

Executive Summary

Background

This document summarizes an assessment of the actions that American Electric Power is taking to mitigate the economic impact of increasing regulatory requirements, competitive pressures, and public expectations to significantly reduce carbon dioxide and other emissions. A subcommittee of independent directors of the Policy Committee of the AEP Board of Directors prepared this report in response to a shareholder proposal. In the course of our evaluation, the subcommittee met with twenty-eight persons external to AEP. We also met with management to understand the actions the company has taken and is taking to address emissions of carbon dioxide and other air emissions; to assess the technologies available to the company for reducing these emissions; and to review analyses of the costs of several control scenarios.

AEP relies heavily on coal as the primary energy source to generate a reliable supply of affordable electricity for its customers. Among its most significant economic drivers are current and future environmental policies, particularly those affecting air quality. Limits on currently regulated air emissions are likely to become increasingly stringent and there is the possibility of mandatory controls on the emission of greenhouse gases.

The company has developed a robust least-cost plan for meeting the current Administration's requirements for SO₂, NO_x, and mercury. Implementing this plan requires an investment of approximately \$3.5 billion through 2010, and \$5 billion through 2020. Analyses developed for this report show that the company could likely make modest reductions in greenhouse gas emissions and could do so anytime within the next several years without significant risk to its investment in pollution control technology for currently regulated emissions.

Recommendations

The central challenge the company faces is that of making decisions about large investments in long-lived assets in a setting of uncertain public policy and rapidly evolving technology. We believe that this situation is likely to persist for a considerable time, and make the following recommendations for managing the challenge it creates:

- **Design of control regimes.** The design of environmental regulatory programs profoundly affects the cost of meeting the emission reduction requirements. AEP should engage in persuasive, proactive advocacy of positive policy positions that ensure that the rules governing such programs will operate in a transparent, fair, and cost-effective manner that works in the interests of the company's shareholders, customers, and stakeholders.
- **Technology leadership.** The central technology challenge for AEP is to preserve its ability to utilize coal economically while meeting increasingly stringent emission control requirements. The company has committed to being an

industry leader in developing Integrated Gasification Combined Cycle (IGCC) technology and already is forging ahead to develop partnerships and agreements to make IGCC a viable option for AEP's next generation of new power plants.

- **Excellence in plant operations.** Consistently operating emission-controlled plants at high capacity factors is difficult at best, requiring mastery of not only traditional power plant operations but also the management of complex chemical reactions. Reliable and efficient operation of such equipment also has the benefit of maximizing the availability of retrofitted power plants to sell excess generation into wholesale markets.
- **Sophisticated decision-making tools.** The company must engage in an exceedingly complex decision-making process to identify the mix of options that will minimize the cost to the consumer while at the same time being robust with respect to the uncertainty in the regulatory process. One of the company's most important accomplishments has been the development of a proprietary analytical model that allows the company systematically to weigh the costs and risks of a wide variety of options. We encourage its continued use as a guide to the company's major investment decisions.
- **Transparency.** Regulators, investors, legislators, government officials, customers, and other stakeholders need to have a clear idea of what AEP is doing to control emissions efficiently, and why it has adopted its chosen approach. While the company has been open in its actions to date, we believe that efforts to make its actions transparent and understandable to stakeholders will be critical going forward.
- **Partnerships.** We are convinced that AEP is venturing into new territory as it works out options to control greenhouse gas and other emissions. We strongly urge the company not to go it alone in this venture, but to find partners along the way.

Conclusion

In summary, we conclude that the actions that AEP has taken over the last decade constitute a solid foundation for the company's future efforts to address the intersection between environmental policy and business opportunities. The challenge now is to build on this foundation in a way that makes economic sense in a setting of policy uncertainty and change. Forceful and serious advocacy of highly efficient control programs, proactive leadership in technology development and operation, discipline in capital allocation decisions, openness to partnerships in technology and policy, and continued transparency of action are, we believe, the essential elements of the path ahead.

To see the full report, please visit the following Web page:

<http://www.aep.com/environmental/performance/emissionsassessment>