams analyzed more than 265 recommendations and developed best-practice recommendations, including more training, greater use of fall protection, the use of safety observers and improving job briefings to identify hazards.

#### PUBLIC SAFETY & CONTRACTOR SAFETY

Accidents occur not only to our work force but also when the general public and our commercial contractors come in contact with our electrical facilities. In 2007, a total of

51 non-employees came in contact with our electrical facilities, resulting in five fatalities (compared with 66 contacts and six deaths in 2006). Some of these were related to trespassers attempting to steal copper, despite tougher state laws in our service areas to prosecute offenders.

Contractor safety remains a key issue as well. We have developed a five-year public safety plan that includes education, advertising, outreach and partnerships with our contractors and others. In 2007, a new, national one-call number was created that requires anyone doing work around

utility facilities to call ahead to have the utilities marked. We contacted all AEP contractors to relay this information, and developed a safety video about the new 811 one-call system and about the requirement to have the utilities marked. Putting more focus on contractor safety paid off during last December's ice storm in Tulsa, Okla. Dozens of contractors came to help with service restoration but they started no work at any time without first holding a safety briefing. As a result, no one was injured. With the exception of our nuclear organization, we do not have safety and health goals specific to contractors, but we intend to begin setting them in 2009.

#### MANAGING PERFORMANCE FOR CONTINUAL IMPROVEMENT

A new Safety & Health Event Management System launched in January 2008 that will give us the ability to identify emerging trends and the capability to develop leading indicators—all of which will help us improve our health and safety outcomes. During our stakeholder meetings, an OSHA representative urged us to develop and measure leading indicators around safety and health and this system will allow us to do that.

Safety and health audits also assist us in identifying



One safety initiative at AEP is to eliminate pole-related injuries by 2010.



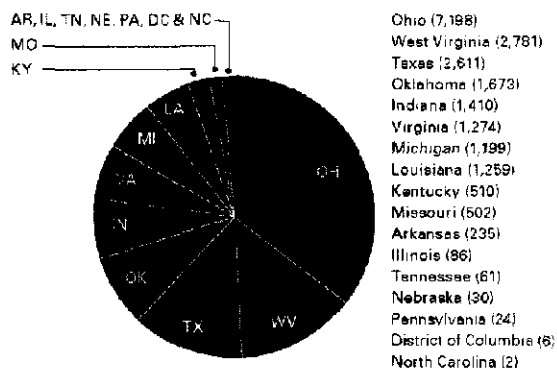
issues and improving performance. We conducted audit site visits at 13 power plants in 2007, including one comprehensive audit of Northeastern Station (units 3 & 4) in Oklahoma and audits of higher-risk safety and health programs at four other plants. Separately, eight plants participated in an audit of OSHA record-keeping and Control of Hazardous Energy procedures. We also began a pilot safety and health audit of AEP Ohio.

These audits have identified some common issues, such as the need for improved training effectiveness, which we are addressing. And we continue to make progress on MESH (Managing Environment, Safety & Health) to conform to the OHSAS 18001 standard by identifying, reviewing and developing programs to address safety and health hazards. In 2007, AEP expanded the MESH initiative to encompass major construction sites and rolled out the first phase of MESH at 12 power plants.

#### MEETING TOMORROW'S BUSINESS NEEDS WITH THE RIGHT WORK FORCE

Our success as an organization depends on the knowledge, experience, diversity and commitment of our people. We rely on our employees to lead us forward in creating and deploying new technologies so we can meet our customers' needs. We have an experienced work force and we

Year-end 2007 Number of Employees by State



have been able to attract new employees who complement our long-term employees.

Approximately 23 percent of our workers are age 55 years or older and 18 percent are eligible to retire; we anticipate that 10 percent of our employees will retire by 2012. In order to encourage our current employees to help us transition to a future work force, we offer them a program to work part-time with benefits at the better full-time rates. This program, known as "Legacy of Knowledge," gives them greater flexibility to transition into retirement.

We have to compete more aggressively for the talent and skills we need to operate a 21st century electric utility. To this end we are developing partnerships with technical schools, colleges and universities. For example, Public Service Company of Oklahoma worked with Oklahoma

#### 2007 Employment Data—EEO-1 (as of August 31, 2007)

|                                 | Employees | Females (%)   | Minorities (%) |
|---------------------------------|-----------|---------------|----------------|
| <b>Total Employment</b>         | 21,005    | 4,001 (18.9%) | 3,075 (14.0%)  |
| <b>Officials &amp; Managers</b> | 3,358     | 342 (10.2%)   | 272 (7.9%)     |
| <b>Professionals</b>            | 5,285     | 1,367 (25.9%) | 734 (13.9%)    |

#### 2006 Employment Data—EEO-1

|                                 | Employees | Females (%)   | Minorities (%) |
|---------------------------------|-----------|---------------|----------------|
| <b>Total Employment</b>         | 20,541    | 3,892 (18.9%) | 2,868 (14.0%)  |
| <b>Officials &amp; Managers</b> | 3,239     | 307 (9.5%)    | 255 (7.9%)     |
| <b>Professionals</b>            | 5,144     | 1,308 (25.4%) | 647 (12.6%)    |

For more detailed EEO-1 information, please visit [www.AEP.com/cj/GRI](http://www.AEP.com/cj/GRI)

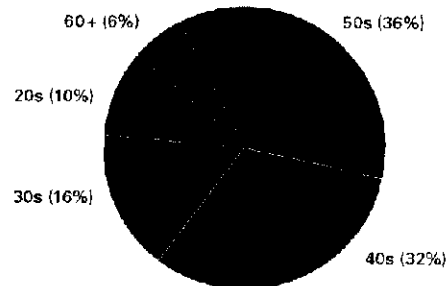
State University in Okmulgee and other power generators to launch a new, two-year associate degree program in Power Plant Technology. The companies worked with the university to develop curriculum, offer internship placements and assist with recruitment. The first class began last fall with eight students. As the complexity of operating power plants increases, advanced education has become a prerequisite for even entry-level jobs.

In Ohio, AEP teamed up with Washington State Community College and other organizations to host the first-ever Women in Engineering Summer Camp for high school girls. Engineering jobs are in high demand; our strategy is to develop and attract the talent we need while increasing the diversity of our employees. We also provide our beginning line mechanic training curriculum to technical schools to encourage entry into this career field.

To retain talent we have started offering back-up child care for full-time employees when their children are sick and the employee can't stay home. This program can also be used for a sick spouse or aging parents. We also offer benefits such as flexible work schedules and telecommuting.

Our continued success depends on our next generation of leaders. We have created AEP leadership development programs for employees with leadership potential, at all organizational levels. We have a week-long training program that encourages and teaches constructive candor while de-

**AEP Employee Age Data** (average employee age is 46)



veloping leadership skills. For the third time in two years, a group of senior executives was reassigned in a corporate succession plan that prepares them and the company for the future by broadening their leadership skills, experience and understanding of our organization.

#### HEALTH & WELLNESS PLAYING A LARGER ROLE

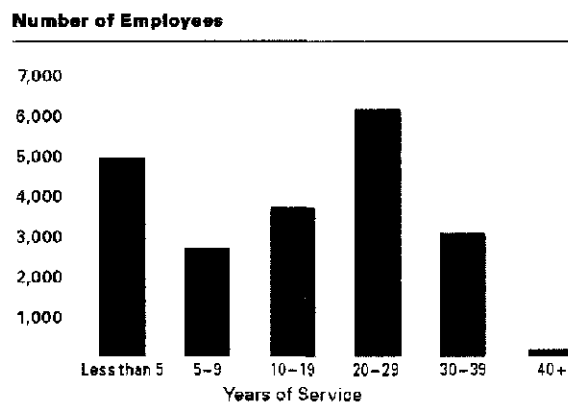
The Centers for Disease Control (CDC) estimate that health care costs in the United States will top \$2.8 trillion by 2011, fully 70 percent of which are preventable or can be reduced. AEP spent \$244 million on medical benefits in 2006—a 6.2 percent increase over 2005.

To encourage our employees and their families to take greater control over their health and wellness, AEP launched a companywide wellness program, including health screenings, personal health coaching, education programs and exercise programs. Our goal in 2008 is to have 60 percent of our employees complete a confidential health risk assessment. This gives employees information needed to make better lifestyle choices. It also tells us, on an anonymous basis, the types of health issues affecting our employees so that we can target programs and services more effectively.

AEP also partnered with the American Heart Association's START! walking program in 2007 to encourage a culture of physical activity and health through walking. The program spawned walking challenges across the company. In 2008, our goal is for one-quarter of our work force to participate in the START! heart walk.

Health and wellness include being prepared for the worst. As a regulated, critical resource provider, AEP is ob-

**AEP Employee Years of Service**  
 (average years of service is 17)



ligated to plan and prepare to operate during a pandemic. Our Avian Flu Task Force was formed in 2006 to address such a risk. As part of our stakeholder engagement this year, OSHA told us how important it is for the agency to know we are prepared. At the end of 2007, many AEP employees received a preparedness kit and information about what to do in the event of a widespread health emergency.

#### LABOR/MANAGEMENT RELATIONS

Nearly one-third of AEP's work force is represented by labor unions. Our relationship with our unionized employees is extremely important and we value a relationship built on trust, mutual respect and collaboration.

In 2007, we worked with the leaders of our largest labor union, the International Brotherhood of Electrical Workers (IBEW), to develop a joint proposal to address the potential impact of climate legislation on the U.S. economy and the risk of driving jobs overseas. The AFL-CIO joined with us to advocate a climate change solution that does not result in a loss of U.S. jobs. We also collaborate with our labor partners on community projects and an annual United Way campaign. During the process of preparing this report, we invited the IBEW to be part of the review process and received meaningful feedback, including an interest in collaborating more closely on safety and health issues. We are doing this now and will do more in the future, as it makes sense.

#### THE FUTURE LIES IN A DIVERSE WORK FORCE

From our power plants and distribution centers to the executive suite, we need a diverse work force to stay competitive, to be sustainable and to succeed. We have created short- and long-range plans to attract, recruit, hire and retain a work force of highly skilled individuals with a variety of perspectives from all cultures and backgrounds.

Even though close to 40 percent of our hires and internal promotions in 2007 were minorities and/or females, we continue to have difficulty achieving diversity targets for engineering and power plant jobs. These challenges are the result of keen competition for the dwindling number

#### Organized Labor at AEP

*(nearly 30 percent of AEP's work force is represented by labor unions)*

| Labor Union                                            | Number of Employees |
|--------------------------------------------------------|---------------------|
| <b>International Brotherhood of Electrical Workers</b> | 3,700               |
| <b>Utility Workers Union of America</b>                | 1,300               |
| <b>United Steelworkers of America</b>                  | 500                 |
| <b>United Mine Workers of America</b>                  | 400                 |

of skilled workers and the remote locations of many of our facilities. We have expanded our outreach to include predominantly black colleges and are working closely with recruiting firms that specialize in attracting females and minorities. We also have developed a new "Adopt-a-School" program to encourage minority and female students at younger ages to consider careers in the power industry.

AEP's Diversity Council reflects our diverse work force and our commitment to diversity. In addition to tracking compliance with affirmative action programs, the Council's goals are to raise awareness of AEP's diversity, celebrate its many differences and foster a culture of inclusion.

As we develop a more sustainable supply chain, AEP remains committed to having a diverse supply base. In 2007, AEP spent \$885 million doing business with small or minority-owned companies; women-owned and veteran-owned businesses; small disadvantaged businesses; and HUBzone and Service disabled businesses. This represents 19.5 percent of the total amount spent on material and services, excluding fuels. While the overall percentage compared with 2006 was down (from 21.2 percent), increases were gained in the following areas: women-owned small businesses (from 1.7 percent to 2.0 percent); and minority-owned businesses (from 0.4 percent to 0.6 percent).

The primary challenge is developing small and diverse suppliers who can support the large capital projects that represent current growth in our business units. ■

Useful web links: [www.osha.gov](http://www.osha.gov) • [www.ibew.org](http://www.ibew.org)  
[www.nafe.com](http://www.nafe.com) • [www.americanheart.org](http://www.americanheart.org)

## Challenges, Goals, Progress { Work Force Issues }

| Challenge                                                                                                                                                                                                                                                                           | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 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). | <b>Recordable Rate—Goal:</b><br>2008 – 1.70<br>2009 – 1.45<br>2010 – 1.24<br>2011 – 1.12<br><br>Hazard recognition training incorporates risk assessment and adequacy of controls. Focus on proactive behaviors to prevent harm, detect weaknesses in the safety and health management system, hold people accountable when we fail and reward/recognize successes. Every employee, at all levels, has compensation tied to safety and health performance.<br><br>Explore at least one opportunity to partner with OSHA on a meaningful work force issue.<br><br>Establish leading indicators to measure safety and health performance. | <b>Recordable Rate:</b><br>2007 – 1.76 (goal was 1.99)<br>2006 – 1.66<br>2005 – 2.35<br>2004 – 2.19<br><br>Hazard recognition training initiated across AEP and began to affect overall performance.<br><br>Developed Safety & Health Event Management System to track safety and health performance; identify trends; and adjust training, procedures and implement corrective and preventive actions, etc. to prevent injury/harm. Launched Jan. 1, 2008.<br><br>Initiated Significant Event Calls with business units to share information about significant events in a timely way. Five Significant Event Calls held in 2007.<br><br>Muskingum River Plant will submit application for OSHA's Voluntary Protection Program in addition to conforming to OHSAS 18001.<br><br>Conducted audit site visits at 13 power plants, including a comprehensive audit of Northeastern Station (units 3 & 4); eight other plants audited for OSHA record-keeping and Control of Hazardous Energy procedures. Pilot audit of AEP Ohio started. Among issues identified is need to improve training effectiveness. |
|                                                                                                                                                                                                                                                                                     | <b>Severity Rate – Goal:</b><br>2008 – 30.07<br>2009 – 25.56<br>2010 – 21.73<br>2011 – 19.58<br><br><b>OHSAS 18001:</b><br>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.                                                                                                                                                                                                                                                                                                                                             | <b>Severity Rate:</b><br>2007 – 42.83 (goal was 35.38)<br>2006 – 31.77<br>2005 – 43.91<br>2004 – 53.00<br>Severity rate was high because injuries were more serious, resulting in more lost work days or restricted duty days. Slips, trips and falls were main causes of serious injuries.<br><br><b>OHSAS 18001:</b><br>Phase 1 rollout at 12 power plants in 2007. Seven additional plants and all hydro plants will begin implementation in 2008.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| It is imperative we eliminate worker fatalities. AEP's history tells us the risk for job-related fatalities is high.                                                                                                                                                                | Zero AEP employee fatalities.<br><br>Through greater emphasis on hazard and risk recognition, proactive injury prevention activities, sharing best practices and lessons learned from near-misses, we expect and will accept no more than zero fatalities.                                                                                                                                                                                                                                                                                                                                                                              | Zero employee fatalities in 2007—first time in 10 years; only the second time in 37 years.<br><br>2006 – 1 employee fatality                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



# Public Policy

AEP is regulated by the public service commissions in the 11 states we serve, as well as the Federal Energy Regulatory Commission at the federal level. Regulators review AEP's costs to ensure we are acting responsibly and prudently. In return, we have the opportunity to recover our costs and earn a reasonable return. AEP represents its own as well as its customers' and shareholders' interests before Regional Transmission Organizations (RTOs), Independent System Operators (ISOs), Congress and with state and federal agencies.

As a company that operates in a highly regulated industry, AEP conducts robust public policy activities on the local, national and international levels. These may range from local zoning questions regarding the siting of equipment or facilities to international issues regarding climate change. These issues can influence what customers pay for electricity.

Our stakeholders care deeply about public policy and want to know more about our involvement. We work with many stakeholders in the public policy process and believe that collaboration is essential if we are to solve complex problems such as climate change. Our stakeholders suggested that our public policy positions should be developed more collaboratively with them before we go to regulators or legislators. We agree. For example, the Arkansas Sierra Club asked us to work with them and others to develop a reasonable renewable energy standard for that state. Our Southwestern Electric Power Co. is now discussing this with them.

Our public policy positions are developed with input and assistance from many departments, including the Board of Directors, the CEO and our Executive Council, Regulatory Services/Public Policy, Environment, Safety & Health and Facilities, Generation, Transmission, Corporate Com-

munications, Human Resources, our operating companies and our Washington, D.C., office, among many others. We work with organizations such as the National Association of Regulatory Utility Commissioners, National Conference of State Legislatures, American Legislative Exchange Council, Council of State Governments, National Governors Association and regional governors associations to ensure that our positions are responsible, well-articulated and coordinated.

Seven core public policy objectives guide our activities as we develop positions that would further the company's ability to:

- Produce electricity safely, reliably and at a reasonable price.
- Expand and reinforce the transmission infrastructure to create a robust system that can be used to support the next generation of electricity supply resources, including renewables. This will also reduce congestion and energy losses, thereby reducing costs.
- Meet the growing demand for clean energy.
- Help our customers manage their consumption through energy efficiency programs designed to balance the im-



Our governmental affairs managers routinely work with legislators and other leaders in their states.

impact of increasing fuel costs, meet environmental requirements and manage infrastructure issues.

- Increase environmental protection through reasonable and voluntary efforts.
- Ensure regulatory cost recovery for generation, transmission, distribution and environmental compliance investments in markets subject to regulation.
- Provide a reasonable total return (including ROE and market growth) for shareholders, thereby helping to ensure AEP's financial stability needed to meet these policy goals.

## OUR POLICY WORK AT THE NATIONAL LEVEL

Several issues will remain prominent for the foreseeable

future—but few more so than climate change. AEP's climate change strategy and policy goals are outlined on Page 37.

AEP will continue to participate in national and international dialogues and will work with all interested parties to adopt a federal climate change policy that adheres to our principles. We support federal legislation as opposed to state or regional regulation for several reasons. Climate change is a global issue and the nation can only play an effective role with a national approach; one set of regulations is the most efficient way to address the issue; and a nationwide policy will create economies of scale to best facilitate a greenhouse gas allowance cap-and-trade program.

AEP, the International Brotherhood of Electrical Workers and the AFL-CIO support a provision in federal climate legislation that would require other nations—such as China and India—to buy international allowances if they export to the United States and have not taken comparable actions to reduce their greenhouse gas emissions. We strongly believe such a provision is important to protect and retain U.S. jobs by preventing a deployment of manufacturing overseas, where environmental costs could be avoided in non-participating countries.

Incentives and tax breaks for deploying advanced technologies and increasing renewable energy resources are also important federal priorities. AEP supports a long-term extension of the federal Production Tax Credit for renewable energy resources. We also continue to lobby for tax credits that encourage investments in advanced technologies such as carbon capture and storage and advanced coal technologies.

AEP supports development of a national interstate, extra-high voltage (EHV) transmission system—similar to our interstate highway system. We believe the best way to develop this system is through federal encouragement and

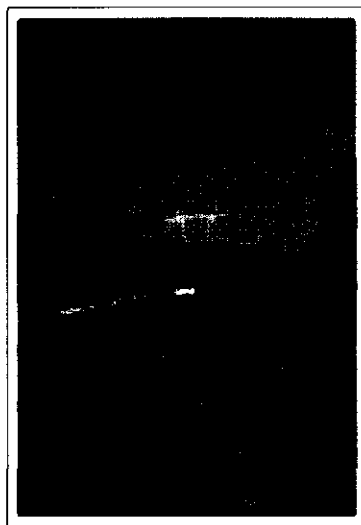
oversight. We believe an interstate transmission highway is imperative to our nation's energy future and we will work with the state and the federal government to advance this vision. Specifically, we advocate the federal government exercise jurisdiction over these EHV facilities (300 kV and higher), similar to how it regulates natural gas pipelines.

#### OUR POLICY WORK AT THE INTERNATIONAL LEVEL

No one nation can solve climate change. Our goal is to build coalitions to develop, advocate and support policies that address climate change globally.

In addition to ongoing support of the Asia-Pacific Partnership and the e8, we joined the World Business Council for Sustainable Development (WBCSD) in 2007, an organization of approximately 200 companies globally that works toward sustainable development. We joined to be part of the world's business leadership that is addressing these issues, to learn what others are doing, to share our progress and to further the progress of others.

We worked with the WBCSD's Electricity Utilities Sector Project to develop a road map for achieving a sustainable electricity future. We joined with nine



The development of a nationwide interstate extra-high voltage transmission system remains one of AEP's primary public policy goals.

global companies to prepare an analysis—*Powering A Sustainable Future*—that was discussed at length during the United Nations' climate negotiations in Bali, Indonesia, in December 2007. The report advocates international collaboration for public policies that support the:

- development of new technology;
- development of renewable energy alternatives;
- energy efficiency programs to reduce demand; and
- ensuring affordable electricity worldwide.

#### OUR POLICY WORK AT THE REGIONAL LEVEL

AEP owns more than 39,000 miles of transmission lines in

the United States, 2,116 miles of which are high-voltage 765 kV lines that serve as the backbone of the electric inter-connection grid in the Eastern United States. This system serves our customers in 11 states and electricity markets. AEP is a member and participates in the organized wholesale markets administered by regional transmission organizations (RTOs) that include PJM in the East and the Electric Reliability Council of Texas (ERCOT) and the Southwest Power Pool (SPP), both in the Southwest.

A range of technical, market and planning issues emerge from our RTO participation. While they vary by RTO, common issues must be addressed, such as regional transmission planning processes, the allocation of costs for construction of extra-high voltage transmission infrastructure, fostering market efficiencies and the appropriate use of demand response in RTO markets.

#### OUR POLICY WORK AT THE STATE & LOCAL LEVEL

State and local issues vary widely by jurisdiction, but there are common issues, such as support and cost recovery for environmental retrofits, advanced coal technologies, renewable energy, energy efficiency and demand-side management (DSM) programs and improvements to our distribution system.

Among many state issues that AEP addresses are:

- jurisdictional and territorial boundaries;
- market structures;
- water resources;
- transmission;
- distribution reliability;
- siting;
- eminent domain;
- state renewable portfolio standards (Ohio, Michigan

and Indiana have introduced legislation); and

- copper theft.

From our familiarity with these issues, AEP has created the Clean Energy Development Toolkit, an inventory of national and state legislation focused on clean energy. In conjunction with this, AEP developed "model" legislation that states can use to encourage clean energy projects in their own jurisdictions. The toolkit has been distributed at legislative conferences and in trade meetings and is also available through third-party web sites, including the Na-

tional Council of State Legislatures. It has been recognized by the Edison Electric Institute through its Advocacy Award.

In addition, AEP supports the state-level version of the carbon capture and storage bill drafted by the Interstate Oil and Gas Compact Commission and has been tailoring the model to satisfy specific state needs. This model bill is being shared with state policymakers in AEP's service territory and beyond to

help establish support for new ways to deal responsibly

"We will do whatever we need to do with you to convince regulators of why you need to invest in cost-effective energy efficiency. But the company needs to come forward with programs and incentive mechanisms that we can support."

Ashok Gupta, air and energy program director,  
 Natural Resources Defense Council

#### AEP's Energy Efficiency/DSM Policy

AEP is committed to actively pursuing the implementation of energy efficiency and demand-side management (DSM) programs in all our jurisdictions. In order to fulfill this responsibility, we will engage in active dialogue with our customers, legislators and regulators, community leaders, and other interested parties to explore opportunities, implement solutions, and evaluate results for programs aimed at reducing demand and/or energy. In doing so, we will rely on the following principles:

- Energy efficiency and DSM will play crucial roles in meeting our environmental and sustainability goals.
- Cost-effective energy efficiency and DSM are important components of our Integrated Resource Plan.
- Regulatory recovery of investments is a threshold requirement to the implementation of DSM programs.

with carbon stocks, such as safe underground storage and enhanced oil recovery.

#### ENERGY EFFICIENCY & DSM

Energy efficiency and DSM programs have long been used by the utility industry and regulators to encourage energy conservation and thereby reduce the need to build new power plants. Because AEP has been a low-cost provider, our customers and regulators have been comparatively slow to embrace these programs as cost-effective. While they may agree in principle with the goal of energy conservation, low prices reduce the financial incentives to act quickly.

More recently, however, increasing fuel prices, escalating new generation costs, new greenhouse gas concerns and the availability of new technology have combined to bring greater interest and attention to energy efficiency and DSM programs in our 11 states. AEP has embraced cost-

effective programs as a key component of our climate strategy as a resource to keep energy costs affordable, and as a way to potentially delay the need for new power plants. We have modified our policy on energy efficiency and DSM to reflect this commitment.

One major challenge in this new environment is the difference of opinion among our stakeholders. While some groups advocate for more aggressive programs, our commercial and industrial customers tend to see higher rates as the difference between turning a profit and operating at a loss—or even being forced out of business. It is an example of the tension that exists between those who want us to implement new programs, ahead of regulations, and those who don't want to pay for programs that benefit others.

AEP has set a self-imposed goal of reducing demand by 1,000 MW by 2012 through customer programs and internal energy efficiency improvements. Each program will

#### Prices for All Retail Customers (2006, in cents per kWh)

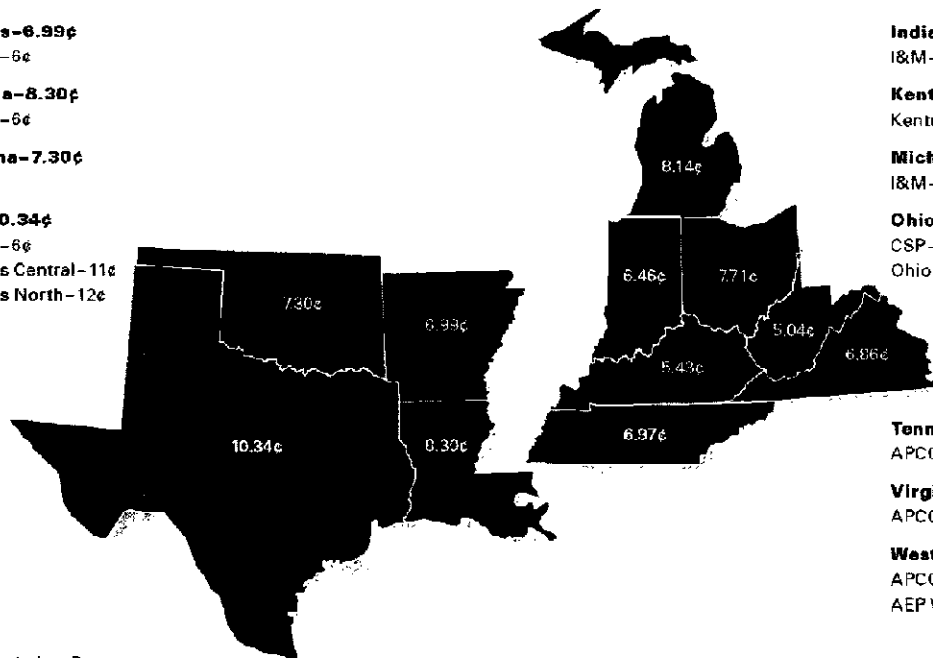
##### What AEP's retail customers pay versus the average cost of electricity in AEP states:

**Arkansas—6.99¢**  
SWEPCO—6¢

**Louisiana—8.30¢**  
SWEPCO—6¢

**Oklahoma—7.30¢**  
PSO—7¢

**Texas—10.34¢**  
SWEPCO—6¢  
AEP Texas Central—11¢  
AEP Texas North—12¢



(APCO) Appalachian Power,

(CSP) Columbus Southern Power, (I&M) Indiana Michigan Power, (PSO) Public Service Company of Oklahoma, (SWEPCO) Southwestern Electric Power Company.

Source: Energy Information Administration, State Electricity Profiles, November 2007

be tailored to each state's regulatory requirements and will be promoted by the individual operating companies. Proposals to some state regulators began in 2007. We have committed that 15 percent of these efficiencies will come from within – reduced energy consumption at our facilities, transformer efficiencies, etc. The remaining 85 percent will come from customer programs. (For more about AEP's position and actions on energy efficiency and DSM, see the *Climate Change* section. For a state-by-state overview of where we made progress in 2007, visit [www.AEP.com/cr/energyefficiency](http://www.AEP.com/cr/energyefficiency).)

#### LOBBYING

AEP advances its public position through the use of state and federal lobbyists, most of whom are full-time employees who have diverse backgrounds in the company. Many have worked in the operations of our companies and understand the physical as well as policy aspects of our operations. AEP has employee lobbyists in nearly every state in which we have a presence, as well as in Washington, D.C. Our lobbyists are part of our overall effort to represent AEP's interests and the interests of our customers.

At the state level, our lobbyists work on such issues as taxes, market structure, siting, eminent domain and state environmental initiatives. They also help manage cost recovery from a legislative perspective – working to ensure that cost recovery regulation is included in all new legislative mandates.

At the federal level, AEP tracks federal legislation through its Washington office as well as through the work of its primary trade associations, including the Edison Electric Institute and the Nuclear Energy Institute. AEP works with all of the members of the congressional delega-

tions that represent its service territory, as well as with relevant committee members from outside the service area.

With the passage of new federal ethics legislation, AEP is reviewing and updating all of its data collection systems to ensure compliance with enhanced registration and reporting requirements for lobbyists. In 2007, AEP spent approximately \$1.7 million to lobby on energy legislation and tax credits.

#### POLITICAL INVOLVEMENT

“Have we really kept electricity rates too cheap, as you say? If so, that tension is missing from your public policy strategy and is impacting AEP's ability to maintain and expand its infrastructure. AEP's public policy should be a framework to direct the short- and long-term vision of the company.”

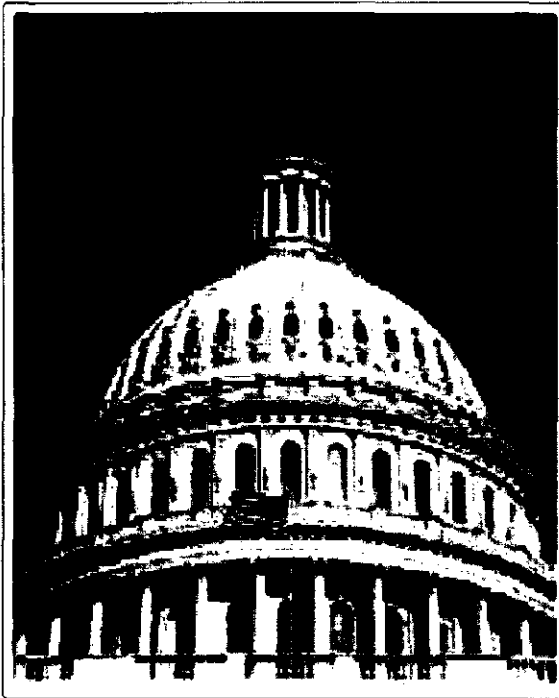
Leah Miller, Small Farm Institute, Ohio

AEP endeavors to develop strong working relationships with regulators and policy-makers and encourages employees to get involved in the political process. We sponsor a federal political action committee (PAC), the American Electric Power Committee for Responsible Government, as well as state PACs in Michigan, Ohio, Texas and Virginia. Eligible employees can make voluntary contributions. The PACs

are employee-controlled and not affiliated with any political party but do make donations to political candidates. AEP pays the administrative expenses of running the PACs to the extent allowed by law, spending approximately \$300,000 on PAC support in 2007.

AEP's federal PAC files monthly reports with the Federal Election Commission (FEC). Reports are available at the FEC's web site at [www.fec.gov](http://www.fec.gov). Reports for AEP's state PACs are filed with the respective states and are available through those states' web sites.

In 2007 we committed to track and report on trade association dues and memberships that may be used for political purposes. That same year, we asked trade associations to which our dues or payments are significant to provide us with a breakdown of what portions are used



When appropriate, AEP asks its employees to contact their members of Congress about matters important to the company.

for expenditures or contributions that, if made directly by AEP, would not be deductible under section 162(e)(1) and other applicable subsections of the Internal Revenue Code. Please visit [www.AEP.com/cr](http://www.AEP.com/cr) to see these reports.

#### GRASSROOTS CAMPAIGNS

AEP periodically calls on our approximately 21,000 employees to voluntarily contact their elected officials about an issue that affects the company. Employees have been enthusiastic in the past in responding to such requests and we expect to call on them again when we can collectively make a difference. Employee grassroots participation is strictly voluntary and is not monitored for individual participation.

#### COALITIONS

AEP supports and collaborates with several coalitions that share common goals. Examples include the American Coalition for Clean Coal Electricity, Americans for Af-

fordable Climate Policy, Generators for Clean Air, Consumers United for Rail Equity (CURE), the Pole Attachment Group (PAG), American Wind Energy Association (AWEA), International Emissions Trading Association (IETA), Association of Electric Companies in Texas, Indiana Energy Association, Ohio Electric Utility Institute, Edison Electric Institute, Nuclear Energy Institute, Midwest Energy Efficiency Alliance and many other national, regional, state and local organizations.

Some advocates have raised concerns about our affiliation with some of these organizations. We believe that we have a positive impact by being part of these groups and working together to address many complex issues. We believe it is important to have a balanced approach to addressing these issues. Our participation, and often leadership, in these organizations allows us to do that.

For a full overview of 2007 public policy accomplishments, visit [www.AEP.com/cr/publicpolicy](http://www.AEP.com/cr/publicpolicy).

#### OUR PUBLIC POLICY PRIORITIES IN 2008

- Climate change legislation – see the *Climate Change* section for full details.
- Shape Renewable Portfolio Standards with state-by-state goals and appropriate cost recovery.
- Encourage legislative and regulatory support for energy efficiency and DSM programs.
- Promote federal jurisdiction over transmission siting and approval processes in order to encourage the development of a robust interstate transmission system.
- Protect water access rights in several states where they are in question.
- Comply with federal/state enacted reliability and environmental regulations and standards.
- Support long-term extension of the federal Production Tax Credit for renewable energy resources. ■

#### Useful web links:

[www.wbcsd.org](http://www.wbcsd.org) • [www.naruc.org](http://www.naruc.org)  
[www.nga.org](http://www.nga.org) • [www.ncsl.org](http://www.ncsl.org)

## Challenges, Goals, Progress { Public Policy }

| Challenge                                                                                                                                                                                                                                                            | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Constructively work to influence the structure of a federal cap-and-trade program that does not unfairly harm the U.S. economy or customers whose electricity is derived largely from coal. Convince developing countries they must be part of the solution.         | Creation of a federal cap-and-trade program that includes a safety valve, provides for a large free allocation of allowances and includes consequences for non-participating countries, as outlined in AEP's climate policy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | All operating companies developed a plan to address this issue at the state level in an attempt to influence federal legislation to support cap-and-trade, impact allocation of carbon credits being discussed in Washington D.C. Contacts commenced in late 2007 and will continue in 2008.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Work with Congress to provide incentives and tax breaks for advanced coal technology deployment and improve accessibility and affordability of wind energy and other renewable resources.                                                                            | Include incentives prior to or along with passage of a federal GHG cap-and-trade program to cost-effectively address climate change.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Lobbied successfully for financial incentives for carbon capture and storage in both the Bingaman-Specter and Lieberman-Warner climate bills.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Work with federal and state regulators to gain support for federal oversight of a national extra-high voltage (EHV) transmission system.                                                                                                                             | Ensure Federal Energy Regulatory Commission has oversight over EHV transmission, similar to how it regulates natural gas pipelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Received NIETC status for entire PATH project.<br><br>Made numerous presentations and published op-ed pieces in national publications outlining AEP's vision for national oversight of EHV transmission.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Gain state-level support for legislation that supports and encourages development of clean energy projects within their own jurisdictions.                                                                                                                           | State legislation adopted supporting carbon capture and storage, renewables and baseload technologies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Clean energy bill adopted in Arkansas.<br><br>Virginia S.1416 includes additional rate of return for voluntary RPS and advanced coal technology.<br><br>Participated in workshop led by National Council of State Legislatures on advanced coal technologies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Engage in active dialogue with our customers, legislators and regulators, consumer advocates, community leaders and other interested parties to explore opportunities, implement solutions and evaluate results for programs aimed at reducing demand and/or energy. | <p>Achieve 1,000 MW reduction in demand by the end of 2012 through DSM/EE programs offered to customers and through internal operations efficiency programs.</p> <p>Develop plans for deployment of an advanced metering infrastructure (AMI) with the goal of installing smart meters in all our jurisdictions by the end of 2015, which we believe will enable additional programs/products that will help customers reduce/shift their demand and reduce their energy usage.</p> <p>Rely upon energy efficiency and DSM for crucial roles in meeting our environmental and sustainability goals.</p> <p>Make DSM an important component of our Integrated Resource Plan.</p> <p>Secure regulatory recovery of investments for implementation of EE/DSM and AMI investments.</p> <p>Advocate for more stringent building codes and appliance standards in the states we serve.</p> | <p>Adopted a public policy position on commitment to active pursuit of EE/DSM programs in all AEP jurisdictions.</p> <p>Implemented EE/DSM activities in the following jurisdictions:</p> <p><b>Texas (2002-2007):</b> 250,842 MWh energy savings (250.8 GWh). 72,125 MW peak demand reduction. \$46.2 million investment.</p> <p>Texas increased the target for demand growth reduction from 15 percent of projected growth to 20 percent by 2009.</p> <p><b>Kentucky (1996-2007):</b> 411,212 MWh energy savings (411 GWh). 4.3 MW summer/19.8 winter peak savings. \$8.7 million investment.</p> <p><b>PSO—Oklahoma:</b> Filed in December 2007 an application seeking approval of comprehensive and cost-effective EE/DSM programs. The discovery process is ongoing.</p> <p><b>Arkansas:</b> Initiated four programs in fall 2007 in addition to an all utility-sponsored education/information program.</p> <p><b>Indiana:</b> Filed for approval of programs as part of a filed rate case in January 2008.</p> |



# Climate Change

## WHERE AEP STANDS ON CLIMATE CHANGE

The world is poised to make the most dramatic change in energy production since the Industrial Revolution. Our collective response to climate change is creating a transformation that will lead to profound consequences for all sectors of the global economy. As one of the largest consumers of coal in the Western Hemisphere, AEP recognizes the urgent need to balance the growing demand for electricity with the imperative to protect the environment for future generations.

The scientific community, led largely by the Intergovernmental Panel on Climate Change, has provided scientific evidence that human activity has contributed to global warming. AEP is helping to lead the discussion nationally and internationally to find a reasonable, achievable approach and enact federal energy policy that is realistic in time frame and does not seriously harm the U.S. economy. We also are developing advanced coal technologies so that coal can continue to be the important energy resource it is today. We support the adoption of an economywide, cap-and-trade greenhouse gas (GHG) reduction program that allows us to provide reliable, reasonably priced electricity to our customers and that fosters the international participation that is necessary to make meaningful progress.

At AEP, we believe that cap-and-trade legislation should include:

- A cap that applies to all sectors of the economy and covers all GHGs.
- A framework that maximizes flexibility and minimizes cost.
- Phase-in of reduction requirements that matches available technology.
- Unrestricted use of real and verifiable domestic and inter-

national emissions offsets, such as methane capture and destruction from landfills and livestock waste and international deforestation protection.

- Allowance allocations to electric generators and other sources based on historical emissions. This might include, if absolutely necessary, a small number of allowances (i.e., less than 5 percent) to be auctioned or set aside for public purposes.
- Incentives for early voluntary actions or investments made to reduce emissions.



Carbon capture technology similar to this, being tested at a Wisconsin Energy plant, will be installed at a western power plant.

- Long-term public and private funding to develop commercially viable technology solutions, such as carbon capture and storage.
- Elimination of legal and regulatory barriers to the use of low- or no-carbon technologies or processes (e.g., carbon capture, nuclear, wind).
- Regulatory pre-approval of utility cost recovery for effective energy efficiency and demand-side management (DSM) programs.
- 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. Companies with compliance obligations can buy emission allow-

ances from the federal government at the safety valve price.

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

Cap-and-trade is widely considered the most effective system to reduce GHG emissions, although debate continues about whether permits should be allocated or sold at

AEP was a founder of CCX in 2003. CCX's CEO is Richard L. Sandor, who has been a member of AEP's Board of Directors since 2000. Because of the relationship between AEP and CCX, Mr. Sandor is not considered an independent director under New York Stock Exchange rules.

auction. We favor allowances, based on our experience with the Environmental Protection Agency's Acid Rain Program and the Chicago Climate Exchange (CCX), both of which allocate allowances based on historical emissions with little or no auction. The EPA program, with only a 3 percent auction of allowances, has been hailed as a major success because of the affordability it provides in reducing acid rain-causing emissions.

A large auction of allowances would require emitters to buy allowances to cover all of their emissions. This would place unfair costs on customers of regulated utilities, especially those whose electricity comes from coal.

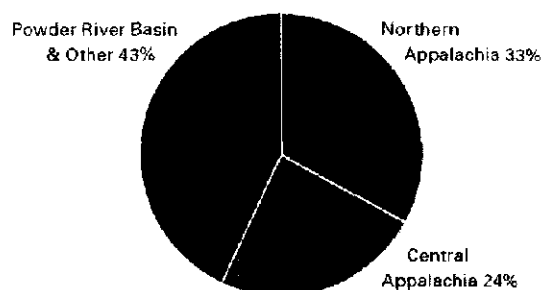
Our stakeholders are divided on having a price ceiling, or "safety valve," in the legislation. The Environmental Defense Fund, for example, strongly opposes a safety valve and has urged us to abandon our support for that provision. Our customers, however, could be severely affected by escalating energy rates if carbon prices were entirely market-based, and would pay more for their energy, through no fault of their own, than customers of utilities that derive less of their power from coal. We believe a safety valve, which sets a ceiling on the cost of CO<sub>2</sub> allowances, would protect the economy if carbon prices skyrocket. Some of our stakeholders are frustrated with this position. We have agreed to continue to discuss this issue to find common ground.

Some stakeholders have asked why we have not joined the United States Climate Action Partnership (USCAP), which provides general recommendations for establishing a mandatory domestic GHG cap-and-trade program that would reduce CO<sub>2</sub> equivalent emissions by 60 percent to 80 percent by 2050. AEP's decision not to join USCAP is based on several factors, including:

1. the proposal's lack of a price-based safety valve to prevent undue economic harm;
2. the recommendation that allowances transition to be fully auctioned instead of freely allocated; and
3. AEP's belief that near- and intermediate-term emission reduction targets may be too onerous to be achieved cost-effectively.

#### 2008 Projected Coal Consumption by Origin

(AEP burns approximately 76 million tons of coal per year.)

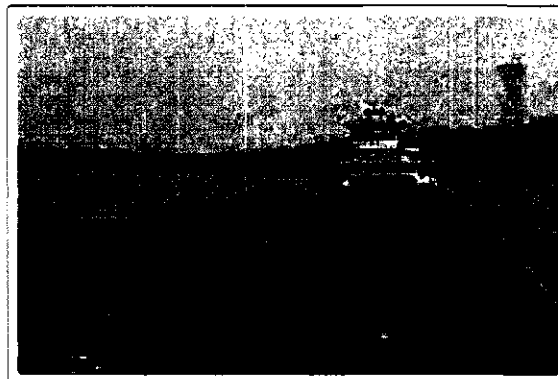


We support another GHG cap-and-trade proposal—Senate Bill 1966, the Low Carbon Economy Act of 2007, introduced by U.S. Sens. Jeff Bingaman (D-N.M.) and Arlen Specter (R-Pa.) that provides the best balance of current legislation in addressing these key issues.

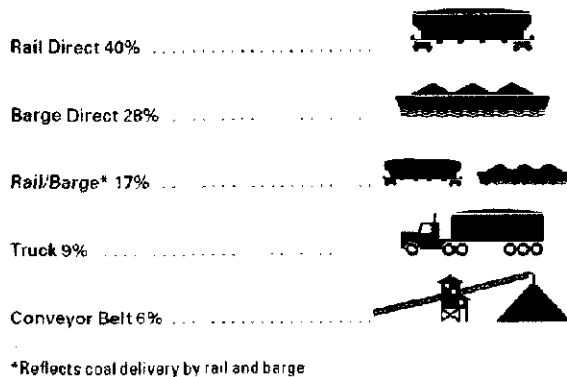
#### THE ROLE OF COAL IN OUR FUTURE

For all its challenges, coal remains an important energy resource for the future. It is an abundant, domestic and relatively inexpensive source of energy. Fully one-half of America's daily electricity supply comes from coal and no other fuel is capable of meeting that need on a cost-effective basis. Twenty-five of AEP's 61 power plants burn coal to generate electricity, accounting for 68 percent of our total generating capacity.

In recent years, however, coal-fired power plants have become increasingly difficult to site and build. Our pro-



Coal fuels 68 percent of AEP's generating capacity. Much of it is delivered to our plants by barge.

**Coal Delivery to AEP's Power Plants**

posed Oklahoma plant was turned down, one of 59 U.S. plants that were cancelled, delayed, or abandoned in 2007 because of objections to coal. Such setbacks make it increasingly likely that demand for electricity will outstrip supply in the next decade. Given the aging infrastructure we have today, these delays may well cause higher prices and supply concerns – without creating any major environmental benefits.

We believe that climate change will not be solved through a single solution, but rather through multiple options and public policies to support them. Advanced coal technologies such as Integrated Gasification Combined Cycle (IGCC), ultra-supercritical pulverized coal, renewable energy sources, energy efficiency and DSM programs for consumers, new nuclear power plants, and new transmission and distribution infrastructure are all needed to make our electricity system more efficient and must all be part of the solution.

**PROGRESS & CHALLENGES WITH TECHNOLOGY**

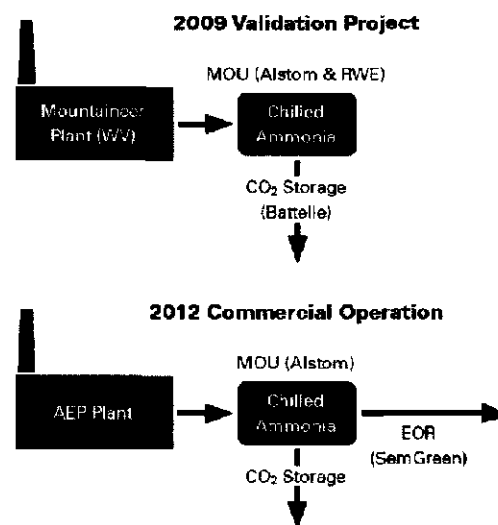
While we actively support programs to reduce the growth in demand, that still leaves us with a need for new generation capacity – a need that is particularly imminent for our southwestern operating companies. Balancing this need alongside our responsibility to protect the environment will require the development of new technology, an area in which AEP has excelled.

**ULTRA-SUPERCRITICAL PULVERIZED COAL**

In 2006, we proposed building two ultra-supercritical pulverized coal power plants – in Arkansas and in Oklahoma. Ultra-supercritical coal plants are more efficient than traditional coal plants. Because they burn less coal per kilowatt hour produced, they also emit less CO<sub>2</sub> on a per-kilowatt hour basis. Arkansas regulators approved the 600-MW \$1.3 billion John W. Turk Plant last year with conditions we accepted, giving us room to develop technology while meeting our obligation to serve our customers' needs. Louisiana regulators approved it in March 2008. (We are awaiting approval from regulators in Texas.) One of the conditions is that we report annually on our progress on carbon capture and storage technologies. The plant, to be built in Arkansas, could serve customers in all three states. Turk Plant will emit carbon dioxide, which we plan to largely offset with reductions elsewhere in the system.

**CARBON CAPTURE & STORAGE**

We are working on two different types of carbon capture technology for coal-fired power plants. The first is a 20-MW

**AEP's Carbon Capture & Storage Initiative**

AEP will install carbon capture on two coal-fired power plants – the first commercial use of this technology.

chilled ammonia process that we are developing in conjunction with Alstom and RWE (a German utility) at our Mountaineer Plant in West Virginia. The Mountaineer Plant pilot project, on which we are collaborating with Battelle, would capture up to 100,000 metric tons of CO<sub>2</sub> per year, which would be stored underground in deep saline aquifers.

Once the chilled ammonia technology is validated our plan is to deploy it on a commercial scale at a plant in our western service territory, delivering the captured CO<sub>2</sub> for use in enhanced oil recovery. This will help the region to recover its natural resources and will defray the high costs of carbon capture technology.

We are piloting the second GHG reduction technology, an oxy-coal combustion process, with 16 other utilities on a 10-MW scale to verify feasibility and understand the commercial issues. If it proves feasible, we plan to retrofit an existing 150-600 MW unit by 2020. It would result in the capture of 3,000 or more tons of CO<sub>2</sub> per day.

There is increasing pressure for new coal plants to employ these full-scale carbon capture and storage technologies from the start. We feel this is an unrealistic expectation that could delay bringing the technology forward to full commercial scale. We are pushing the technology forward as fast as we can. In the meantime, we are facing a growing demand for energy—one that cannot be met without near-term construction of new plants.

**INTEGRATED GASIFICATION COMBINED CYCLE (IGCC)**  
In West Virginia, the Public Service Commission approved our 629-MW IGCC plant; we are appealing a negative decision from the Virginia State Corporation Commission. We are ready to begin construction when all approvals are in hand. The plant, estimated to cost \$2.23 billion and take up to 48 months to build, would be built in West Virginia but serve customers in two states—West Virginia and Virginia. A second IGCC plant proposal in Ohio has regulatory support but faces legal challenges. The Ohio Supreme Court in March ruled against AEP and returned the case to the Public Utilities Commission of Ohio. Some of our stakeholders

**In its testimony supporting AEP's West Virginia IGCC plant, the Clean Air Task Force said:**

“It is unusual for an environmental group to support construction of a new coal power plant. Current projections indicate that coal-fired electricity generation will continue to grow in importance, however, over the next several decades. In fact, recent analysis by the United States Climate Change Science Program indicates that global coal-based electricity generation could double or even triple by the year 2050. Advanced technology will be vital to ensuring that such rapid growth does not threaten the world's environment. In particular, coal gasification, a process in which the energy stored in coal can be put to productive use while rendering coal's impurities more benign, offers a way to bring coal use into the twenty-first century without sacrificing the environment or the economy.”

support adding carbon capture to these plants. We are prepared to go forward with regulatory aspects of such an action when the economics of this technology become clearer.

The promise of bringing IGCC technology to commercial operation gained momentum in 2007 when Indiana regulators approved a similar proposal by Duke Energy to build a 630-MW IGCC plant—bucking a nationwide regulatory trend against coal-fueled power plants. Although IGCC plants are more expensive than conventional pulverized coal plants, they are considered to be more compatible with carbon capture technology and have fewer negative impacts on the environment. One stakeholder, the Clean

Air Task Force, supported the Duke proposal and is publicly supporting AEP's proposed plant in West Virginia.

For more information about these technologies, please visit [www.AEP.com/cr/technologies](http://www.AEP.com/cr/technologies).

#### FUEL DIVERSIFICATION

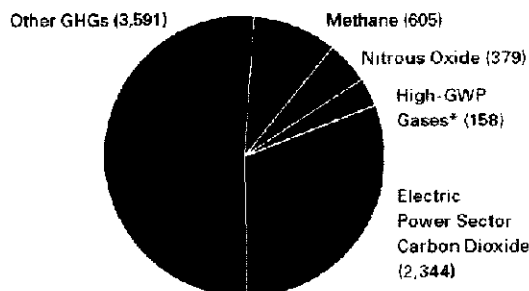
In addition to developing new coal technologies, we are increasing the diversity of the fuels we use to produce electricity. Today, 68 percent of our energy comes from coal. We have not yet determined what the right percentage is, but actions we have taken will drive it lower and develop a more diverse electricity supply. We are building or buying more natural gas-fired plants to meet peak demand periods, such as the summer cooling season. Natural gas units emit about half the CO<sub>2</sub> compared with similarly-sized coal units. However, natural gas is subject to price volatility and supply issues.

In 2007, AEP added 12 gas units with a total capacity of 2,020 MW. These plants will emit approximately 8 million metric tons of CO<sub>2</sub> during the next decade, based on projected demand, compared with 16 million metric tons for the equivalent coal-fired production.

#### OUR COMMITMENT TO REDUCE EMISSIONS

As a founding member of the Chicago Climate Exchange in 2003, AEP committed to cumulatively reduce or offset 46 million metric tons of carbon dioxide (CO<sub>2</sub>) by 2010.

**2006 U.S. GHG Emissions** (million metric tons)



\* High global warming potential gases

Source: Energy Information Administration, November 2007

Through 2007, we have reduced or offset 43 million metric tons of CO<sub>2</sub>, and we are on track to meet our commitment. We have done so by improving the efficiency of existing plants; retiring older, inefficient units; substantially reducing the leakage rate of sulfur hexafluoride (SF<sub>6</sub>)—a potent GHG—from transformers; increasing renewable energy resources; and conserving trees and reforested lands in the United States and abroad.

For the future, we have planned improvements to our existing power plants that will further reduce GHG emissions by more than 400,000 tons per year by 2010. We outlined our post-2010 strategy in our first Corporate Responsibility Report and predicted our emissions would grow by as much as 10 million to 15 million tons annually between 2011 and 2020 as we build power plants. We committed to offset CO<sub>2</sub> emissions by an additional 5 million tons annually through offsets, as follows:

- Purchasing an additional 1,000 MW of new wind power by 2011 and adding some of it in our eastern states. In 2007 we signed agreements to buy 275 MW of wind energy that will serve customers in Indiana, Michigan, Virginia and West Virginia. In January 2008 we began receiving delivery of the first 75 MW of wind-generated power.
- Investing in domestic offsets. AEP signed an agreement in 2007 with the Environmental Credit Corp. to purchase 4.6 million carbon credits (one carbon credit is equal to reducing one metric ton of CO<sub>2</sub>) between 2010 and 2017. The credits would be created by capturing and destroying methane on 200 U.S. livestock farms, at least half of which will be within our 11-state service territory. The first two manure “lagoons” to capture methane were completed on a farm in upstate New York in December. These credits will offset 0.6 million metric ton of CO<sub>2</sub> between 2011 and 2017.
- Increasing our investments in domestic offsets, including forestry, between 2011 and 2020. As described in the offsets section that follows, investments in new forestry projects have been hampered by the conversion of lands to grow crops, often for biofuels.

- Offsetting 0.2 million ton of CO<sub>2</sub> emissions from our mobile fleet and aircraft. We achieved this goal in 2007 and we took steps to increase the number of hybrid electric vehicles in our 11,000-vehicle fleet. Of 542 light-duty vehicles planned for purchase in the coming year, 31 percent will be hybrid or flex fuel.

We remain committed to our post-2010 climate change strategy in terms of the overall goals, but our recent experiences demonstrate the need for flexibility in how we can achieve them in a cost-effective manner. Some of the many tactics we are using to reduce our carbon footprint are described in more detail below.

#### ENERGY EFFICIENCY & DSM

AEP is committed to pursuing energy efficiency and DSM programs in all of the states in which we operate. We believe these programs should be an important part of our Integrated Resource Plan. The challenge is that we have some of the lowest electricity rates

in the country, making it difficult for such programs to pass the "cost-effectiveness" tests that can motivate behavior changes. Reasonable cost recovery is an issue for us, too, in some jurisdictions. We support greater consistency across supply-side and demand-side cost recovery treatment but continue to face a regulatory preference for supply-side investments in many states.

Much to the frustration of some stakeholders, we previously did not have a clearly defined policy on energy efficiency. In 2007, therefore, we clarified our policy and developed a strategy (through our gridSMART™ initiative) to take us beyond traditional energy efficiency and DSM programs.

We fully support programs that result in additional conservation and reduction—critical components in addressing climate change. We have ongoing programs in Kentucky

and Texas, have recently initiated several programs in Arkansas, and have requested approval for programs and related cost recovery in Oklahoma and Indiana. As part of our gridSMART™ initiative we will begin approaching regulators, customers and other stakeholders in the remaining states we serve. (For a state-by-state review of energy efficiency programs and actions in AEP's service territory, see [www.AEP.com/ci/energyefficiency](http://www.AEP.com/ci/energyefficiency).)

Energy efficiency strategy must go far beyond changing light bulbs and rebates. Our gridSMART™ initiative

seeks to put consumers in control of electricity usage by giving them the information about when energy is at peak demand, and when there is excess capacity in the system—and enabling them to adjust their usage accordingly. Facilitating informed decisions by our customers will help us reduce the number and length of outages, improve service and postpone the need for new generation. (Read more about gridSMART™

"AEP has good intentions but is bumping up against challenges it didn't see coming or knows how to address. It felt like you just shrugged your shoulders and moved on. We have to look at unintended consequences and we want to know that AEP is at the table on these policy issues."

Laura Belleville, Appalachian Trail Conservancy,  
referring to unforeseen challenges.

in the *Energy Security, Reliability & Growth* section.)

Overall, our philosophy on demand-side efficiency is to help our customers understand the true value of electricity, in the belief that they will be motivated to change how they use it—and be more likely to embrace technologies and rate structures that encourage energy conservation. Many of our stakeholders, including customers, employees and regulators, agree with this philosophy and we will continue to work with them to make it not just a philosophy but a reality.

#### RENEWABLE ENERGY

Many consumers are clamoring for clean, renewable energy. We are working to expand the options we can offer our customers and help our states meet their clean energy goals. For example, AEP Ohio's Green Pricing Option program en-

ables customers to buy Renewable Energy Certificates that represent power purchases of wind, solar and landfill gas.

Wind power is the fastest growing source of renewable energy, accounting for approximately one-third of all new generation capacity in the United States last year – but solar, biomass, geothermal and hydroelectric energy are also in high demand. Small- to mid-sized renewable energy sources are relatively easy to tie into a customer's facility or the distribution system, but developing large-scale renewable resources presents significant challenges.

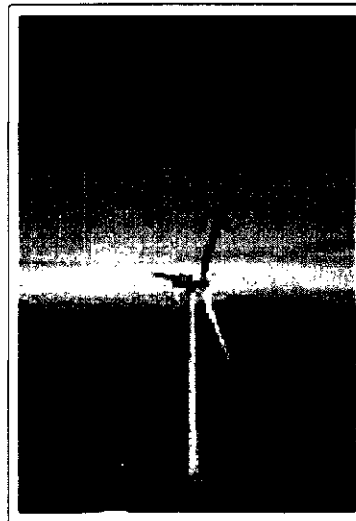
We need dramatic improvements in our nation's electrical infrastructure (i.e., transmission) capabilities if we are to deliver on the American Wind Energy Association's goal of providing 20 percent of the nation's electricity from wind. This can be achieved only with major investments in a transmission system that can deliver wind energy from where it can be generated to where it is needed.

The full potential of adding significant amounts of new large-scale renewable projects can best be realized through construction of a new, modern interstate extra-high voltage (EHV) transmission system that could carry the power from where it is produced to where it can be used. A modern EHV transmission system would also lead to less wasted energy, fewer emissions and greater access to affordable energy. (Read more about AEP's transmission vision in the *Energy Security, Reliability & Growth* section.)

#### GREENHOUSE GAS OFFSETS

Credible, enforceable greenhouse gas offsets are needed to address climate change. AEP is investing in a variety of offsets—including forestry projects and methane capture, and many stakeholders would like us to expand our reach even beyond our current efforts.

We invest in forestry projects because they support biodiversity while serving as an efficient method of carbon storage. We have not, however, been able to meet our 2007 goal to begin tripling our annual investments in forestry projects due to competition for private lands from crop producers. Such competition raises land costs substantially, making forestry offsets less cost-effective than other projects. In addition, the standards for forestry continue to be in a state of flux, so we are seeking projects that will “count” in the regulatory framework of the future.



Through the e8, AEP helped develop a 2,400 MW wind project to protect a fragile ecosystem in the Galapagos Islands. It is certified as a Clean Development Mechanism under the Kyoto Protocol.

By expanding our original focus on forestry projects to include other kinds of verifiable domestic offsets, we remain on target to meet our post-2010 carbon offset goals. We will continue working through these emerging issues with our stakeholders to resolve differences of opinion to stay on track in terms of total climate change impacts.

#### OUR INTERNATIONAL EFFORTS ON CLIMATE CHANGE

AEP's involvement with the World Business Council for Sustainable Development (WBCSD) has provided us with an international forum to share technology, promote sound policy and identify low-carbon options that provide a secure and

sustainable electricity future. This is a step in the right direction to ensure that most of the burden of reducing CO<sub>2</sub> emissions doesn't fall unfairly on the United States or on any other single nation. (For more information about our work with the WBCSD, see the *Public Policy* section.)

Our leadership in the San Cristobal Wind Project in the Galapagos Islands, and in hosting one of two e8 environmental performance workshops, has facilitated other projects being undertaken through the e8 to share sustainable energy knowledge and expertise with developing nations. The United Nations showcased the San Cristobal

Wind Project as a model for other nations and project developers. The e8 companies agreed to move forward with three more renewable energy projects in developing nations involving hydro and solar power.

#### OUR WORK AT HOME

AEP is actively engaged in the national discussion to shape climate change legislation. The Chicago Climate Exchange provides a good model for a federal cap-and-trade program. We have joined with others to support policies that foster advanced coal technologies, such as carbon capture and storage, at both the federal and state levels.

Our actions on this front include participating in the U.S. Environmental Protection Agency's Advanced Coal Technology Work Group, which focuses on identifying barriers to and incentives that promote the rapid development and deployment of coal technologies.

AEP's chief executive officer chairs the Business Roundtable's Energy Task Force, which has released a comprehensive vision and action plan for America's ener-

gy future, recognizing the need for a diversity of fuels and for public policies to support technology, reduce emissions and promote energy efficiency.

We were disappointed with the U.S. Department of Energy's (DOE) decision to end its funding for the FutureGen project—the first near-zero emissions coal power plant. We continue to support this project, and will also support additional funding of carbon capture and storage projects. The DOE has restructured FutureGen funding toward advancement of carbon capture and storage (CCS) technology. DOE has issued a Request for Information (RFI) on this new proposal. We have responded and have identified several carbon capture and storage initiatives that AEP has undertaken. We look forward to working with the DOE and are willing to take action on both FutureGen and CCS projects. ■

#### Useful web links:

[www.chicagoclimateexchange.com](http://www.chicagoclimateexchange.com)  
[www.awea.org](http://www.awea.org) • [www.e8.org](http://www.e8.org) • [www.ipcc.ch](http://www.ipcc.ch)

## Challenges, Goals, Progress { Climate Change }

| Challenge                                                                                                                                                                                                                     | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reduce or offset approximately 46 million metric tons of carbon dioxide equivalent emissions between 2003 and 2010, in spite of uncertainty how these voluntary reductions will be treated under federal climate legislation. | Meet our CCX commitment through 2010 through 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, including forestry.</li> <li>• Direct purchase of emission credits through CCX.</li> </ul>                                                                                                                                                                                             | Through 2007, reduced or offset CO <sub>2</sub> emissions by approximately 43 million metric tons through power plant efficiencies. <ul style="list-style-type: none"> <li>• Completed purchase agreement for 4.6 million carbon credits between 2010-2017 from methane capture from livestock.</li> <li>• Did not meet forestry goal due to competing interests for land that made it inefficient and too costly.</li> </ul>                                                                                                                                                                                                                                                                  |
| With no further actions, AEP's emissions will increase by approximately 10 million to 15 million metric tons between 2010 and 2020, as new generating plants come online.                                                     | Implement our post-2010 strategy to reduce carbon dioxide equivalent emissions by approximately 5 million metric tons per year: <ul style="list-style-type: none"> <li>• Bring new carbon capture and storage technology to commercial operation.</li> <li>• Invest in other advanced coal technologies, including IGCC and USC.</li> <li>• Increase renewable energy.</li> <li>• Invest in a range of offsets, including methane capture and forestry.</li> <li>• Implement EE/DSM programs to reduce consumption.</li> </ul> | <ul style="list-style-type: none"> <li>• Signed three long-term power agreements for 275 MW wind; 75 MW online January 2008 with remainder scheduled to be online December 2008.</li> <li>• Mountaineer chilled ammonia carbon capture and storage (CCS) project expected to begin operation in 2009.</li> <li>• Commercial operation of CCS at a power plant likely to begin in 2012. This project will reduce emissions by 1.5 million metric tons per year.</li> <li>• Arkansas and Louisiana regulators gave conditional approval to USC plant; Texas approval pending. Oklahoma regulators rejected second USC plant.</li> <li>• Proposed IGCC plant in West Virginia approved</li> </ul> |

| Challenge                                                                                                                           | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                     | <ul style="list-style-type: none"> <li>• Make efficiency improvements to power plants and retire less efficient, older plants.</li> <li>• Offset corporate mobile fleet and aircraft emissions.</li> </ul>                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• but rejected in Virginia; legal challenge to Ohio IGCC sent back to PUCO.</li> <li>• Identified efficiency improvements to power plants to potentially reduce CO<sub>2</sub> emissions by 1.1 million tons per year, after 2015.</li> <li>• 31 percent of 542 new light-duty vehicles ordered for 2008 are hybrid or flex fuel.</li> <li>• Reduced mobile fleet emissions, including aircraft, through carbon credits.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Implement cost-effective energy efficiency and DSM programs that motivate customers to reduce energy consumption.                   | <p>Collaborate with stakeholders to bring cost-effective EE/DSM programs to regulators, resulting in both MW and MWh reductions, delaying demand for new generation.</p> <p>Obtain regulatory support for gridSMART™ initiative, including traditional EE/DSM programs, new digital grid and smart metering technology.</p> <p>Reduce 1,000 MW of demand by 2012 – 15 percent to come from AEP; 85 percent to come from customer programs.</p> <p>Deploy 5 million smart meters by 2015, with regulatory support.</p> | <ul style="list-style-type: none"> <li>• Developed clearer policy on EE/DSM.</li> <li>• For complete state-by-state information on 2007 EE/DSM activities, see <a href="http://www.AEP.com/cr/energyefficiency">www.AEP.com/cr/energyefficiency</a>.</li> <li>• Kicked off gridSMART™ initiative that includes traditional EE/DSM program development and new technologies. Signed agreement with General Electric Co. to jointly develop and deploy equipment and technology programs to support this initiative.</li> <li>• Working collaboratively with Indiana Utility Consumer Counsel to implement 10,000-meter pilot in South Bend, Ind.</li> <li>• Participation with Leadership Group of National Action Plan for Energy Efficiency.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Reasonable and achievable carbon controls that encourage other nations to participate, as described in AEP's climate change policy. | A market-based federal cap-and-trade program that includes all sectors and sources, rewards early action, allows GHG offsets, supports public and private funding for technology development, includes a safety valve on the market price for purchasing allowances that protects the economy, allowances allocated based on historical emissions with only a small number of allowances (less than 5 percent) auctioned or set aside for public benefit.                                                             | <ul style="list-style-type: none"> <li>• AEP supports Senate Bill 1766, the Low Carbon Economy Act of 2007, introduced by U.S. Sens. Jeff Bingaman (D-N.M.) and Arlen Specter (R-Pa.).</li> <li>• Ongoing discussions with policymakers, industry peers and environmental stakeholders.</li> <li>• Supported Business Roundtable Energy Task Force report calling for diversified, domestic-based energy supply mix, increased EE/DSM and more investment in new technologies, such as carbon capture and storage.</li> <li>• Broad support for AEP/IBEW provision for climate change legislation.</li> <li>• Through participation in WBCSD, AEP is one of 10 global companies to develop report outlining policies and technologies needed for sustainable electricity future. Report presented at U.N. climate negotiations in Bali, Indonesia.</li> <li>• Hosted e8 coal power plant conference; engineers from India and Indonesia participated.</li> <li>• Through e8 participation, Galapagos wind energy project completed and brought online. Wind turbines displace partial need for diesel fuel for electricity, reducing the risk of fuel spills and emissions that could harm the fragile ecosystem of the Archipelago. Certified under Kyoto Protocol Clean Development Mechanism. AEP donated and installed 12 photovoltaic panels and funded training for long-term repairs and maintenance of both the solar and wind equipment.</li> </ul> |



# Energy Security, Reliability & Growth

During 2007, AEP began several breakthrough projects designed to put more control in the hands of customers, bolster the supply of available energy and strengthen the overall reliability of our system.

The first is a major initiative called gridSMART<sup>SM</sup> that will allow customers to better manage energy demand, usage and cost. We will update and automate our electric distribution system so that customers will receive more reliable service while also having more choices about usage; we will have real-time information about the status of the system; and we will have a greater ability to conserve energy through more efficient operations. To facilitate this system, we signed an agreement with the General Electric Co. to jointly develop and deploy equipment and technology programs to enable these "smart grid" features.

On the energy supply front, we received conditional approval to build a more efficient ultra-supercritical coal plant in Arkansas and approval to build a commercial-scale Integrated Gasification Combined Cycle (IGCC) plant in West Virginia.

Finally, we reorganized our already strong transmission operations as we advocate our vision for a nationwide extra-high voltage network that would add reliability and the ability to bring electricity from more diverse fuels to market.

Despite these accomplishments and plans, many challenges remain. Although the Energy Information Administration's projected growth in electricity demand has been lowered to 1.3 percent a year through 2030, from the 1.5 percent annual rate projected in 2007, that growth still will require new generating capacity.

AEP is examining new rate structures that better link prices to the value of electricity at various times. Rates that increase with consumption provide price signals to cus-

tomers that encourage energy conservation. Any change in rate structures will require investments in advanced metering and approval by state regulatory commissions. Those discussions, including time-of-day rates and others, will be addressed during regulatory filings this year. In each filing, the company will consider the impact on business, economic growth or vulnerable customers.

## GRIDSMART<sup>SM</sup>

Imagine being able to automatically postpone some energy intensive functions, such as running the air conditioner, hot water heater, pool functions or a manufacturing line, until after the hours of peak demand, when the cost is lower. With gridSMART<sup>SM</sup> customers will have control in their homes and in businesses that doesn't exist today, giving traditional energy efficiency and demand-side management programs a big technological boost.

gridSMART<sup>SM</sup> is the cornerstone of AEP's energy delivery system of the future. Not every need or technological innovation that customers will demand in the future can be envisioned today, but gridSMART<sup>SM</sup> is being designed to provide

a much greater degree of flexibility than is now possible. gridSMART<sup>SM</sup> provides three major benefits: it adds automation and capabilities to allow customers to better manage their energy use and improve reliability; it allows AEP to monitor and operate its system more efficiently and create fewer emissions; and it prepares the system for new technologies that could greatly affect how power is generated, distributed and consumed.

Smart meters would communicate with an AEP data center to indicate the price of power at a given time and how much energy is being used. Coupled with time-of-day or

**gridSMART<sup>SM</sup>** other innovative rates, home or business own-



The Dolan Chemistry Lab processes insulating oil samples from electrical equipment for maintenance support.



AEP's Transmission Operations Center, in New Albany, Ohio, is the nerve center of the nation's largest electricity transmission system.

ers would be able to decide how much they are willing to spend to perform a particular task now, versus waiting until a lower rate is in effect.

During periods of peak demand, customers might choose to cycle their air conditioning in 20-minute periods, for example, rather than run them continuously, or to turn off the pool pump for a few hours. Commercial and industrial customers could postpone energy intensive manufacturing or business operations.

The same technology would also allow AEP to better manage its system. Smart meters and distribution system equipment would enable us to connect customers remotely, identify overload conditions more easily and reduce energy theft. The result would be more timely service for customers, fewer crews on the road, fuel savings and lower emissions. gridSMART™ would enable us to identify outages more quickly rather than waiting for customers to report them, and this would help us deploy repair crews sooner.

gridSMART™ also incorporates more traditional energy efficiency and DSM programs, which could be implemented independently of advanced technology. Because electric prices have been so low in our service area, these programs have had little appeal among customers and regulators alike. Low prices undermine incentives to reduce consumption.

Some of our stakeholders, including Natural Resources

Defense Council, Ceres and the American Council for Energy Efficient Economies, continue to press us for programs and ideas that result in measurable reductions. At the same time, they recognize AEP's need for the cost of these programs to be recovered – while we recognize the value of continuing to work with these groups toward achievable solutions.

As rates increase because of higher fuel prices, environmental upgrades, new plant costs and related factors, AEP expects that the appeal of these programs will increase, and that gridSMART™ will magnify their benefits for our customers. We will also continue to offer traditional programs such as home weatherization, lighting upgrades and high efficiency upgrades. Our goal is to offset 1,000 MW of demand by 2012 through these efforts.

gridSMART™ will help us to operate more efficiently and save energy with programs that range from installing energy management systems in our company buildings to upgrading to new transformers that reduce energy losses. We project that making these improvements to our assets would yield 150 MW of our 1,000 MW goal in demand savings and provide 600 gigawatt hours a year in energy savings by 2012.

The gridSMART™ initiative also involves technology development in the areas of fuel cells, large-scale batteries and other energy technologies. No one can say with certainty how these technologies will be adopted, the rate at which they will be deployed and what their final impact will be on traditional generation systems.

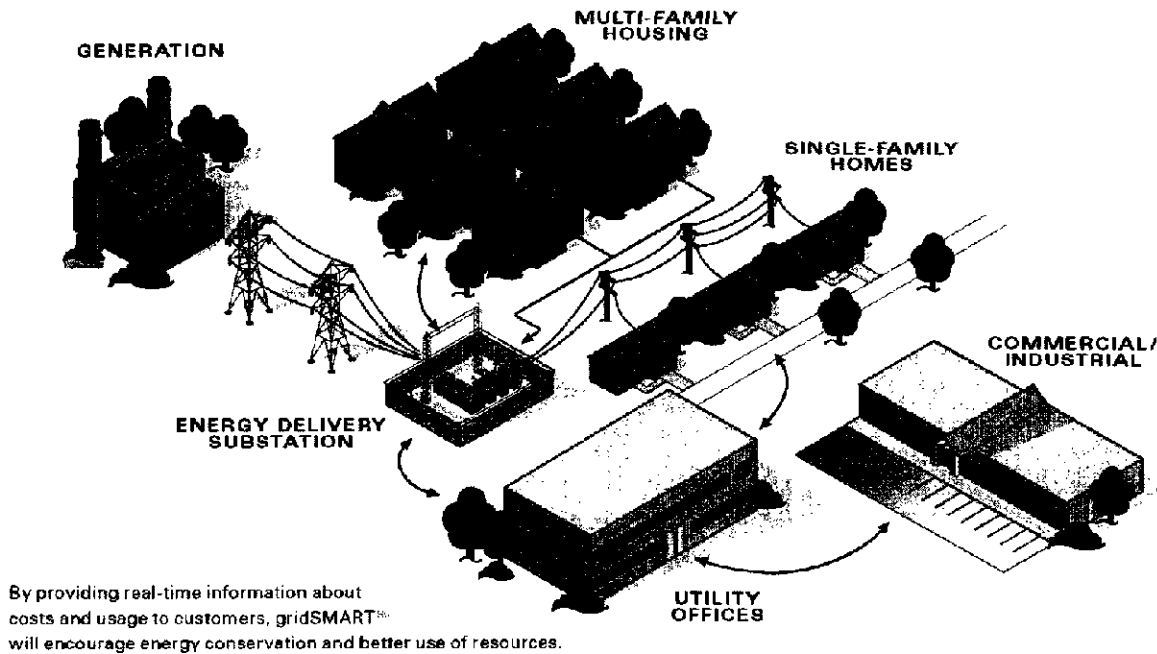
Among the technologies we are leaders in deploying,

#### AEP's Systemwide Reliability Performance

|              | 2006  | 2008  | 2007  |
|--------------|-------|-------|-------|
| <b>SAIFI</b> | 1.546 | 1.51  | 1.519 |
| <b>SAIDI</b> | 197.7 | 191.4 | 189.8 |

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

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



as discussed in last year's report, are sodium sulfur or NAS batteries, which can be deployed to support local circuits and take the strain off substations nearing capacity load. These batteries can support megawatt-sized loads for hours in the event of an outage. Their steady supply of power also helps offset power quality issues. They can delay the need for expensive substation upgrades for years, facilitating a better prioritization of capital. Once station upgrades have been completed, the batteries are easily moved to a new location.

AEP installed its first megawatt-scale NAS battery in 2006 and ordered three two-megawatt NAS batteries in 2007, which will be delivered and deployed this year. We expect to have 25 megawatts of NAS batteries in place by the end of 2010.

Another technology with significant potential to reshape the utility business is the plug-in hybrid electric vehicle, or PHEV. We are working with the major auto manufacturers to determine their likely rate of adoption. General Motors, Ford and Toyota have announced plans to introduce PHEVs, which will recharge from 110-volt circuits, before or in 2010.

Plug-in electrics have the potential to significantly alter utility load profiles. The utility industry goal is to en-

courage customers to recharge at night, when demand is lower and capacity is available.

More importantly, PHEVs can improve the nation's environmental profile. PHEVs eliminate automobile greenhouse gas emissions, which are a major contributor to greenhouse gas levels worldwide. Power plant emissions will increase, which will offset some of those gains. However, power plant emissions come from much fewer sources and are concentrated, which makes them easier to capture. As described earlier, AEP and others are developing technologies to capture carbon dioxide from coal plants.

All of these elements are part of gridSMART™. Deploying the technology will vary by state and is subject to regulatory approval and cost recovery. Each of our operating companies will develop plans to roll out these technologies and will work with their regulators on cost recovery.

To support the gridSMART™ effort, AEP and the General Electric Co. agreed in 2007 to jointly develop and deploy equipment and technology programs. The agreement calls for two pilot programs to be conducted in two mid-sized cities to test the equipment and customer response. Those cities have not yet been identified. A small pilot program will be conducted in Indiana as part of a settlement

agreement with regulators. AEP's goal is to have all 5 million smart meters in place by 2015, if regulators approve.

## TRANSMISSION

The nation's existing transmission system is aging and insufficient to meet long-term energy needs. It was built to serve utility load and to enhance reliability among interconnected utilities – not to facilitate the transfer of energy in a competitive marketplace. Nor was it designed to transmit renewable resources, such as wind and solar power, which may be generated far from where it is needed. As demands on our transmission system evolve, so too must our expectations and, ultimately, how the system is designed. Our existing 765 kV system provides a good foundation for expanding the nation's extra-high voltage (EHV) transmission network to meet near- and long-term energy needs.

We support development of a national interstate EHV transmission system—the electrical equivalent of our interstate highway system. Such a system would jump-start the development of a robust, modern electric grid to reinforce the strength of the existing system and allow us to deliver power where it's needed, when it's needed. We believe the best way to develop this system is through federal oversight and to encourage its development through incentives. Such an interstate transmission system is essential to ensuring a sustainable future for the nation. We are committed to this vision and will work with others to advance it.

A modern EHV system would eliminate bottlenecks, increase energy efficiency and congestion, and enable more renewable energy to be brought to market, foster greater competition and improve the system's reliability. For example, in a study completed in 2007 in conjunction with the

U.S. Department of Energy (DOE), the National Renewable Energy Laboratory, and the American Wind Energy Association (AWEA), AEP determined that a 19,000-mile 765 kV transmission system that overlays the existing network could help achieve AWEA's long-term goal of securing up to 20 percent of the nation's power from wind.

The system, as proposed, would cost approximately \$60 billion to build (in 2007 dollars), which represents one-third the cost of comparable capacity at 345 kV. It also uses less than one-quarter of the land needed for a right-of-way of an equivalent 345 kV system.

In addition to the benefits of bringing more renewable power to market, such a 765 kV network would free capacity on lower voltage transmission lines (such as existing 500 kV, 345 kV and 230 kV circuits). This is particularly important because this additional capacity provides more operational and maintenance flexibility and significantly improves reliability and efficiency.

**"We need a true nationwide transmission version of our interstate highway system; a grid of extra-high voltage backbone transmission lines reaching out to remote resources and overlaying, reinforcing, and tying together the existing grid in each interconnection to an extent never before seen."**

Suede Kelly, FERC Commissioner, July 23, 2007

Many of our stakeholders generally support new transmission but are cautious in their support because they want certainty that AEP will consider factors such as biodiversity when siting and building new lines. Some customers have told us the growth of AEP's transmission system is tied to the growth of their companies because they can only expand and grow where they have access to the electricity needed for their businesses.

Our vision for a 550-mile transmission line from West Virginia into New Jersey, announced in January 2006, is becoming a reality. The first step is a joint venture with Allegheny Energy to build the 290-mile Potomac-Appalachian Transmission Highline (PATH). One section of the route—244 miles—will consist of 765 kV trans-



mission lines.

The project is slated to start at AEP's Amos substation near St. Albans, W.Va., and run to Allegheny's Bedington substation, near Martinsburg, W.Va. Another 46 miles will consist of 500 kV transmission lines from Bedington to a new station to be built near Kemptown, near Frederick, Md. The Kemptown segment will be owned solely by Allegheny Energy. Siting studies for these projects are expected to begin in 2008.

While PATH has received approval from PJM Interconnection LLC, the regional transmission organization responsible for transmission planning for the area, state and local approvals must still be obtained. PJM has identified the corridor as an area in critical need of additional transmission capacity and has requested that the new line be in service by 2012.

In addition, the PATH project falls within an area that has been designated by the DOE as a National Interest Electric Transmission Corridor, which recognizes the need to address reliability and congestion concerns in the region. AEP believes that completing PATH will improve energy efficiency and provide greater reliability while reducing high congestion costs for the eastern PJM region.

We also received regulatory approvals to form a joint

venture with MidAmerican Energy Holdings Co., known as Electric Transmission Texas (ETT). We have begun



assigning major transmission projects to ETT and we also advocated a proposal to build 1,000 miles of transmission lines in Texas to support the state's development of its Competitive Renewable Energy Zones. We also signed an agreement with ITC Transmission to evaluate the feasibility of extending 765 kV lines through Michigan.

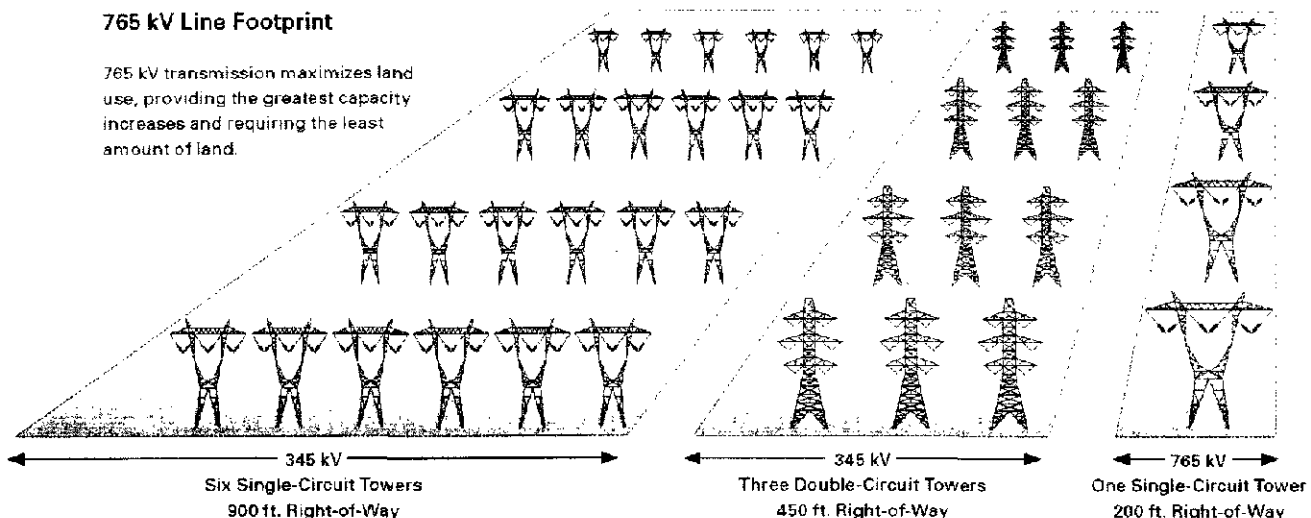
In response to the growing importance of these opportunities to expand the nation's EHV system, the transmission organization was reorganized to report directly to AEP's chairman.

#### GENERATION & PLANT EFFICIENCY

AEP's plans to build two ultra-supercritical coal plants met with only partial success. The John W. Turk Plant was approved in Arkansas and Louisiana and now awaits approval in Texas. This facility will use the latest technology to create electricity more efficiently than traditional coal plants. AEP believes that coal must remain part of the nation's generation because of its availability, consistent performance and low cost. This technology is an important part

#### 765 kV Line Footprint

765 kV transmission maximizes land use, providing the greatest capacity increases and requiring the least amount of land.



of our country's ability to use coal in the future. We will continue to develop coal and carbon capture technologies.

The second plant, proposed for Oklahoma, was not approved. As a result, Public Service Company of Oklahoma is working with its stakeholders to assess how we will meet growing energy demand in that region. (See the *Climate Change* section for more information on this topic.)

AEP also continues to pursue the construction of two IGCC coal plants, which convert coal into a gas before combustion. IGCC plants can be highly efficient and can be more easily configured for carbon capture than pulverized coal plants. Plants are tentatively planned for West Virginia, which would serve Appalachian Power customers in West Virginia and Virginia; and in Ohio.

The West Virginia Public Service Commission approved the 629-MW IGCC plant for Appalachian Power in March 2008. Unfortunately, the Virginia Public Service Commission has denied our request to recover the cost of building the plant. We plan to appeal the decision. This plant is important to meeting the needs of both states.

Because of the Ohio restructuring law that took effect in 2000, the proposed Ohio plant faces legal challenges. The Ohio Supreme Court ruled in March 2008 that the plant cannot be added to the regulated companies' rate base and sent the case back to the Public Utilities Commission of Ohio. We hope to resolve the issue.

Our stakeholders support adding carbon capture technology to these plants. We are prepared to go forward with

regulatory aspects of such an action when the economics of this technology become clearer.

We are not building only coal plants; other fuels have a role to play as well. Natural gas plants continue to be added to our generation fleet because of their favorable emissions profiles, quick build times and scheduling flexibility. In 2007, AEP added 12 gas units with a total capacity of 2,020 MW. Although natural gas has a useful place in our national energy system, it also has its limits due to price volatility and supply issues.

In addition to building more generating capacity, we are also focusing on supply-side efficiency in order to make the best possible use of existing generating capacity. Generating unit efficiency is expressed in terms of heat rate – the amount of energy required to generate one kilowatt hour of electricity. The less energy that is needed, the more efficient is the plant.

AEP has long been a leader in efficiency. Our system-wide average heat rate for AEP-owned coal-fired units was 9,962 Btu/kWh in 2007. In 2006, our heat rate was 9,915 Btu/kWh, which is just under 4 percent better than the national fossil fuel average of about 10,300 Btu/kWh. Heat rate increased in 2007 primarily because of the addition of three scrubbers. As additional environmental controls are retrofit on plants, efficiency decreases, as reflected by an increase in heat rate.

To improve plant efficiency, we routinely evaluate design improvements and have formed the Generation Performance Team to develop an integrated performance monitoring program for heat rate improvement and to provide guidance for a coordinated, disciplined approach to performance improvement. We also incorporate heat rate targets into the Generation group's incentive compensation program.

#### NUCLEAR ENERGY

Nuclear energy is again being considered a viable option for new generation, primarily as a response to climate change. We believe that nuclear should be among our power options



AEP Chairman Mike Morris (left) leads a tour of the Cook Nuclear Plant for U.S. Energy Secretary Samuel Bodman (right).

for new generation in the future.

AEP has operated the Donald C. Cook Nuclear Plant near Bridgman, Mich., since 1975. The Cook Plant received 20-year extensions of the licenses of each of its operating units in August 2005. As a result of those extensions, a number of long-term projects to improve plant reliability and capacity, including the replacement of high-pressure turbines, are being implemented.

In 2007, a routine emergency plan siren performance test activated sirens in 23 minutes in lieu of the required 15 minutes and was counted as a test failure of Cook's emergency siren system. The plant staff identified and corrected the component that failed. A subsequent Nuclear Regulatory Commission inspection of Cook's Emergency Planning Program early in 2008 confirmed that the issues that led to the failure have been resolved.

We continue to study the possibility of adding more nuclear capacity to our system. As prices increase for new coal units and greenhouse gas regulations remain uncertain, some state commissions are expressing greater interest in nuclear power. We continue to look at all options when considering new generation.

While nuclear energy does not produce greenhouse gas emissions, the issue of nuclear waste storage is significant, costly and unresolved. (Please see the *Environmental Performance* section for a further discussion of this topic.)

#### TESTING OUR RESILIENCE

As a system that serves 11 states in an area from Virginia to Texas, our resilience is tested routinely. A part of our service territory is often under some sort of outage and AEP crews respond as quickly as possible to restore power.

We are tested around the clock by storms, flood, lightning and equipment failures. Because of advance planning, companywide coordination and attention to detail, AEP is able to marshal resources to restore service in our own areas and in other utilities' service areas as well.



Two severe ice storms tested AEP's resiliency in Oklahoma in a 12-month period.

In our own service territory, Public Service Company of Oklahoma suffered widespread service interruptions twice in a 12-month span from major ice storms. In January 2007, an ice storm knocked out power to 100,000 customers. Damage was so extensive that some customers were without power for 10 days, despite an influx of workers from nearby AEP utilities and others. In December 2007, another ice storm left a total of 260,000 customers without electricity in what some called the worst natural disaster in the state's history. Most of our customers had electricity service restored within eight days.

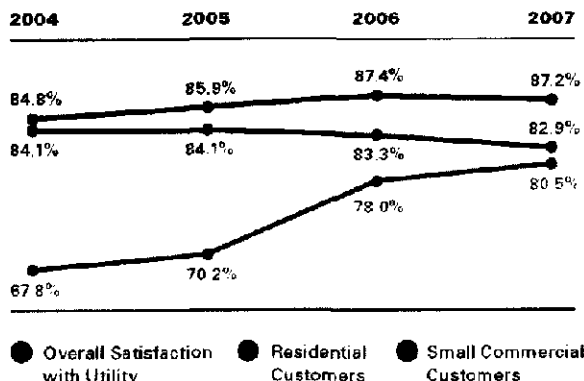
The utility industry has an established process in which utilities help each other when major events overwhelm their systems. Once that process is activated, we are capable of sending crews from throughout our system within hours of a call and even providing food and temporary quarters if the need arises. Through mutual assistance agreements, many of those companies have also helped AEP in dire weather crises. AEP is routinely recognized by the Edison Electric Institute, the industry's primary trade association, for our ability to help other utilities.

In 2006-2007, our crews provided assistance to 12 utilities across the United States.

The company's Business Continuity Plan includes planning for a natural or man-made disaster that destroys or renders unusable the com-



### Customer Satisfaction (national average = 82%)



Source: Market Strategies International

pany's headquarters or other key facilities, or affects employees and their families. The plan is updated continuously and practiced routinely so that key business functions can be carried on without major interruption. Backup locations have been identified for key personnel and functions. Affected personnel can be issued laptop computers to continue to work remotely. Plans have been expanded to include pos-

sible epidemics, such as the avian flu, that could render a large number of employees unable to work.

In addition to planning for unexpected disasters, AEP is also planning for the future leadership of the company. We have a senior management succession plan to ensure the company's future leadership sustainability.

Resiliency is increasingly being recognized as a factor in sustainability. According to the Center for Resilience at The Ohio State University, of which AEP is a founding member, "the key to sustainability of these systems is resilience, the ability to resist disorder" when referring to the combination of economic, environmental and social performance.

According to the Center, enhancing resilience not only strengthens a company's operations and improves financial performance, it enhances many intangibles such as reputation, employee motivation and process excellence. ■

Useful web links: [www.ge.com](http://www.ge.com) • [www.nrc.gov](http://www.nrc.gov)  
[www.resilience.osu.edu](http://www.resilience.osu.edu) • [www.ferc.gov](http://www.ferc.gov)

## Challenges, Goals, Progress { Energy Security, Reliability & Growth }

| Challenge                                                                                                                                                                                                                                                                                       | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| We need timely regulatory approval to site and build new utility infrastructure to meet the growing demand for electricity and improve reliability. The challenge lies in issues such as siting, regulatory lag in recovering costs and competing interests among stakeholders.                 | Meet our obligation to serve customer demand with reliable, reasonably priced electricity while remaining in compliance and receiving regulatory support.<br><br>Work with and listen to all affected constituencies.<br><br>Execute a transmission plan to achieve best practices in reliability compliance, respond to ordered improvements by regional entities, serve our distribution system and other interconnections and replace aging equipment. | A Distribution Reliability Strategic Plan, incorporating infrastructure, customer, regulatory and financial impacts for all of AEP's distribution system, was developed and is being incorporated into the five-year capital forecast. However, cost recovery in future filings will determine ability to implement.<br><br>Completed a needs assessment study in Michigan in conjunction with International Transmission Corp. and are engaged in joint venture discussions to build the proposed transmission line in the study recommendation, with approval from the Michigan Public Service Commission and Gov. Jennifer Granholm's Energy Policy Task Force. |
| Our vision for transmission is to develop a national interstate transmission grid that would improve reliability, reduce wasted energy through lower system losses and bring more renewable and new-technology energy to market. The challenge is to work with various stakeholders to advocate | Complete construction of PATH transmission project by 2012, completing first half of I-765 project as originally proposed in 2006 and advancing the goal of creating a new interstate transmission system. PATH project recognized as critical to reliability and regional congestion issues; it falls                                                                                                                                                    | AEP formed joint venture with Allegheny Energy to build 290-mile PATH line with 244 miles of the line to be 765 kV. FERC approved the formula rate that will go into effect March 1, 2008, subject to refund, pending the outcome of hearing or settlement discussions.                                                                                                                                                                                                                                                                                                                                                                                            |

| Challenge                                                                                                                                                                                                                                                                                                                                                                                                                                             | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| for a national interstate EHV transmission system versus a series of short-term local fixes.                                                                                                                                                                                                                                                                                                                                                          | <p>within NIETC designation.</p> <p>Build transmission infrastructure to support long-range reliability and development of new technology and renewable generation, like the Competitive Renewable Energy Zones (CREZ) in the Electric Reliability Council of Texas (ERCOT).</p> <p>Build coalition of public support from industry, trade groups, NGOs, policymakers and others to demonstrate need and support for EHV interstate transmission system.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>AEP announced Electric Transmission Texas (ETT), a joint venture with MidAmerican Energy Holdings Co., in November 2007. An additional approximately 1,000-mile, high-voltage, high-capacity backbone transmission system proposed to state regulators and the ERCOT. The first two stages of the proposed infrastructure would reinforce the ERCOT transmission grid, providing access for up to 10 GW of existing and planned renewable energy projects in north and central West Texas.</p> <p>AEP announced another joint venture with MidAmerican, Electric Transmission America (ETA). ETA will be a 50-50 partnership identifying and investing in high-voltage transmission projects (345kV or higher) located in North America, outside of ERCOT. Through ETA, the companies intend to invest in transmission projects with a cost of at least \$100 million or more.</p> |
| To delay the need for new generation, consumers must change how they use electricity and reduce their demand for it. Giving them the tools and information to make informed decisions about how and when to use electricity requires new technologies combined with traditional energy efficiency programs. The challenges include regulatory support for this strategy and educating consumers about the value of electricity to affect their usage. | <p>gridSMART<sup>SM</sup> initiative provides the platform to develop and deploy new technology, develop cost-effective energy efficiency programs and allow AEP to operate more efficiently, creating fewer emissions. These changes also position AEP to better manage new technologies such as PHEVs. Achieve full regulatory support to allow deployment of 5 million smart meters by 2015.</p> <p>In 2008 we plan to complete implementation of a 10,000-meter gridSMART<sup>SM</sup> pilot project in the South Bend, Ind., area, file a multi-year Advanced Meter Infrastructure deployment plan in Texas and obtain regulatory approval to demonstrate the benefits of gridSMART<sup>SM</sup> technologies in two model city deployments.</p> <p>Reduce or offset 1,000 MW demand through energy efficiency programs by 2012, with 15 percent to come from AEP and 85 percent to come from customer programs.</p> <p>Deploy 25 MW of NAS battery storage by the end of 2010, with 6 MW installed in 2008.</p> <p>Increase diversity of fuel portfolio to reduce percentage of generation that relies on coal to make electricity.</p> | <p>AEP and General Electric Co. agreed to jointly develop and deploy equipment and technology programs.</p> <p>Launched comprehensive gridSMART<sup>SM</sup> initiative to coordinate technology and program development.</p> <p>Ordered three two-megawatt NAS batteries for deployment in 2008. Identified locations where the batteries can be demonstrated.</p> <p>Committed to 2008 customer education campaign on energy usage through Clinton Global Initiative.</p> <p>Offered DSM programs in several states.</p>                                                                                                                                                                                                                                                                                                                                                            |
| Having a diverse energy portfolio is critical to a secure energy future and strengthens the nation's ability to reduce its reliance on foreign energy sources. In addition, coal is becoming more of a global commodity, forcing us to compete internationally for it.                                                                                                                                                                                | <p>Add 1,000 MW of wind power by 2011.</p> <p>Keep nuclear power in the fuel diversity and climate change discussions as a carbon emission-free generation source.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Added 12 natural gas units in 2007 with total capacity of 2,020 MW.</p> <p>Signed power purchase agreements for 275 MW of wind; 75 MW online in December 2007. Remainder to come online in 2008.</p> <p>The Donald C. Cook Nuclear Plant implemented process and efficiency improvements to ensure its long-term operation. Both units received 20-year license extensions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



# Stakeholder Engagement

To be successful we must work with many different stakeholders on an ongoing basis, not only when we need them. We face complex, global issues that require collaboration in order to achieve solutions. We must listen with an open mind to build mutually advantageous relationships that are grounded in trust, respect, honesty and a shared commitment to collaboration. Whether we succeed will be for others to determine.

In the spirit of living these values, we organized a series of eight stakeholder meetings in 2007 and 2008 in order to hear different points of view on issues such as environmental performance and discussions about work force planning and mountaintop mining. We reached out to customers, regulators, employees, community leaders, environmental groups, labor, conservationists, educators, investors and neighbors of our power plants. Through this process, we learned about what we are doing well and received constructive suggestions for improvement. This section reflects some of what we heard and how this report was influenced by our stakeholder engagement.

To foster neutrality, AEP engaged SustainAbility, a London-based firm, to facilitate six of the meetings. Stakeholders and AEP management, including power plant managers, senior executives and operating company presidents, had wide-ranging discussions on issues of mutual concern. These discussions will serve as a foundation for integrating stakeholder engagement as an ongoing process within our companies and at our power plants.

Among those we met with were representatives of the Indiana Consumer Counsel, the Occupational Safety & Health Administration (OSHA), the Environmental Defense Fund, Arkansas Sierra Club, Virginia Polytechnic Institute and State University, Oklahoma Sustainability

Network, International Brotherhood of Electrical Workers (IBEW), Ceres, Wal-Mart Stores Inc., Kimberly Clark Corp., Texas Public Utilities Commission, Ohio University, Whirlpool Corp., Appalachian Trail Conservancy, Small Farm Institute of Ohio, AllianceBernstein Investments, Lord Abbett & Co., a neighbor of our Rockport Plant, University of Arkansas and many of our employees.

Many stakeholders were surprised that we invited them to participate in this process and welcomed the openness it signaled. We asked them to be candid and assured them we were listening with an open mind. We learned a

lot about how we are perceived, how we can improve, and how to forge relationships we never expected to have.

Through this process we were able to identify gaps in our reporting, such as a lack of information on mercury issues. Our employees expressed concerns about aging work force issues and related them to safety risks for inexperienced workers.

Some employees did not understand our approach to carbon offsets; one employee said it sounded like "we can't live up to all the expectations so let's buy some mulligans."

One investor told us his clients are increasingly asking what companies are doing to be good stewards and recommended we reach out more to socially responsible investors.

The language and terminology we use came into question at times. One stakeholder asked if we are opposed to mandates we don't like when we say "reasonable and voluntary" in talking about regulations. Others asked us to stop using the term "clean coal" because coal is not clean in their eyes. Nearly everyone who participated in these discussions agreed AEP must do more to educate customers, policymakers and the general public about the true value of electricity and the impact that unreasonable carbon regula-



AEP, in partnership with the Columbus Housing Partnership, supported construction of this LEED home that will be sold to a low-income family. Solar panels will provide part of the home's energy.

**Here are some other comments we heard:**

"Do not underestimate how literate college students are on energy issues. They are quite savvy."

Sonia Marcus, Sustainability Coordinator, Ohio University

"Pushing the envelope can be more challenging in a regulated utility environment. However, utilities that do can drive innovation and creativity throughout the industry."

Kevin Christ, Wal-Mart Stores, Inc.

"The way we talk about cost recovery for environmental performance comes across as an excuse. It adds to the public mistrust of the company."

Dave Pinson, unit operator, Big Sandy Plant

"This section of the report is very positive: of all of them, this is the one that demonstrates corporate responsibility, ethical behavior and concern for society where AEP operates."

J.D. Strong, chief of staff, Secretary of Environment, State of Oklahoma, talking about *Stakeholder Engagement* section

"People really want to know how we are connecting with and giving back to our communities and how we treat our employees. This is a good start but we need to see more of it in future reports."

Judy Litherland, administrator, Rockport Plant

"It seems odd that we talked about celebrating a year with no AEP employee fatality when we did have contractor and public fatalities."

Janet Smith, manager, Economic Development, Public Service Company of Oklahoma

"We have to be responsible for our share and do something about what we can control and be responsible. If the world doesn't survive, we won't either."

Margarete Burch, technician, Utility Operations-West, talking about climate change

tions will have on prices and on the economy. We were also questioned why there were not more young people involved because they will be living with and paying for the decisions made today for a sustainable energy future.

**WORKING WITH REGULATORS**

AEP's major subsidiaries are regulated utilities that must comply with laws and regulations at the federal, state and local levels. To increase rates or build new facilities, we must justify the need and obtain approval. Working with regulators is the only way we can serve our customers' needs cost-effectively while earning a fair return for our shareholders.

We have always invested time to strengthen trust and credibility with our regulators. During hearings for permission to build the John W. Turk Plant in Arkansas, that state's Public Utility Commission (PUC) asked to visit one of AEP's plants before rendering a decision. We invited the regulators, the state's attorney general and the interveners to visit our Flint Creek Plant.

SWEPCO understood the concerns of the local communities that would be affected by the new plant's construction and reached out across its three-state service territory to outline the facts and answer questions. Months after testimony and stakeholder discussions began, the Arkansas and Louisiana PUCs conditionally approved the new plant—a significant milestone because it came at a time when other proposed coal plants around the country were being rejected.

Our top priority is our employees', customers' and contractors' safety and health. To improve our safety performance, we invited OSHA to meet with management and employees and to visit our plants.

Raising customer rates is and will be necessary to keep pace with the increasing cost of maintaining and operating AEP's system. When we needed rate increases in Texas, AEP Texas initiated a campaign to educate regulators and customers about why it was necessary. The Public Utilities Commission of Texas approved rate increases in 2007. In the case of Texas North Company (part of AEP Texas), the commission required us to make annual \$50,000 contributions to the Texas Association of Community Action Agencies to help subsidize electricity for low-income customers in its service territory.

### WORKING WITH ADVOCATES

After working with Ceres to develop the 2006 Corporate Responsibility Report, we pledged to hold quarterly stakeholder briefings. Although not quite quarterly, we did hold periodic meetings with Ceres, the Pew Center for Global Climate Change, the NRDC and the Environmental Defense Fund to discuss our climate change strategy and plans for carbon capture and storage. Our CEO and Chairman, Mike Morris, led most of these meetings.

We continued to touch base with the Ceres stakeholder team (17 organizations) throughout the year. For example, we briefed them when the New Source Review (NSR) settlement was being announced, and when we decided to support the Bingaman/Specter climate bill in Congress. In November 2007, we organized a stakeholder briefing call, led by AEP Chairman Mike Morris. We also worked with other groups throughout the year, including The Great Plains Institute, the Clean Air Task Force, ACEEE and the National Wild Turkey Federation on various initiatives.

When the Oklahoma Corporation Commission opened a notice of proposed rulemaking for development of energy efficiency programs, AEP seized the opportunity to work with stakeholders, including Ceres and the NRDC, on this issue of mutual concern. While they did not agree completely with our position, the dialogue we had was productive. We learned more about what is important to them in establishing energy efficiency programs and they learned how AEP recovers its costs for such programs.

### WORKING WITH OUR COMMUNITIES

We believe that our vision for an interstate transmission system is necessary for America's energy future, but not everyone agrees. AEP's original 550-mile 765 kV transmission line proposed to run from West Virginia to New Jersey raised concerns among national park managers in the region. At the request of stakeholders, we met with 40 national park superintendents in Gettysburg, Pa., to explain the proposed project and the potential impact on the many national parks in the area. We also shared our approach to



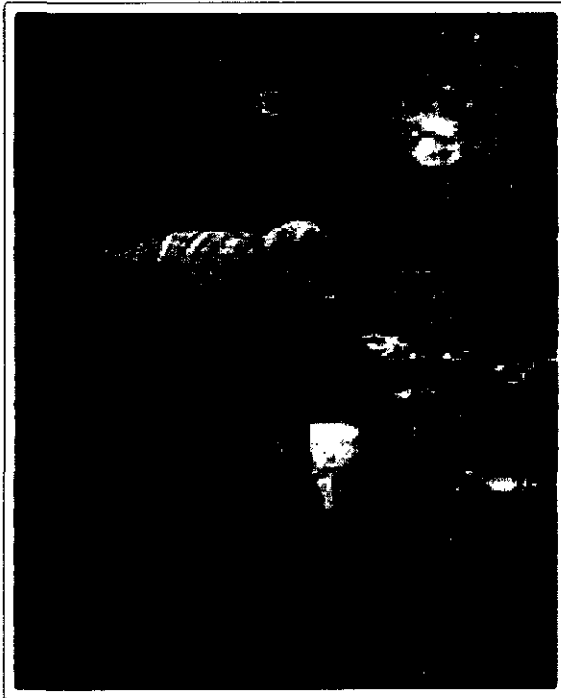
AEP management routinely participates in webcasts for employees to discuss earnings and significant company announcements.

working with communities, affected landowners and agencies, such as the National Park Service. The session was well-received and we pledged to keep the group informed as the project develops.

Our employees are often engaged in forming relationships between AEP and the communities in which we operate. Habitat for Humanity, for example, receives significant volunteer support from our employees. In 2007, AEP sponsored and built a two-story home in Columbus, Ohio, through more than 2,400 hours of donated work. In another volunteer effort, employees at the Welsh Plant in Texas set up a fund to help less fortunate families and to provide local children with Christmas gifts. Last year, the employees made home repairs, installed new energy-efficient appliances and donated gifts for a family faced with family medical hardships.

### STAYING CONNECTED WITH OUR EMPLOYEES & CUSTOMERS

We take seriously our responsibility to keep our employees informed and engaged. We stay connected to our employees with an Intranet site ("AEPNow") that provides tools, information and resources; a monthly employee newsletter ("Inside AEP") that is mailed home to ensure we communicate with all employees; quarterly employee webcasts scheduled around earnings announcements and other spe-



Mark Dempsey, front, vice president of external affairs for AEP in West Virginia, and Frank Brown, who lives along Morris Creek, stock trout in the creek, which was dead to aquatic life at the beginning of the century. AEP worked with local residents to restore the creek so it could support life.

cialized communications.

In 2007, we launched an internal blog that allows employees to sound off on a range of issues important to them. "Open Mike" is another employee forum that meets privately and regularly with the CEO. Participation in Open Mike rotates to allow for broader participation; 25 employees are part of this program each year.

One of our challenges is employee understanding of sustainability, especially as it relates to their jobs day-to-day. During our employee stakeholder meetings we heard that if it had not been for their participation in this process, many employees would not have known about the report or AEP's sustainability strategy.

Clearly, we have to change this view. We are developing a cross-functional team to create an action plan for routinely incorporating sustainability into training, new employee orientation and individual goal development. We

have begun a communications initiative, called "Sustainability in Action," that will regularly use existing newsletters and web-based tools to identify examples of what sustainability means to AEP and how it affects employees and the company's business strategy.

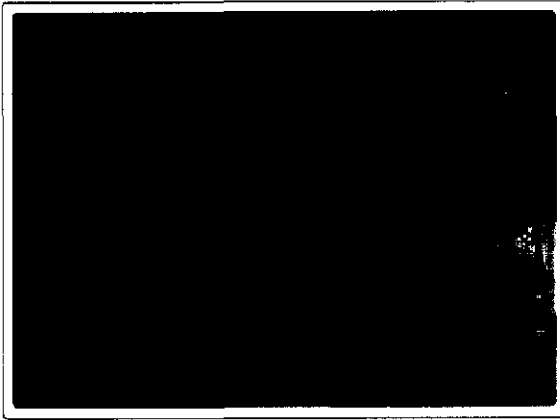
Our customers are also part of our stakeholder engagement process. We communicate with them in many ways, including monthly bill inserts, customer newsletters, media advertising, web sites, customer call center agents, field representatives and account managers. Our customer service employees and call center representatives have direct contact with customers on all aspects of our business. We survey our customers quarterly and last year we saw customer satisfaction increase from 83 percent in 2006 to 83.7 percent in 2007. AEP ranks 10th among 60 utilities nationally in customer satisfaction.



#### PHILANTHROPY

Our corporate giving program has a special emphasis on improving lives through education from early childhood through higher education. Other areas of focus are protecting the environment; providing basic human services in the areas of hunger, housing, health and safety; and enriching the quality of life through art, music and cultural heritage. Support for each of these is critical for successful communities. In 2007 AEP's philanthropic investments totaled \$15.6 million.

While corporate giving is often measured in dollars and cents, it doesn't always take money to improve someone's quality of life. For example, Indiana Michigan Power Co. sponsored a Habitat for Humanity house in Fort Wayne, Ind., that is now home to a refugee family from Myanmar (formerly Burma). The company also donated computers to provide family learning experiences and laptops for at-risk pregnant women who are bedridden. The computers allow them to stay in touch with loved ones and access information about their health. For more information about AEP's corporate giving, please visit [www.AEP.com](http://www.AEP.com).



AEP Chairman and CEO Mike Morris listens to a question while visiting the University of Arkansas, one of six campuses on the Future of Energy Listening Tour.

## AMERICAN ELECTRIC POWER FOUNDATION

The American Electric Power Foundation was created in

2005 to provide a permanent, ongoing resource – independent of our financial performance – for charitable initiatives. This stability allows us to make multi-year commitments within and outside of the communities we serve. One of the Foundation's largest commitments is to the Columbus Downtown Development Corporation. The Foundation will match up to \$10 million of the city's contributions to transform the Scioto River waterfront into a modern park, located near AEP's corporate headquarters. The Foundation donated \$11.5 million to 68 organizations in 2007. For more information about the American Electric Power Foundation, please visit [www.AEP.com](http://www.AEP.com). ■

### Useful web links:

[www.sustainability.com](http://www.sustainability.com) • [www.ceres.org](http://www.ceres.org)  
[www.habitat.org](http://www.habitat.org) • [www.sciotomile.com](http://www.sciotomile.com)

## Challenges, Goals, Progress { Stakeholder Engagement }

| Challenge                                                                                                                                                                                                                           | Goal                                                                                                                                                                                                            | Progress                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| We must engage our various stakeholders regularly to build our 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. | Further develop stakeholder outreach plan, in partnership with business units that can be integrated with existing community outreach activities and create shared value of sustainable development objectives. | Joined SustainAbility's Engaging Stakeholders program to learn best practices that could be implemented at AEP.                                                                                                                                  |
|                                                                                                                                                                                                                                     | Hold regular stakeholder briefings with environmental, social and community-based NGOs.                                                                                                                         | Developed stakeholder plan for 2008 corporate sustainability report in collaboration with business units, tapping their stakeholder base as the source of this outreach.                                                                         |
|                                                                                                                                                                                                                                     | Integrate inclusive stakeholder process with development of annual corporate sustainability report.                                                                                                             | Held regular meetings/briefings with leaders of Ceres, NRDC, Pew and Environmental Defense Fund on various issues. Full stakeholder briefing held in the fall on several issues, including NSR settlement, climate change and energy efficiency. |
| Without continued employee involvement in the community, AEP's message may not be heard and relationships would not be as strong.                                                                                                   | Continue \$150 grant award opportunities to AEP employees for community involvement.                                                                                                                            | Collaborated with Clean Air Task Force, Great Plains Institute, NRDC, Ceres and others on a range of issues throughout the year. Regular discussions held.                                                                                       |
|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                 | In 2007, 908 grants of \$150 each were made on behalf of more than 750 active and retired employees, who collectively performed more than 138,000 hours of volunteer service.                                                                    |
| Continue philanthropy and corporate giving, even in economic downturns when the support is needed                                                                                                                                   |                                                                                                                                                                                                                 | \$15.6 million donated through corporate giving in 2007.                                                                                                                                                                                         |

| Challenge                                                                                                                  | Goal                                                                                            | Progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| most. Our support is critical to having successful communities and improving quality of life.                              |                                                                                                 | <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>During last decade sponsored 230 teacher workshops and partnered with more than 90 schools, colleges and educational organizations to reach more than 4,400 teachers and 352,000 students. Contributed more than \$3.1 million to programs targeting K-12 grades.</p> <p>AEP Foundation donated \$11.5 million to 68 organizations in 2007.</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 2007, employees contributed \$2 million to United Way; AEP added \$1 million.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Glossary

**Advanced Coal Technologies:** Includes supercritical, ultra-supercritical, circulating fluidized bed and integrated gasification combined cycle (IGCC) technologies.

**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 & 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 and is considered a greenhouse gas because it traps heat radiated by the earth into the atmosphere.

**Climate Change:** Changes in climate that depart from normal variability, representing significant changes in averages and/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-Side Management (DSM):** 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.

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

**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.

**Megawatt (MW):** One million watts of electricity. A unit of power equal to 1,000 kilowatts.

**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 minimums for particular sources, such as renewable energy.

**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.

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

**Sustainable Development:** Coined by the Brundtland Commission as development that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs." Generally, means development that includes environmental sustainability, economic sustainability and social-political sustainability.

**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.

# GRI Table of Contents { Key Indicators }

**Key:** CS 2008 = Report Page Number CW = Corporate Web Site EU = Electric Utility Sector Supplement

|                               | CS 2008                                                                                                                                 | CW                   |                                          | CS 2008                                                                                                                                              | CW                    |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>Strategy &amp; Profile</b> |                                                                                                                                         |                      |                                          |                                                                                                                                                      |                       |
| 1.1                           | Statement from the most senior decision-maker of the organization                                                                       | 2-3                  | 4.11                                     | Whether and/or how the precautionary approach or principle is addressed by the organization                                                          | 2-3                   |
| 1.2                           | Description of key impacts, risks, and opportunities                                                                                    | 4-5                  | 4.12                                     | Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses | CW                    |
| <b>Organizational Profile</b> |                                                                                                                                         |                      |                                          |                                                                                                                                                      |                       |
| 2.1                           | Name of the organization                                                                                                                | Cover                | 4.13                                     | Memberships in associations                                                                                                                          | 34 CW                 |
| 2.2                           | Primary brands, products, and/or services                                                                                               | Inside Back Cover CW | 4.14                                     | Stakeholder groups engaged by the organization                                                                                                       | 7, 57-61              |
| 2.3                           | Operational structure of the organization                                                                                               | CW                   | 4.15                                     | Identification and selection of stakeholders                                                                                                         | 7, 57-61              |
| 2.4                           | Location of organization's headquarters                                                                                                 | Inside Back Cover CW | 4.16                                     | Approaches to stakeholder engagement                                                                                                                 | 57-61                 |
| 2.5                           | Countries in which the company has operations                                                                                           | CW                   | 4.17                                     | Use of stakeholder engagement                                                                                                                        | 6-7, 57-61            |
| 2.6                           | Nature of ownership and legal form                                                                                                      | CW                   | <b>Economic</b>                          |                                                                                                                                                      |                       |
| 2.7                           | Markets served                                                                                                                          | Inside Back Cover CW | <b>Disclosure on Management Approach</b> |                                                                                                                                                      |                       |
| 2.8                           | Scale of the reporting organization                                                                                                     | Inside Back Cover CW | EU5                                      | Short- and long-term reliability planning                                                                                                            | 2-5 / 29-35 CW        |
| 2.9                           | Significant changes in size, structure, or ownership                                                                                    | CW                   | EU6                                      | Demand-side management programs                                                                                                                      | 47-55 CW              |
| 2.10                          | Awards received in the reporting period                                                                                                 | CW                   | EU7                                      | Research and development activity                                                                                                                    | 31-32 / 42-43         |
| EU1                           | Installed capacity (MW) by regulatory regime                                                                                            | CW                   | EC1                                      | Direct economic value generated and distributed                                                                                                      | 31-32 / 35, 45, 47-55 |
| EU2                           | Number of residential, industrial and commercial customer accounts                                                                      | CW                   | EC2                                      | Financial implications and other risks and opportunities for the organization's activities due to climate change                                     | CW                    |
| EU3                           | Length of transmission and distribution lines by voltage                                                                                | CW                   | EC3                                      | Coverage of the organization's defined benefit plan obligations                                                                                      | 37-45 CW              |
| <b>Report Parameters</b>      |                                                                                                                                         |                      |                                          |                                                                                                                                                      |                       |
| 3.1                           | Reporting period                                                                                                                        | 7                    | EC4                                      | Significant financial assistance received from government                                                                                            | CW                    |
| 3.2                           | Date of most recent previous report (if any)                                                                                            | 7                    | EC5                                      | Range of ratios of standard entry-level wage compared to local minimum wage at significant locations of operation                                    | CW                    |
| 3.3                           | Reporting cycle                                                                                                                         | 7                    | EC6                                      | Policy, practices, and proportion of spending on locally based suppliers                                                                             | 26 CW                 |
| 3.4                           | Contact point for questions regarding the report                                                                                        | 8                    | EC8                                      | Development and impact of infrastructure investments and services provided primarily for public benefit                                              | 45-55 CW              |
| 3.5                           | Process for defining report content                                                                                                     | 6-9                  | EU9                                      | Long-term planned capacity                                                                                                                           | 51-53                 |
| 3.6                           | Boundary of the report                                                                                                                  | 6-9                  | EU10 & EU11                              | MW and MWh saved through demand-side management                                                                                                      | 36                    |
| 3.7                           | Specific limitations on the scope or boundary of the report                                                                             | 6-9                  | EU12                                     | Average generation efficiency                                                                                                                        | 52                    |
| 3.8                           | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities                       | CW                   | EU13                                     | Transmission and distribution efficiency                                                                                                             | 47-51 CW              |
| 3.9                           | Data measurement techniques and the bases of calculations                                                                               | 6-9                  | <b>Environmental</b>                     |                                                                                                                                                      |                       |
| 3.10                          | Explanation of the nature and effect of any restatement                                                                                 | 7                    | <b>Disclosure on Management Approach</b> |                                                                                                                                                      |                       |
| 3.11                          | Significant scope, boundary, or measurement changes from previous reporting period                                                      | 7                    | EN1                                      | Materials used by weight or volume                                                                                                                   | 11-19                 |
| <b>GRI Content Index</b>      |                                                                                                                                         |                      |                                          |                                                                                                                                                      |                       |
| 3.12                          | Table identifying the location of the Standard Disclosures in the report                                                                | 63-64                | EU-EN1                                   | In-use inventory of PCBs                                                                                                                             | 15                    |
| 3.13                          | Accuracy and completeness of report                                                                                                     | 7-8                  | EN3                                      | Direct energy consumption by primary energy source                                                                                                   | 38                    |
| <b>Governance</b>             |                                                                                                                                         |                      |                                          |                                                                                                                                                      |                       |
| 4.1                           | Governance structure of the organization                                                                                                | CW                   | EN5                                      | Energy saved due to conservation and efficiency improvements                                                                                         | 18-19                 |
| 4.2                           | Indicate whether the Chair of the highest governance body is also an executive officer                                                  | CW                   | EN6                                      | Initiatives to provide energy-efficient or renewable energy based products and services                                                              | 31-32 / 42-43         |
| 4.3                           | Independence of the Executive Board                                                                                                     | CW                   | EN8 & EN10                               | Total water withdrawal by source                                                                                                                     | 13 CW                 |
| 4.4                           | Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body                        | CW                   | EU-EN8                                   | Water used for processing, cooling and consumption                                                                                                   | CW                    |
| 4.5                           | Linkage between organization's performance and compensation for members of the highest governance body, senior managers, and executives | CW                   | EN9                                      | Water sources affected by withdrawal                                                                                                                 | 11 CW                 |
| 4.6                           | Processes in place for the highest governance body to ensure conflicts of interest are avoided                                          | CW                   | EU11                                     | Location and size of land owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas     | 16 CW                 |
| 4.7                           | Process for determining the qualifications and expertise of the members of the Executive Board                                          | CW                   | EU14                                     | Biodiversity of replacement habitats                                                                                                                 | CW                    |
| 4.8                           | Corporate mission and values                                                                                                            | 6 CW                 | EN12                                     | Impacts on biodiversity                                                                                                                              | 18-17 CW              |
| 4.9                           | Board-level processes for identifying and managing risks and opportunities                                                              | 6-9                  | EN13                                     | Habitats protected or restored                                                                                                                       | 18-17 CW              |
| 4.10                          | Processes for evaluating the highest governance body's own performance                                                                  | CW                   | EN14 & EU-EN14                           | Strategies for managing impacts on biodiversity                                                                                                      | 16-17 CW              |
|                               |                                                                                                                                         |                      | EN15                                     | IUCN Red List species and others with habitats in areas affected by operations                                                                       | CW                    |
|                               |                                                                                                                                         |                      | EN16                                     | Total direct and indirect greenhouse gas emissions by weight                                                                                         | 12 CW                 |
|                               |                                                                                                                                         |                      | EU-EN16                                  | CO <sub>2</sub> e per MWh by regulatory regime                                                                                                       | CW                    |
|                               |                                                                                                                                         |                      | EN17                                     | Other relevant indirect greenhouse gas emissions by weight                                                                                           | 12 CW                 |
|                               |                                                                                                                                         |                      | EN18                                     | Initiatives to reduce greenhouse gas emissions and reductions achieved                                                                               | 37-45                 |

|                                                                                                                     | CS 2008 | CW |
|---------------------------------------------------------------------------------------------------------------------|---------|----|
| EN19 Emissions of ozone-depleting substances                                                                        |         | CW |
| EN20 NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions                                        | 12      | CW |
| EN21 & EU-EN21 Total water discharge by quality and destination                                                     |         | CW |
| EN22 & EU-EN22 & EN24 Waste volume by type and disposal method                                                      |         | CW |
| EN23 Total number and volume of significant spills                                                                  | 15      | CW |
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| EN26 & EN30 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation | 11-19   |    |
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| EN29 Environmental impacts of transporting products                                                                 | 41      |    |

### Labor Practices & Decent Work

|                                                                                                                                                            |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Disclosure on Management Approach                                                                                                                          | 21-27    |
| EU15 Retention and renewal of skilled work force                                                                                                           | 24-25    |
| LA1 Total work force by employment type, employment contract, and region                                                                                   | CW       |
| EU16 Total subcontracted work force                                                                                                                        | CW       |
| EU17 Contractors and subcontractors that have undergone health and safety training                                                                         | 23       |
| LA2 Total number and rate of employee turnover by age group, gender, and region                                                                            | 24-25 CW |
| LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations                                | CW       |
| LA4 & EU-LA4 Percentage of employees covered by collective bargaining agreements                                                                           | 26       |
| LA5 Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements                                     | CW       |
| LA6 Work force represented in formal joint management-worker health and safety committees                                                                  | 25-26    |
| LA7 & EU-LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region                           | 21-23    |
| LA8 Programs in place to assist work force members, their families, or community members regarding serious diseases                                        | 25-26 CW |
| LA9 Health and safety topics covered in formal agreements with trade unions                                                                                | 25-26    |
| LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings | CW       |
| LA12 Percentage of employees receiving regular performance and career development reviews                                                                  | CW       |
| LA13 Composition of governance bodies and breakdown of employees per category                                                                              | 24-26 CW |
| LA14 Ratio of basic salary of men to women, by employee category                                                                                           | CW       |

### Human Rights

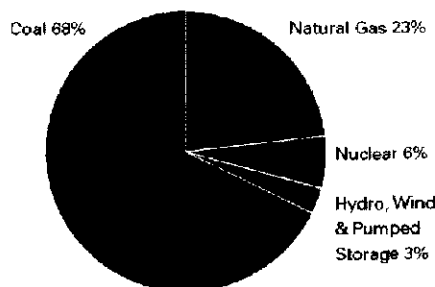
|                                                                                                                                      |               |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Disclosure on Management Approach                                                                                                    | 21-27 / 57-61 |
| HR4 Total number of incidents of discrimination and actions taken                                                                    | CW            |
| HR5 Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk | CW            |
| HR8 Security personnel trained in policies or procedures concerning aspects of human rights that are relevant to operations          | CW            |
| HR9 Total number of incidents of violations involving rights of indigenous people and actions taken                                  | CW            |

|                                                                                                                                               | CS 2008    | CW |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------|----|
| <b>Society</b>                                                                                                                                |            |    |
| Disclosure on Management Approach                                                                                                             | 57         |    |
| EU18 Participatory decision making processes with stakeholders and outcomes                                                                   | 57-61      |    |
| EU20 Contingency planning measures, disaster/emergency plans and recovery/restoration plans                                                   | 53-54 / 26 |    |
| SO1 & EU19 Programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting | CW         |    |
| EU21 Number of people displaced by operations                                                                                                 | CW         |    |
| SO2 & SO3 & SO4 Percentage and total number of business units analyzed for risks related to corruption                                        | CW         |    |
| SO5 Public policy positions                                                                                                                   | 29-35      |    |
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| SO7 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes                                        | CW         |    |
| SO8 Value of significant fines and total number of non-monetary sanctions for non-compliance                                                  | 21         |    |
| EU22 Programs to improve or maintain access to electricity services                                                                           | CW         |    |
| EU23 Practices to address language, low literacy and disability related barriers to accessing and safely using electricity services           | CW         |    |

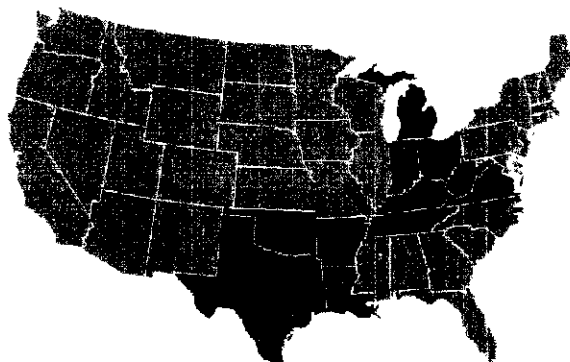
### Product Responsibility

|                                                                                                                                                |         |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Disclosure on Management Approach                                                                                                              | 33-36   |
| PR2 Incidents of non-compliance with regulations and voluntary codes concerning health and safety                                              | 21      |
| EU24 Injuries and fatalities to the public                                                                                                     | 23      |
| PR3 Type of product and service information required by procedures                                                                             | CW      |
| PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling   | CW      |
| PR5 Practices related to customer satisfaction, including results of surveys measuring customer satisfaction                                   | 52-53   |
| PR6 Programs for adherence to laws, standards, and voluntary codes related to marketing communications                                         | CW      |
| PR7 Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications                       | CW      |
| PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data                                | CW      |
| PR9 Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services | 21 / 27 |
| EU26 Number of residential disconnections for non-payment                                                                                      | CW      |
| EU27 & EU28 Power outage frequency and average outage duration                                                                                 | 48      |

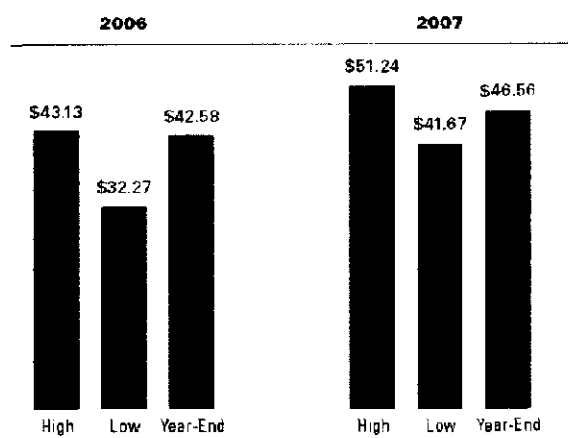
#### AEP Generation Portfolio



#### Service Territory



#### Market Price—Common Stock



#### COMPANY OVERVIEW

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.

|                                         | 2007                 |
|-----------------------------------------|----------------------|
| Revenues (in billions)                  | \$ 13.6              |
| Net Income (in millions)                | \$ 1,089 *           |
| Earnings Per Share                      | \$ 2.73 *            |
| Service Territory                       | 197,500 square miles |
| Transmission                            | 39,000 miles         |
| Distribution                            | 213,000 miles        |
| Generating Capacity                     | 37,736 MW **         |
| Generating Stations                     | More than 80         |
| Total Assets (in billions)              | \$ 40.4              |
| U.S. Customers (year-end, in thousands) | 5,191                |
| Employees (year-end)                    | 20,861               |

\* Generally Accepted Accounting Principles

\*\* Includes 270 MW of retired/decommissioned generating capacity

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

The company is based in Columbus, Ohio.



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