

REFERENCE	US Electricity transmission and distribution
Title:	NATIONAL ELECTRIC DELIVERY TECHNOLOGIES ROADMAP Transforming the Grid to Revolutionize Electric Power in North America
Date:	January 2004
Author:	United States Department of Energy, Office of Electric Transmission and Distribution
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Hard copy reference:	
URL:	http://www.energetics.com/pdfs/electric_power/electric_roadmap.pdf
Date accessed:	July 2006
Web Format:	pdf
IEA topics covered	VI.2 Electricity Transmission and Distribution VI.2.1 Electricity Transmission and Distribution VI.2.2 Other transmission and distribution R&D related to integrating distributed and intermittent generating sources into networks VI.2.3 All high temperature super-conducting research not covered elsewhere
Geographical focus:	The USA
Brief Abstract:	This Roadmap outlines the key issues and challenges for modernizing the grid and suggests paths that government and industry can take – both separately and together – to build America's future electric delivery system. Grid modernization development will need to take many ideas into consideration, including the impact new technologies will have on the marketplace and the costs versus benefits of all alternative or possible scenarios.

OUTPUTS	
Short Report?	N
Major report?	Y
Visualisations?	Y
Information held on dedicated software?	N
- which package?	

ARCHITECTURE	
Timescales used:	Long-term to 2025
Trends and drivers?	
- list	<ul style="list-style-type: none"> • Design the “Grid 2030” Architecture • Develop “Critical” Technologies • Accelerate Acceptance of Advanced Technologies • Strengthen Electric Market Operations • Build Public-Private Partnerships.
Enablers?	
- list	<ul style="list-style-type: none"> • US Department of Energy • US Utility Industry and Network Utility Associations • EPRI
Performance measures/targets?	N
- list areas	
Mapping of RD&D activities?	Y
Critical assessment of capabilities?	Y

PROCESS	
Methods used:	
- Desk study?	Y
- Consultation	Y
- Interviews?	
- Facilitated workshop(s)	Y
- Working groups/task force	Y
- Integrated Process	Y
Stakeholders engaged:	
- University based researchers	Y
- Other public sector researchers	N
- Business – technology	Y
- Business – other	Y
- Government - energy	Y
- Government – SET	Y
- Government - other	Y
- NGOs	N
No of people engaged:	-
Budget (if known):	Not known
Commitment to re-visit?	Y

ACTIONS IDENTIFIED	
List of actions?	Y
Actions listed according to timescale?	Y
Actions prioritised?	N
Sequencing/dependencies identified?	N
Responsibility for actions identified?	Y
Types of actions identified:	
- Basic research?	Y
- list areas	
- Applied research?	Y
- list areas	
- Development & demonstration	Y
- list areas?	
- Other types of action?	Y
- list other types	<ul style="list-style-type: none"> • Regulation and policy • Education training and awareness • Explore research priorities • Support collaborative (industry-academia) activities • International partnerships