

**Bilateral issues related to energy – Competing Electricity Options** Pierre-Olivier Pineau, Assistant Professor School of Public Administration, University of Victoria where environmental constraints are well integrated would give a competitive advantage to green technologies.

However, the context of U.S. and Canadian governments' choices is made more complex by some additional factors. First, electricity does not fall within federal jurisdiction (though inter-state and inter-provincial transmission does), and the many state and provincial stakeholders are not willing to lose power over the sector. Second, energy independence and investment adequacy issues have put nuclear power back in the debate. This cannot be done without government's involvement. Indeed, under the Bush administration, new fiscal incentives for nuclear production have been put in place, as well as new funds for research in this field. In Canada, the Ontario government is considering new nuclear developments, following the March 2004 report on the future of Ontario Power Generation. Third, and finally, citizens are not wildly enthusiastic, to say the least, about market reforms bringing fluctuations in electricity prices and possible privatization. Much uncertainty remains concerning the benefits of liberalization in the electricity sector and the distribution of those benefits, especially in the hydro-rich provinces of Québec, British Columbia and Manitoba.

## **Key Issues**

In this context characterized by intense pressure for change but important inertia factors (division of political power, need for government intervention, uncertainty of liberalized market), the U.S. and Canadian electricity sectors face four critical issues.

• Commercial integration. If electricity exchanges among differ

difficult to obtain, with numerous "NIMBY" syndromes to fight. Third, leadership in this field is hard to establish, because of the large number of stakeholders involved.

• **Regulatory integration**. Although electricity sector liberalization is often presented as "deregulation", new regulatory institutions and powers always appear in the reform process. In order to level the playing field (needed for commercial integration) and to overview the development and operation of the transmission system, a unified regulatory system for the electricity market has to appear.

Canada has no equivalent of the U.S. Federal Regulatory Energy Commission (FERC), which tries to progressively create a uniform electricity market across the U.S. by favoring market access and common rules. However, much resistance is met in various states, where the influence of the federal regulator is not always welcome. Integrating Canada and U.S. regulations, when no two states and provinces are similar, is a requirement for a well functioning market, but the political challenge it represents is great.

*Environmental policy integration*. Electricity production has a huge impact on • the environment: CO<sub>2</sub> emissions from coal power plants, nuclear waste and risks from nuclear power plants, flooding from hydropower dams. No mainstream technology is harmless. Furthermore, whereas electricity systems can be clearly located geographically, environmental impacts are global. Any optimal development in the electricity sector will need to rely on harmonized environmental policies, otherwise artificial incentives for certain types of technologies will be present in different jurisdictions. This creates two problems. First, benefits of one environmental policy can be destroyed if another jurisdiction follows a different policy (e.g. greenhouse gases need to be reduced collectively). Second, once the electricity is produced, it can travel to other jurisdictions through the transmission network irrespective of the environmental constraints present in the consuming region. Environmental regulation may be ineffective, in practice, if access to electricity from other jurisdictions is allowed (e.g. a nuclear -or large hydro- restrictions in a jurisdiction are ineffective if power can be imported from another jurisdiction).

The development of a common environmental policy is therefore critical to the creation of a sustainable electricity sector, both from a commercial and environmental standpoint.

Confronted with these key issues, Canada will certainly suffer from U.S. hegemony in some aspects of the regulatory and environmental spheres. The regulatory power of the U.S. FERC is even greater when one considers that no Canadian equivalent exists (the National Energy Board having close to no responsibility in the electricity sector). With respect to environmental issues, the weight

from progress in integration. On physical integration, as issues have such important local content (because of the location of transmission lines), no country has an *a priori* advantage.

## **Choices for Canadians**

Three options are open to Canadians: (1) status quo with local adjustments; (2) a Canadian electricity sector initiative; and (3) a regional Canada-U.S. integration scheme.

• *Option 1: Status quo*. Because of provincial losses and federal fears, Canadians could decide to continue to

## **Potential Flash-Points**

These three options could unfold differently as negotiations progress in other sectors. Three flash points have been identified.

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