

Copy of an Order of His Honour the
Lieutenant Governor in Council dated 26 August 2003

EC2003-467

MARITIME ELECTRIC COMPANY LIMITED REGULATION ACT
PETITION TO INQUIRE INTO AND REPORT ON
ELECTRICITY GENERATION AND TRANSMISSION ACCESS

Pursuant to section 23 of the *Maritime Electric Company Limited Regulation Act* R.S.P.E.I. 1988, Cap M-1.2, Council directed the Island Regulatory and Appeals Commission to inquire into, and to report to Executive Council by 14 November 2003 on, the following matters relating to electricity generation and transmission access:

- current electricity generation and transmission access opportunities (direct or indirect) open to cities, towns or municipalities as well as large industrial customers within Nova Scotia, New Brunswick and the New England States;
- pending and probable changes to current electrical generation and transmission access within these jurisdictions;
- current or contemplated transmission access opportunities in other jurisdictions which do not now exist on P.E.I.; and
- any other matter the Commission may consider relevant to the issue.

(Sgd) Lynn E. Ellsworth

Lynn E. Ellsworth
Clerk of the Executive Council

Appendix 2

**Review of
Open Access Policies and Practices
In North America**

Prepared for the Island Regulatory and Appeals Commission

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Executive Summary

Overview

During the past twenty-five years, the electric utility industry in North America has slowly yet continually moved from a vertically integrated monopoly structure to one of competition and open access. Competitive supply, at least at the wholesale level, is readily available in the majority of jurisdictions based on open access to transmission facilities. During the transition from a monopoly to a competitive market structure, it has become apparent that the profit interests of transmission owning utilities has sometimes outweighed the intent of open access. This has required the development and adoption of increasingly more stringent rules and regulations to ensure open and non-discriminatory access to transmission by all market participants.

Open access for electricity transmission in North America began in 1996 when the U.S. Federal Energy Regulatory Commission (FERC) issued Orders 888 and 889 directing utilities to file Open Access Transmission Tariffs (OATTs). This, for the first time, provided an opportunity for buyers and sellers of electricity to enter into contracts independently from the incumbent utility, and to attain access to the utility's transmission network to serve the load. Furthermore, access was to be provided by the transmission owner on a non-discriminatory basis and at a reasonable level based on the cost of providing the transmission service. Initially such access was directed towards wholesale customers that purchase electricity for resale (also known as Load Serving Entities (LSEs)), but was soon expanded in many jurisdictions to include other large customers.

Recent initiatives by FERC have included a proposed "Standard Market Design" which after an extensive consultation process was revised to become a proposed "Wholesale Power Market Platform" as set out in FERC's white paper of April of 2003. These initiatives support FERC's objective to continue making the rules relating to open transmission access more fair for all market participants. Legislation has been passed in both the U.S. House and U.S. Senate during 2003 supporting FERC's objectives.

Canada is intrinsically linked to U.S. power markets through various connections to the North American grid. While there are undercurrents of political concern regarding Canada's sovereignty over its energy future, electricity exports depend on meeting reciprocity requirements set out by FERC. Furthermore, reliability considerations are becoming increasingly important as the frequency of major outages provide acute reminders of the fragility that exists when grid operations approach their limits, something that is happening more frequently in both North America and other parts of the world.

Most Canadian electric utilities understand that in the future, rules for electricity access for the entire North American grid will be largely defined by FERC. In addition to meeting the reciprocity requirements, security of supply dictates that some entity must provide the overall leadership in order for the grid to operate, both economically and technically, in the best interest of all. There will be ongoing opportunities for interested parties to present Canadian interests and views for defining market rules to FERC at various proceedings.

On June 19, 2003, the New Brunswick Board of Commissioners of Public Utilities (PUB) approved an Open Access Transmission Tariff for NB Power with an effective date of September 30, 2003. This tariff is available for municipal wholesale and industrial customers served from NB Power's transmission system (69 kV and above). In New England both wholesale and retail customers have open access to the transmission grid, with the exception of Vermont which has not been active with electricity restructuring and therefore only wholesale customers have access as provided under FERC's jurisdiction.

Nova Scotia had initially indicated a willingness to participate in the New England Transmission Organization (RTO). However, the October 2003 Final Report by the Nova Scotia Electricity Marketplace Governance Committee recommends that only the six municipal utilities should be granted open transmission access initially, and that Nova Scotia should progress slowly with regard to opening the market to transmission access.

In Prince Edward Island there has not been a requirement for Maritime Electric Company Limited (MECL) to file an Open Access Transmission Tariff. Nevertheless, it is important for the assurance of proper rate levels for transmission services that FERC's principles be considered when establishing tariffs for any transmission contracts in Prince Edward Island.

FERC Principles and Pricing Policy

~~Following the FERC framework to the extent necessary to satisfy reciprocity requirements has not presented a problem for those Canadian jurisdictions that have established open access transmission tariffs.~~ FERC follows generally accepted rate making principles similar to what any jurisdiction would be expected to develop on its own initiative.

The objectives relating to Open Access Transmission are:

- (4) All customers must be given access on the same terms and conditions;
- (5) Transmission Rights must be allocated fairly; and
- (6) Rates must be consistent with FERC's Transmission Pricing Policy Statement.

FERC's Transmission Pricing Policy Statement issued on October 26, 1994 specified five principles regarding the pricing of transmission services. Transmission Pricing: (1) Must meet the traditional revenue requirement. (2) Must reflect comparability. (3) Should promote economic efficiency. (4) Should Promote Fairness, and (5) Should be practical.

FERC defines 3 steps in the rate design process as:

- Establishment of the revenue requirement
- Allocation of the revenue requirement to various services, and
- Recovery of costs from each customer class.

This approach by FERC follows the framework for establishing "just and reasonable" and "fair and equitable" rates as discussed in detail in a previous Inquiry on Economic Regulation undertaken by the Island Regulatory and Appeals Commission in May, 2003.¹

Transmission Rights

The allocation of Transmission Rights is very important in establishing fairness of rates for customers in open access transmission tariffs. A firm transmission right assigns priority to customers at times when demand exceeds the transfer capacity of the transmission grid, and when higher cost alternative energy must be acquired in order to serve all loads (periods referred to as transmission congestion). Transmission Rights enable Load Serving Entities (wholesale customers who purchase electricity for resale, i.e. the City of Summerside) to guarantee continuous supply to their customers regardless of the level of transmission congestion. The holder of such rights normally does not pay additional costs when there is congestion, and if it relinquishes usage during times of congestion, it will normally receive compensation from whatever party uses its rights.²

¹ "See Economic Regulation for Electric Utilities History, Rationale and Practices", May 15, 2003. Appendix A, LR3 Principles for Regulation and Methodology for Setting Rates - Summary from "Principles of Public Utility Rates" by Bonbright, Danielsen and Kamerschen. Second Edition March 1998. Public Utility Reports, Inc., Vienna, Virginia.

² Some markets (such as ISO New England) use a financial transmission right, which differs from a "firm" or "physical" right in that it offers a hedge against price volatility rather than a guarantee of a physical path.

FERC proposes that eligible customers be served by a single Network Access Service tariff that would have two components. An Access Right (the right to move power between any two points on the system, the costs for which would be recovered by an access charge), and a Transmission Right (the right to a predetermined price for service between two specific points on the system).

There is ongoing discussion regarding what is the fair way to make initial allocations of transmission rights to Load Serving Entities (LSEs). Following extensive consultation with the industry, FERC has determined that fairness in the allocation of transmission rights is best achieved on the basis of historical usage. In its April 28, 2003 White Paper, FERC concluded that it wanted to ensure that "existing customers retain their existing transmission rights and retain rights for future load growth." FERC proposes that in its Final Rule, transmission rights "would be allocated according to existing contracts and existing service arrangements in order to hold customers harmless".³ In all instances observed, it is proposed that transmission rights be allocated at the wholesale level, not to individual retail customers.

FERC's views on allocation of transmission rights based on historical usage becomes increasingly important for Prince Edward Island as the cable link with New Brunswick experiences increased periods of congestion. There are two Load Serving Entities on Prince Edward Island, Maritime Electric and the City of Summerside. Historical transmission usage by these LSEs could be argued to apply to both the cable link from New Brunswick and other transmission facilities on the Island. Although the City of Summerside may have been executing the majority of such usage indirectly through bundled tariffs for electricity purchased from Maritime Electric for resale to its customers, it all represents the "historical usage" of Summerside as an LSE. Customers in Summerside have been paying (within their rates) a portion of both fixed and variable costs associated with all transmission facilities used by Maritime Electric to serve Summerside.

There has been extensive public debate in other jurisdictions in order to develop transmission tariffs and assign transmission rights in a way that satisfy objectiveness of fair and equitable rates and access for all users. Allocation of and charges for transmission usage in PEI should satisfy these same tests of fairness, and be based on rationale as thorough and as robust as would be the case if PEI had fully open transmission access.

New England, New Brunswick and Nova Scotia

New England

The New England States, with the exception of Vermont, have both wholesale and retail competition, and all customers may access the transmission system in order to acquire power from elsewhere. In Vermont, where there has not been electricity restructuring, FERC's jurisdiction still applies for transmission access at the wholesale level, and municipal utilities are eligible to purchase power elsewhere and take delivery under the Open Access Transmission Tariff structure, (though retail customers are not eligible for open transmission access).

New Brunswick

As of Sept 30, 2003, New Brunswick's three municipal electric utilities and its large industrial customers have the option to purchase their electricity from any supplier of their

³ FERC Wholesale Power Market Design Platform - White Paper - April 28, 2003. (pages 5 & 10)
http://www.ferc.gov/industries/electric/indus-act/smd/white_paper.pdf

choosing based on open access to the transmission system of NB Power. At the same time, any power producer in New Brunswick located near the NB Power transmission system, has nondiscriminatory access to the network and can sell its electricity to any customer on the grid. The New Brunswick Market Design Committee has recommended that generators located in an area served at distribution voltage (below 69kV) receive a price equal to the utility's avoided cost, along with savings in line losses to the point of sale. It is expected that this recommendation will be included in the Market Rules that are being developed.

Nova Scotia

Nova Scotia initially indicated a willingness to participate in the New England (Northeast) RTO. However, the final report of the Nova Scotia Electricity Marketplace Governance Committee released in October 2003, indicates a preference to allow open access only to the six municipal utilities which represent approximately 2% of the province's load. It is not proposed to include large industrial customers at this time, nor to adopt a fully FERC compliant Open Access Transmission Tariff.

Summary

In a sequence of orders, FERC has attempted to progressively work towards a set of market rules for transmission access that will provide fair and non-discriminatory access to all.

The principles and pricing policies used by FERC in the approval process for the Open Access Transmission Tariff follow generally accepted rate making principles utilized by most regulatory agencies. Following FERC's approach for setting transmission tariffs in order to meet reciprocity requirements has not been found to be a burden for Canadian utilities. The entire North American Continent, including Canada and Mexico generally have or are in the process of implementing Open Access Transmission Tariff designs that are compliant with FERC principles.

Rules relating to the controversial subject of Transmission Rights are being reviewed with the objective of reaching common treatment and fairness to customers based on existing contract rights and historical usage.

There has not been a requirement, to date, to approve an Open Access Transmission Tariff for Prince Edward Island. However, it is important that the principles contained in the FERC process and being adopted throughout most of North America, including fairness to all customers, be taken into account during the determination of rates for bilateral contracts for transmission usage in Prince Edward Island.

Introduction

The Federal Energy Regulatory Commission (FERC) Notice of Proposed Rulemaking (NOPR) on *Standard Market Design* (SMD), issued on July 31, 2002, signified the beginning of more clearly defined rules relating to electricity transmission access and tariff design. Controversy regarding FERC's initial proposal for SMD led to the initiative being reworked and presented by FERC in a "White Paper" dated April 28, 2003 as the *Wholesale Power Market Platform*. The changes incorporated seem to have succeeded in reducing opposition sufficiently so that FERC stands a good chance of penning a final order that will be acceptable by all market players. Through these efforts FERC is making it clear that it plans to play the lead role in electricity regulation in North America.

There is concern expressed at the State level in the US regarding loss of sovereignty, and similar concern at both the federal and provincial levels in Canada. Nevertheless, FERC will be taking the lead in making decisions on all of the major rules by which wholesale electricity market participants will be operating in the future. All participants will be provided an opportunity for input, but it is now recognized that if regions are allowed to implement inconsistent market rules, it will be impossible to attain the objectives of long-term price stability and reliability.

The evolution from a vertically integrated monopoly based electricity market to an industry where the majority of markets offer fully open access to both generation and transmission services began about twenty five years ago for generation and twelve years ago for transmission. To understand how FERC will define the rules for the future, we must pay close attention to the arguments presented to FERC by key players during the past two years and the legislation passed by the U.S. Congress and Senate during the summer of 2003.

The final order on the Wholesale Power Market Platform should be released by FERC within the next few months, and should set the stage for the next decade. Its objective is to define a way that benefits can be enjoyed by consumers while at the same time encouraging investors to build the additions to generation and transmission facilities needed to maintain the necessary levels of reliability.

This paper provides background relating to the move to open access, and describes the future as it is now unfolding, including insight into the rules that should soon be adopted.⁴

⁴ As always, the literature review is an essential part of the report. Most of the information presented in this report is based on the information gathered during the literature review process and captured in that section of the report. Readers who have an electronic version of this report are encouraged to click on the hyperlinks in that section and read any of the references found to be of particular interest.