

Abstract

of paper proposed for the

Commission for Environmental Cooperation's
**North American Symposium on Understanding
the Linkages between Trade and Environment**

Will Free Trade in Electricity Between Canada and the US Improve Environmental Quality
by Takis Plagiannakos, Ontario Power Generation (Canada)

As a result of the electricity deregulation in Ontario/Canada and US, Ontario Power Generation (OPG) plans to expand and grow its business in the US electricity markets. This paper will focus on the results of a number of studies that OPG has undertaken in consultation with external experts. Many of the elements in the Analytical Framework for Assessing the Environmental Effects of NAFTA will be used to address the following issues:

- Identify differences in regulatory frameworks for air quality between Ontario/Canada and US and examine the potential implications for an open electricity market.
- Compare emission standards and air quality standards between Ontario and adjacent US States and assess their impact on a deregulated electricity market.
- Assess the transboundary air pollution impacts between Ontario/Canada and US.
- Benchmark the environmental performance of electricity producers in the Midwest and Northeast US and Ontario.
- Assess the environmental impacts of free electricity trade between Ontario/Canada and Northeast/Midwest US under two alternative scenarios of environmental regulations and emission standards.

The latter assessment will be based on the results of a series of integrated electricity and financial models that simulate the dispatch of the electricity plants in Canada and US in an open electricity market. Some of the factors considered by the models include operating costs, environmental constraints, transmission constraints, clean up choices, air emissions, price of electricity, import-export flows between jurisdictions, price of emission allowances etc. Results will be reported in the following areas for the period 2002 to 2012:

- Impact of environmental regulations on fossil generation
- Imports and exports of electricity between Ontario/Canada and US
- Impact of emission allowance trading on the competitive position of utilities
- Impact of environmental regulations on electricity prices
- Impact of electricity free trade on the environmental quality

Base on the results of the analysis, the paper will conclude with recommendations regarding:

- Harmonization of environmental regulations between Ontario/Canada and US
- Establishment of a level playing field for electricity generators
- The role of emissions trading in minimizing the cost of environmental regulations
- The role of regional environmental performance standards for protecting environmental quality