How This Study Was Conducted

The National Energy Policy Plan directed the U.S. Department of Energy (DOE) to conduct a study to examine the benefits of establishing a national electricity transmission grid and to identify transmission bottlenecks and measures to address them.

DOE began by conducting an independent analysis of U.S. electricity markets and identifying transmission system bottlenecks using DOE’s Policy Office Electricity Modeling System (POEMS). DOE’s analysis, presented in Section 2, confirms the central role of the nation’s transmission system in lowering costs to consumers through increased trade. More importantly, DOE’s analysis also confirms the results of previous studies, which show that transmission bottlenecks and related transmission system market practices are adding hundreds of millions of dollars to consumers’ electricity bills each year. A more detailed technical overview of the use of POEMS is provided in Appendix A.

DOE led an extensive, open, public input process and heard a wide range of comments and recommendations that have all been considered. More than 150 participants registered for three public workshops held in Detroit, MI (September 24, 2001); Atlanta, GA (September 26, 2001); and Phoenix, AZ (September 28, 2001). In addition, more than 40 public comments were received.

The National Energy Policy Development (NEPD) Group recommends that the President direct the appropriate federal agencies to take action that will remove constraints on the interstate transmission grid so that our nation’s electricity supply will meet the growing needs of our economy.

NEPD directs the Secretary of Energy to examine the benefits of establishing a national grid and to identify transmission bottlenecks and measures to address them.


1Federal Register Notice for the study and public input process was published September 12, 2001.
by mail or through a DOE website created for the study (http://www.ntgs.doe.gov/). Appendix B lists the organizations that offered public comment at one or more of the workshops or through the website.

As further input to this study, DOE commissioned a series of six issue papers from teams of nationally recognized experts. Each team of experts was asked to provide a comprehensive survey of a topic, including review of the comments from DOE’s public hearings, and to identify and assess options for DOE’s consideration. The six topics reviewed in the issue papers are:

- Transmission System Operation and Interconnection
- Reliability Management and Oversight
- Alternative Business Models for Transmission Ownership and Operation
- Transmission Planning and the Need for New Capacity
- Transmission Siting and Permitting
- Advanced Transmission Technologies

The issue papers are published under a separate cover. Readers are cautioned that the views expressed by the authors in the issue papers are not necessarily those of DOE.

In preparing its recommendations, DOE considered the analysis and options presented by the public comments received, DOE’s own analysis, and the issue papers. As one would expect on such a complex subject, there were many divergent opinions on the recommendations that DOE should include. It is not possible, or desirable, to discuss each and every position. Instead, this study presents the results of DOE’s comprehensive review and analysis.