

## Call for Papers

### Journal of Energy Engineering

#### Special Issue on Implications of CO<sub>2</sub> Emissions Policies for the Electric Power Sector

The implementation of CO<sub>2</sub> emissions policies such as Emissions Trading Schemes (EU ETS) in the European Union and the Regional Greenhouse Gas Initiative (RGGI) in the United States has altered the economic fundamentals of the electric power industry. In the short run, it rearranges the production merit order by incorporating emissions costs in production costs; in the long run, it may drive the generation mix toward less carbon-intensive technologies. The main mechanism underlying these policies is the cap-and-trade approach, where a fixed amount of tradable emissions allowances is allocated to affected facilities, and these facilities are required to hold or buy sufficient allowances to cover their emissions.

Experience with the Clean Air Act (CAA) Title IV SO<sub>2</sub> emissions trading program in US has indicated that cap-and-trade programs could be an effective means in controlling for air pollution. However, the impact of CO<sub>2</sub> emissions policies on the power sector is expected to be far more substantial than the SO<sub>2</sub> program because it affects power generation not only from coal-fired baseload units but also other fossil-fired units, and the costs are anticipated to be much higher. Thus, understanding the implications of CO<sub>2</sub> policies is crucial for the power sector to develop effective strategies.

The *Journal of Energy Engineering* will publish a theme issue devoted to “Implications of CO<sub>2</sub> Emissions Policies on the Electric Power Sector”. This special issue aims to cover recent developments in CO<sub>2</sub> emissions policies related to the electric power industry. This issue is expected to be published in 2008.

High-quality papers on the following aspects of CO<sub>2</sub> control strategies and emissions trading are sought for this issue:

- emissions trading and power market modeling
- diffusion and adoption of CO<sub>2</sub> pollution control technologies
- short-run implications for power prices and generators’ profitability
- long-run implications for generation capacity mix, investment and reliability
- power plant operations and generation asset evaluation
- environmental issues (e.g., CO<sub>2</sub> leakage)
- risk management associated with CO<sub>2</sub> emissions policies
- renewable energy development and interaction with renewable policies

Papers on related topics are also welcome. All papers will be subject to peer review. For manuscript requirements, please refer to the following web site <http://www.pubs.asce.org/authors/index.html>. Submit copies of the cover letter listing suggested reviewers and specifying the special issue title as a PDF file along with a PDF file of the full manuscript to both ASCE at [journal-submissions@asce.org](mailto:journal-submissions@asce.org) and to Dr. Yihsu Chen at [yihsu.chen@ucmerced.edu](mailto:yihsu.chen@ucmerced.edu) by ~~April 30, 2007~~ **May 30, 2007** (newly extended deadline).

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