

Abstract
3rd IERE General Meeting
November 26, 2003

Diversity of Electric Sources, above and Under the Horizon in terms of Global Climate Change

Richard C. Bratcher
Area Manager, Global Climate Change Research
EPRI

Title: Costs of Carbon Dioxide Emission Reductions from Electric Generating Facilities and the Influence of Climate Policy on Asset Values

Abstract: Case studies recently conducted by EPRI have brought focus to the economic implications of climate policy for electric generating companies, which span a broad range and are highly dependent on numerous circumstances specific to individual companies. Carbon dioxide emission reduction costs ranged in several case studies from near zero to well over US\$100/ton of CO₂. These results highlight the importance of developing company-specific CO₂ emission reduction supply curves as a critical element of understanding the potential costs of meeting CO₂ emission reduction requirements. The influence of climate policy on generating asset values also varies widely, depending again on company-specific circumstances. For example, in one case study conducted, climate policy was shown to halve the value of coal-fired assets, while doubling the value of nuclear assets. In order to manage the substantial financial risks associated with climate policy, companies can take a number of steps now. These include limiting emissions, helping to get the rules right, and investing in research and development leading to deployment of advanced, near-zero emission electricity generation facilities.