

1. Integrated Resource Planning for Electricity Supply on Both Sides of the US/Canada Border.

The advent of competitive electricity markets was supposed to eliminate the need for centralized resource planning. Such markets were to price electricity at its true costs, giving consumers accurate information on the value of what they use and therefore appropriate incentives to conserve, and giving producers information on the value of new generation and therefore incentives to invest. Transmission was to be put in place to facilitate the plans made by the consumers and producers. But total reliance on markets has led to serious concerns about resource adequacy and about the ability of consumers to value conservation adequately. Centralized resource planning has therefore re-emerged, though in different guises under different organizations of the electricity supply system.

In the United States, FERC's Order 2000 said that a regional transmission organization (RTO) must be the transmission planner for its region. In Canada, Ontario has created a central planning agency and charged it with responsibility for integrated resource planning, while Alberta has told its system operator that it must plan for transmission in advance to accommodate new generation and New Brunswick has a System Operator that is responsible for transmission planning only.

This paper will explore approaches taken to centralized resource planning under FERC Order 2000 for RTOs, under US structures other than RTOs, and as applied in Canada. The focus will be on what agency, if any, is responsible for regional planning, how its plans are reviewed, and what powers it has to implement its plans. The paper will conclude with observations on how well these planning approaches seem to be working.

2. The Prospects for a National Grid in Canada

In electricity trade, as in most of its trade, Canadian provinces generally have stronger links with US states to the south of them than to other Canadian provinces to the east and west of them. In part, this is a result of the strong provincial (and weak federal) jurisdiction over electricity generation and trade; in part it is due to the vast distances between some provinces. In the past, there has been talk of a more integrated Canadian system, closer to that in the United States, but the interprovincial ties continue to be relatively weak.

Recent environmental concerns, including global warming, have stimulated increased interest in a stronger east-west transmission link within Canada. Canada has major undeveloped hydraulic resources in the far east of the country, in Labrador (which is well east of Maine), and in the mid-west in Manitoba (which is directly north of Minnesota). Domestic demand for this potential electricity is in Ontario (stretching from north of New York to north of Minnesota) and Alberta (north of North Dakota). The federal government has shown interest in helping to develop these resources and a private pipeline company has proposed putting an east-west transmission line on the same right of way as its pipeline.

This paper will discuss the prospects for such strengthening of the east-west transmission system in Canada, including factors promoting and those inhibiting it. It will conclude with a discussion of the implications for Canadian electricity markets if the transmission lines were to be built.

BIO for Mitchell Rothman