# An Analysis of the New Brunswick-Hydro Quebec MOU

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#### Introduction

The Memorandum of Understanding (MOU) signed by the Governments of New Brunswick and Quebec on October 29, 2009 calls for an unprecedented, broad and permanent transformation of the relationship between the two provinces and an entirely new system for generating, transmitting and selling electricity in New Brunswick.

The MOU is the basis for a definitive agreement to be reached between the two provinces. The goal is to have that agreement in place at the end of March 2010.

Though it consists of only 13 pages stating its terms, the MOU is a complex document and raises many issues that require either further negotiations or elucidation.

It is as much a political document as the outline of an interprovincial business transaction. As a result, it has given rise to political debate, sometimes heated. Because of its complexity and occasional opacity, it has given rise to claims and counterclaims that cannot be supported by its terms. Some of the discussion has revealed understandings based on differing

assumptions about how the deal will work in the future.

To cite just one example, the claim is made that the deal will be worth \$10 billion to New Brunswick. This value would be based on the combination of a cash payment and lower rates. The cash payment portion of the deal will remain uncertain for some time. As for the rate relief portion, estimated to provide more than half the value, the benefits would only be derived over a period well in excess of 30 years and then only if certain assumptions work as forecast.

Here is the essence of the transaction foreseen by the MOU:

1. New Brunswick is to be paid a sum of money to reduce its debt and will receive a five year rate regime designed to provide significant relief to NB Power customers. After the five years, at least a portion of the rates will be potentially subject to a regime promising additional relief. The scope of savings after the initial period is speculative.

- 2. New Brunswick will also be relieved of the risks inherent in some future costs related to NB Power. However, it will not be relieved of all cost and contingencies. Its residual costs will have to be recovered from New Brunswick taxpayers or NB Power customers.
- 3. Hydro Quebec (HQ) is to acquire a transmission system that is pivotal in eastern Canada and between that part of Canada and New England. It will acquire some NB Power generators. This system can be expected to yield HQ a regulated profit commensurate with its investment.
- 4. HQ will also acquire a captive market for power from Quebec. Though there will be some limits on the rates it may charge for this power, it, too, should be profitable.

Whether the benefit of the bargain is worth the sale of the NB Power assets is a judgment principally to be made by New Brunswick. For New Brunswick, the arrangements are final and irrevocable.

It is virtually certain that the economics for HQ, which takes little risk, will be favorable. It is not limited in how it may deploy or dispose of the assets is acquires, so the arrangements leave it with considerable flexibility.

In evaluating the MOU transactions, a sufficient range of issues are raised that it may be worthwhile to determine which steps included in the MOU could be undertaken by HQ and NB Power without the asset sale. For example, would it be possible for NB Power to enter into a long-term power purchase from HQ, close certain generators, enhance open transmission access for independent suppliers, but retain its transmission system.

One of the principal motivations for the MOU is New Brunswick's desire to limit rate increases. NB Power rates have been kept artificially low, so it is reasonable to be concerned about "rate shock", the impact of sudden, sharp increases. It is inevitable that, even with the HQ sale, NB Power rates will increase over time by greater amounts than in the past. To be sure, there will be a five-year rate freeze for most customers, but shortfalls will be recovered from them after the freeze. Would it be possible for NB Power to institute a rate

plan to be approved by the regulator with little or no difference from the HQ deal? This approach may merit consideration.

The principal evaluation of the deal will be made in New Brunswick, and this paper seeks to provide an analysis of the MOU that can be of help to that evaluation. As an independent observer, I have no particular interest in the outcome of the process and thus try to provide information and comment to assist participants in the process. I try to answer the question of how likely it is that the transaction can meet the goals stated in the MOU.

Some participants in the electricity market outside of the two provinces will be affected, and I also attempt to address matters of potential concern to them.

The paper does not make forecasts about what may be in the plans of either province or of HQ either now or in the future. The assumptions used are stated and are kept to a minimum.

The MOU deals with (a) New Brunswick debt relief, (b) N.B. Power rate relief (c) generation and power supply, (d) transmission and distribution (e) regulatory matters and (f) the future role of N.B. Power as a wholly owned subsidiary of HQ.

## **Analysis of the MOU Provisions**

#### 1. New Brunswick Debt Relief

The principal part of the consideration provided by HQ is the payment of \$4.75 billion, the "Cash Price", which is supposed to equal the total of all debt owed by New Brunswick relative to NB Power.

The MOU does not require that these funds should be used to retire that debt, although that is the apparent purpose of the payment.

The payment upon closing the deal, planned for March 31, 2010, will not be the full amount. An as-yet unspecified portion of this amount will be withheld until the Lepreau nuclear generator comes back into service, now forecast to take place in 2011. It may be as much as \$1 billion.



If Lepreau does not return to service, New Brunswick will not receive the full \$4.75 billion. It is not now possible to know with certainty if the Lepreau refurbishment, already well behind schedule, will be successful.

Either the Province of New Brunswick or NB Power's generation entity will take on certain cost responsibilities, discussed below, that may well serve to cause new provincial debt.

### 2. NB Power Rate Relief

The other major element of the consideration provided by Quebec to New Brunswick is lower electric rates for customers than otherwise would have been the case.

The methods for developing the new rates are complicated.

Two separate groups of customers are identified. The rate treatment differs for each group. In addition, there is an initial period of five years followed by a second period of undefined length.

#### a. Industrial customers

During the initial period, which begins with the closing, the rates for Industrial Customers will be set at the level of comparable HQ rates. This is the largest single rate reduction under the MOU and will provide most of the rate savings Industrial Customers can expect under the MOU. During this period, NB Power Industrial Customers' rates will change if there is a change in the similar HQ rates. Over the initial period, the amount of savings may be approximately \$80 million.

The MOU provides that this rate regime will apply to up to 4.5 TWh (a Terawatt hour is 1 billion kilowatthours) annually. In 2007-8, NB Power sold 5.6 TWh to Industrial Customers, and four years earlier it was 6.2 TWh. The recession has had an effect on such sales, but the amount under the MOU leaves little room for the growth in consumption that would accompany economic development. Additional power supply to meet such new demand will be priced at its actual cost. The added cost will be rolled into the Industrial Customers' rates.

As a result of both possible changes in the HQ industrial rates and additional industrial load in New Brunswick, the rates for Industrial Customers could increase at any time from the new lower levels established at the outset. In short, while there is a substantial reduction in rates at the outset, there is no limit on rate increases after that initial adjustment.

After the initial period, what might be called the core Industrial Customer rate will change just as the New Brunswick Consumer Price Index changes. The core rate includes only the power supply relating to the original 4.5 TWh. Transmission and distribution charges and the incremental cost of supply additional demand are not subject to this indexing. The transmission and distribution charges will be subject to regulatory approval to allow for recovery of costs. Incremental supply will be recovered at its cost.

In the second, indefinite phase, Industrial Customer rates in the aggregate may increase more than at the rate of inflation. The inflation adjustment will apply to only a core portion of the customer cost and, over time, that portion will constitute a decreasing share of the total amount that can be billed to customers.

b. Residential, Commercial and Wholesale (RCW) Customers

Treatment of the RCW rates also falls into two periods.

During the first, five-year period, the RCW Customers are initially frozen at their levels at the time of the MOU. This rate freeze applies only to 9.5 TWh. In 2007-8, NB Power sold 8.7 TWh to these customers. Four years earlier, when RCW consumption was combined with Industrial Customer consumption, the total was 14.6 TWh, more than the total fixed amount under the MOU.

The RCW agreed amount allows for modest growth in consumption. Because of current economic conditions and increased efficiency, the presumption appears to be that there will be modest load growth. This presumption is speculative and may be sensitive to rates. The five-year freeze could stimulate consumption.

To the degree there is the need for power supply to meet consumption above the MOU level; its costs will be recovered from all RCW customers. However, such recovery will be deferred in order to provide the benefits of the rate freeze for five years. As a result, with even greater certainty than is the case for the Industrial Customers, during the first five years, the RCW Customers will receive most of their benefits to be expected from the deal.

RCW rates will increase after the initial period in the same way as the Industrial rates. However, while the Industrial Customers will be paying the costs of any power supply above the MOU amount on a current basis during the initial period, the RCW customers will pay for any such costs only in the second period. Until all such costs, advanced by HQ, are recovered, the RCW customer will also pay interest on the remaining balance.

Of course, as with Industrial Customers, the RCW Customers will pay for transmission and distribution costs and incremental power supply costs in addition to the indexed core supply amount.

#### c. Transmission and Distribution (T&D) Rates

No distinction is made in the MOU among customers, though normal T&D rates may reflect variations based on the size of the customer and other factors.

T&D rates are to be regulated by the New Brunswick Energy and Utilities Board (EUB), the provincial body responsible to regulating NB Power, on a traditional cost of service basis under which a return on the HQ's investment will be allowed. This is the traditional form of regulation and is not subject to any freeze or cap after the initial period.

The MOU provides that, after the initial period and in addition to the cost of T&D service, the T&D rate or a surcharge will also include costs related to the deferral account carried by NB Power for the refurbishment of the Lepreau nuclear generator. This account includes the costs imposed on NB Power for replacement power and labour at the station that is retained during the refurbishment.

The amount of this account will be no less than \$525 million and will be considered to be an asset acquired

by HQ and on which it may earn a return. It will be considered to be a part of the T&D rate base just as are the towers, poles, lines and other T&D equipment. This account may exceed \$525 million. HQ will be entitled to this T&D rate treatment whether or not Lepreau returns to service.

Because the MOU envisages certain legislative decisions in New Brunswick that will be imposed on the EUB, there are other amounts that can be expected to be recovered through the T&D rate.

Replacing or improving two interfaces between the NB Power and HQ transmission systems will be considered to be necessary. To the extent that all or a portion of these interfaces are located in New Brunswick, their costs will be reflected in the T&D base on which HQ may earn a return. Similarly, certain supplemental costs relating to the Mactaquac and Lepreau generators and federal and provincial mandates will be included in the T&D rates. New Brunswick has the option of recovering from customers the decommissioning costs of generating units not acquired by HQ.

Freed from the limitations of the current NB Power rate recovery policy, which has been a cause if its debt burden, NB Power T&D rates can be expected to increase significantly after the initial period.

d. Value to New Brunswick Customers of Rate Provisions of the MOU

To determine the value of the transaction to New Brunswick customers, a comparison must be made between the rates that will result from the provisions of the MOU and what otherwise would have been the rates.

To the degree that the period over which the comparison takes place is reasonably short, the forecast can be reasonably accurate. The longer the comparison extends, the less reliable is the comparison. Projecting current trends and inflation rates plus forecasting the evolution of governmental and private sector actions and policies for many years, even decades, adds a great deal of risk to any rate forecast. For example, how likely would it have been twenty years ago to forecast reasonably accurately (1) the Lepreau refurbishment requirements and costs, (2)

costs of the policy of persistently deferring rate increases as a way for NB Power to avoid in-depth regulatory scrutiny, (3) the issues surrounding the use of Orimulsion fuel, (4) the increased and widely fluctuating cost of fossil fuels or (5) the effects of global warming and the related increased emphasis on green power?

Public information about the rate provisions of the MOU suggests net present value savings of \$5 billion to New Brunswick customers. This amount reflects the current value of savings over future decades.

The forecast savings are derived from a study by NERA Economic Consulting for New Brunswick. NERA said the value of rate reductions under the MOU would be \$5.6 billion of which \$1.7 billion would be derived after 2040. The \$5.6 billion is the net present value of 30 years of savings plus a single amount, the terminal value, to represent all later years.

NERA said that three items are the principal contributors to the savings: (1) lowering NB Power Industrial Customer rates to the HQ levels and the rate freeze for RCW Customers, (2) the ability of NB Power to avoid future capital spending, and (3) the ability of NB Power to avoid increases in fuel prices.

NERA's estimate of the initial period savings resulting from (1) above is \$1.25 billion. It is not clear from its report that NERA took into account the effect of excess consumption above the amounts covered by the MOU, though it appears to have taken into account industrial rate increases in Quebec.

With respect to the other two major contributors to savings, much depends on the comparative cost of power supplied by HQ and independent generators compared with NB Power continuing to operate and refurbish its fossil-fuel units indefinitely into the future. Because the independent suppliers can and presumably will price their generation at the market, there is no assurance that the price will be less than what NB Power would have otherwise paid. Of course, it is possible that NB Power could itself choose to shut down its fossil-fuel generators and buy from the open market, as HQ proposes to do. If it did so, it would also be relieved of carbon cost, which NERA includes as one of its responsibilities.

NB Power has historically attached importance to socalled heritage resources. It remains to be seen if it is reasonable to assume that it would continue to do so indefinitely if it could supply its customers at comparable or lower cost from independent supply as is done, with limited exceptions, throughout New England. However, the assumption that it would definitely retain and refurbish all current generators seems to be an uncertain reed on which to build a forecast.

NERA acknowledges that "...it is essential to recognize that any forecast of this nature is very sensitive to the assumptions." As noted above, that sensitivity must be greater the further into the future one extends the forecast.

It may be possible to debate a wide range of known sensitivities to the analysis, and NERA considers six of them: carbon regulation, inflation, fuel, new supply costs and export sales revenues, capital costs and the discount rate. NERA does not, because it cannot, take into account changes in technology, government policies and regulation, and markets.

It might be possible to construct a competing model simply by using other assumptions and then arguing that the assumptions in the alternative were superior to those in NERA's calculation. At the same time, it could be argued that the assumptions used by NERA came from NB Power, an instrumentality of the Government that sought to support its decision to sell.

But that alternative approach would have to suffer from the same drawback as the NERA study: it would depend on a 30-year or longer projection, a projection into the unknown and unknowable future.

The result of the NERA analysis on which the rate benefits are projected is that it depends heavily on distant results. Much of the rate RCW benefit forecast will come to New Brunswickers who are now small children or are yet to be born.

#### 3. Generation and Power Supply

HQ is to acquire some, but not all, of the generators owned by NB Power's Genco. It will purchase the Mactaquac hydro units and three combustion turbines.

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Lepreau nuclear will be added to this supply when it returns to service.

The Dalhousie, Courtenay Bay and Grand Lake facilities, the "Surplus Facilities", are to be shut down at the expense of New Brunswick. HQ and Genco will agree on the date they will be closed.

HQ must dispose of sufficient generation to meet its requirement of supplying 14 TWh of core power. Initially, this power supply will come from its own units and the units it will acquire plus from the Belledune and Coleson Cove units, the "Retained Facilities", that will continue to be owned by NB Power.

HQ will purchase the output from the two operating units retained by Genco for as long as 20 years, though it may shut them down at any time. It will pay Genco through a combination of a specified rate, escalated by inflation, for the units' fixed costs plus a variable rate for operating costs.

The MOU indicates that power supply will increasingly come to be supplied from resources not currently in service in New Brunswick. HQ is expected to supply power from its Quebec resources, especially after the two interconnections between the two provinces are improved. New Brunswick is expected to rely increasingly on supply from privately-owned, independent power suppliers after a competitive process.

The exact mix of power supply resources is not known and can be expected to evolve over time. It is likely that the New Brunswick market will come somewhat closer to markets in the United States, including New England, where much of the power supply, if not all, is derived from private, unregulated sources.

While the price of the core power supply is covered by the provisions of the MOU, consumer rates will reflect the cost of the supply required to meet the growth in consumption above the core amount. The cost for this power supply is not known, but it will reflect the market situation in the relevant market, either the Maritimes or New England. (The Maritimes are a designated reliability and market area; the area does not include Newfoundland and Labrador or Ouebec.)

One of the principal elements of the MOU is the commitment by HQ to supply the 14 TWh at a frozen or reduced price initially and then subject to escalation only by inflation. This provision places risk on HQ to use resources that can provide power at less than the sale price. The risk is attenuated by the potential for resource development in Quebec and New Brunswick and the relatively small size of the NB Power requirements when compared with HQ's.

The cost of additional supply to meet increased consumption will be spread across the rates applying to all customers and not simply to those causing the increased power supply requirement.

NB Power has made some commitments to provide power supply to others, and these agreements are of varying duration and generally at fixed rates. They have been expected to be profitable for NB Power, and HQ will be responsible for fulfilling them. As a result, HQ should gain some net revenues.

The MOU provides for NB Power's generation component, called Genco, to continue in existence for some time. It will own and operate several generating units, subject to their being closed when ordered by HQ. Genco, separately from HQ, will incur costs that must be recovered in some way, not specified in the MOU.

For some unspecified time, the Surplus Facilities will operate and provide power supply to HQ. The MOU does not indicate how much and in what manner NB Power will be paid for the operation of these units. Presumably, HQ will pay Genco on the basis of the units' cost of service, though it might use a formula similar to the one applying to the Retained Facilities.

Genco will have to pay costs for decommissioning, shut down and site restoration for both the Surplus and Retained Facilities. For the Retained Facilities, HQ will pay Genco one year's worth of the fixed cost payment for the Belledune or Coleson Cove, but will have no further responsibility.

The MOU does not prescribe how Genco will obtain the funds necessary for closing the five generating plants aside from the HQ payment, which is not intended to be adequate to cover all costs. The MOU does not provide any revenue resource for Genco. There are two possible solutions, both of which impose costs in New Brunswick. New regulatory law could provide that Genco's costs will become a surcharge to be added to the customer rates, an approach mentioned in the MOU as a possibility. Presumably, their recovery including applicable interest charges on outstanding balances would take place over several years. Alternatively, Genco's costs would become the responsibility of the New Brunswick Electric Finance Corporation, which has issued debt on behalf of NB Power. Additional debt would be issued to cover Genco's costs. Ultimately, either New Brunswick ratepayers or taxpayers would be responsible for these costs.

#### 4. The Lepreau Facility

Lepreau, the nuclear facility that has given rise to problems for NB Power, contributing to its financial troubles, receives special attention in the MOU.

The facility is currently being refurbished and is out of service. Originally expected to return to service in 2009, it now appears likely that it will not be in use before 2011. While it is out of service NB Power incurs costs for replacement power, for retaining trained employees who will be needed later and for interest payments. These costs are assigned to a deferral account, meaning they will be recovered in rates over later years.

NB Power has about \$400 million in that account and expects to add \$125 million to it before the planned closing of the transaction with HQ. If the deal closing occurs on March 31, 2010, the \$525 million account will be acquired by HQ and recovery for it will be through its cost of service presumably included in the T&D rate. If amounts are recovered from entities, such as the Canadian Government or Atomic Energy Canada, Ltd (AECL), they will be allocated to the account reducing the amount that needs to come from customers.

If the deferral account is greater than \$525 million, New Brunswick is protected from additional cost. The amount of such added cost will be paid by HQ to New Brunswick in effect increasing the cash price related to Lepreau. Thus, while the deferral account to be recovered from New Brunswick customers could

increase, that increase will be offset by the added payment by HQ.

As noted, there will be a separate and later closing for the Lepreau transaction, meaning that a portion of the cash price of \$4.75 billion will not be paid at the closing scheduled for March 2010. The closing is contingent on the completion of the work at Lepreau, its testing and restart and the issuance of necessary government authorizations.

The risk for New Brunswick is that Lepreau does not again enter into service. In that case, the province would not receive the full cash price in the MOU. Perhaps even more serious, New Brunswick would remain responsible for the decommissioning of the Lepreau facility and all of the costs associated with it, existing Lepreau liabilities, and the deferral account.

In this case, New Brunswick would face increased continuing costs for replacement power. It would undoubtedly seek compensation from Ottawa, but could face opposition on the ground that it had made the decision to refurbish Lepreau rather than decommissioning it.

A significant part of the benefit that New Brunswick expects to obtain from the arrangement resulting from the MOU could be lost if Lepreau did not come back into service. While there is now no indication that it will not return to service, the extensive delays in its refurbishment and the problems encountered by AECL can justifiably provide grounds for concern.

HQ would lose a generating resource, but also be relieved of the need to recover additional costs. The impact of the loss of Lepreau on HQ would be far less than the effect on New Brunswick ratepayers and taxpayers.

#### 5. Transmission and Distribution

A principal advantage of the MOU for HQ is its acquisition of all of NB Power's transmission and distribution facilities. Undoubtedly, it can be developed in a way to improve HQ's access to the New England market.

The frozen and indexed rates under the MOU will include the T&D rates during the first five years. At



the end of the initial period, the T&D rates, having been determined subject to EUB approval, will be allowed to change in line with a traditional cost of service study. The deferred expenses related to Lepreau will be added to this rate and incorporated in the T&D rate. Other charges that may relate to Genco costs may also be added.

HQ will have the opportunity to take advantage of the strategic location of the NB Power T&D system to pursue the goal of creating the Energy Hub. While the details of this initiative are lacking, it is likely that Quebec and the Maritimes will find the NB Power grid to be a pivot point for regional transmission, especially in relationship to New England. As merchant or independent generators use the system, notably for off-system sales, they can produce transmission revenues that would serve to reduce costs for New Brunswick customers.

The MOU provides for significant changes in the operation of the transmission system. New Brunswick now has an independent operator, the New Brunswick System Operator (NBSO). This entity has its own governing board and is not under the control of NB Power. The NBSO manages the transmission system and power market. It insures that open access rules are established and maintained. It ensures that there is sufficient power supply available to meet the requirements of the system including instantaneous response to changes in those requirements. Its paramount responsibility is as "reliability coordinator" with authority to keep the transmission system operating to provide a high level of service.

Canada and the United States have an integrated system for maintaining reliability. The Martimes component is provided by NBSO. The international body with overall responsibility is the North American Electric Reliability Corp. (NERC), which is the officially designated Electricity Reliability Organization (ERO) in the United States. It operates through regional bodies. The Northeast Power Coordinating Council (NPCC), one of these bodies, includes Quebec, the Maritimes and New England as well as other parts of the United States.

The MOU would eliminate the NBSO and lodge its functions in HQ's transmission subsidiary. This transfer raises questions about the ability of the new

transmission operator to be truly independent of HQ and to operate the transmission system without preference being given to its owner.

Ultimately, the limit on the amount of control that HQ will be able to exercise over the system operator may be imposed by commitments made in the past by HQ and NB Power to both NERC and the U.S. Federal Energy Regulatory Commission (FERC). The continued or enhanced neutral cooperation of the Maritime and Quebec transmission systems will require surveillance over the transmission system, and it is unclear what agency would have that authority.

# 6. Effects of the HQ Acquisition on External Entities

The enlargement of HQ to include NB Power will have effects on utilities, generators and marketers and regulators outside of the two provinces. The scope and nature of the effects remain somewhat unclear at least until the final accord replacing the MOU is completed.

HQ will own and control all present and proposed transmission interconnections with New England as well as major links with New York. The amount of generation controlled by HQ together with this extensive control of transmission raises issues on both sides of the international border.

Across the continent, the north-south electricity links between Canada and the United States are, as a rule, more important than the east-west links. Canada has significant current and potential generating capacity, and the United States offers a market that far surpasses provincial markets. Canadian power not only to serves Canadian customers but is a major export product.

In eastern Canada, three provinces with significant generating resources cannot access the U.S. market without using transmission in another province. This is a unique situation in Canada. The three provinces are Newfoundland and Labrador, Prince Edward Island (PEI) and Nova Scotia. The last two are part of the Maritime transmission area managed by NBSO.

Interestingly, northern Maine, a system comparable to PEI's, is in a similar position. Its only access to the remainder of New England is through NB Power. It

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may be affected in the same way as the three locked-in provinces.

To compete in the U.S. market in general and the New England market in particular, no entity may exercise so much market power that it can control prices in the relevant market. FERC will not allow a supplier to set its own market prices if it has market power. In that case, it can only earn what a regulated utility would be allowed – less than the market price.

Soon after the MOU announcement, New England marketers and generators expressed their concern about the potential for HQ market dominance. They worry that HQ will, in effect, be able to capture a large share of the market and also control the price they receive for their power.

FERC has the authority to require HQ to submit new information related to its market power. New England parties that are concerned about this issue may participate in a FERC proceeding, and it is likely that Canadian interests may as well. The length of such a proceeding is uncertain.

On the Canadian side, in the absence of any extraprovincial (either regional or federal) regulator, the locked-in provinces will have less ability to seek redress for any perceived loss of market opportunity. It is possible that their best chance for more assured market access to New England would be the FERC proceedings on market dominance. One way to reduce market dominance, if it is found, could be to provide corridors on the HQ transmission system for generation in the locked-in provinces.

HQ's answer to these concerns is that the transmission tariff will be in line with American regulations that require open access for all generators. While HQ is committed to the principle of open access, as it must be if it does business in the United States, the application of that principle can cause problems.

NB Power's transmission component itself adhered to the open access principle. However, in practice for an extended period it allowed the company's generation entity to reserve what was essentially all capacity on the transmission lines connected with New England. Independent generators were forced to seek from NB Power Genco some of the capacity already allocated to their competitor.

Would HQ simply reserve all space on the lines and then have a captive transmission system administrator control access? Similar situations have arisen in the United States where vertically integrated utilities continue, and the result has been limited development of independent generation.

HQ's acquisition of NB Power raises significant questions concerning open access to electricity markets in northeastern North America. It may prove beneficial to all parties to attempt to clarify issues and seek mutually beneficial arrangements while the final agreement between Quebec and New Brunswick is being drafted.

#### 7. Regulation

The MOU not only deals with the transaction between HQ and NB Power but also requires changes in utility regulation in New Brunswick.

Perhaps the most unusual section of the MOU requires New Brunswick's utility regulation to "conform to the framework currently in effect in Quebec". Curiously, it leaves open the question of regulatory alignment should Quebec's current regulation change over time.

The requirement that the acquisition of one electric utility by another will also cause the cross-jurisdictional alignment of regulation appears to be unprecedented. A single owner of electric utilities in multiple jurisdictions exists in both Canada (e.g. Fortis) and the United States (e.g. Exelon). But these owners are not governments; the utility companies are investor owned.

The MOU provides for one provincially owned utility to acquire another. The owners are thus able to agree on the form of regulation that will apply to the merged entity. As a result, New Brunswick does considerably more than cede control of its electric utility. As part of the consideration it gives to HQ for the transaction, it also permanently cedes some important government authority.

Not only must the EUB track Quebec regulation, but it will be expected to adopt certain specific decisions. Regulation is a delegated legislative function, left to



experts both to avoid political entanglement and in recognition of the complexity of utility issues. Under the MOU, the New Brunswick Legislative Assembly is expected to engage in regulation, leaving the EUB to implement its orders.

In addition to accepting the MOU rate regime, the EUB must approve as prudent the costs of enhancement of the two interconnections between the two provinces, any costs that might be required by the closure of Mactaquac, government mandated costs and, if the New Brunswick government so chooses, costs associated with Genco's continued ownership or decommissioning of generators not sold to HQ.

The EUB will also be required to insure open transmission access, a provision that has become usual in the era of independent generators. But that open access requirement applies only to electricity above the 14 TWh. That means that HQ can control and serve the largest part of the power market in the province without competition. Of course, in its discretion it may choose to purchase from independent sources.

The EUB will also be required to allow Industrial Customers to purchase power using the open access system and paying HQ only for T&D service.

The new regulatory regime in New Brunswick will be made in Quebec or, as specified, by newly enacted New Brunswick laws. EUB will have jurisdiction over T&D rates, but they must include certain deferred expenses discussed earlier.

While the EUB has long been subject to a degree of political influence that is unusual in many other jurisdictions, the MOU system will permanently reduce its ability to strike a reasonable balance between utility and customer interests.

As discussed earlier, the independent NBSO, which performs certain regulatory functions, will simply be eliminated. Depending on the degree to which the system operator within HQ's transmission arm retains independence, the nature of transmission control in the Maritimes could change.

# 8. The Future Role of New Brunswick and NB Power

For most people in New Brunswick, the MOU transaction will have no visible effect. NB Power will continue to operate under its own name as a wholly owned subsidiary of HQ. Quebec has undertaken to respect NB Power's traditional role in the province. Alongside NB Power, an HQ entity through which ownership control will be exercised will have the same status as NB Power has had. Unlike some cases where cross-jurisdictional utility acquisitions have taken place, HQ will not be required to pay any transfer tax on its purchase of NB Power.

HQ will offer employment to all NB Power employees under the current terms of employment. Lepreau employees will be offered jobs when that plant is acquired. Issues relating to employees of the units that will be retained by Genco and eventually closed remain to be determined.

The current terms of employment do not preclude a reduction in the NB Power work force. Thus, employees are not guaranteed unlimited employment under the MOU.

New Brunswick will be responsible for all public sector pension benefits to which current employees will be entitled when the deal is completed. This obligation includes any unfunded liability that exists at that time. These pension costs are not assumed by HQ, but it will both contribute to the current system for current employees and create a new system for those joining its employ after the final arrangement enters into effect. Control of the pension arrangements are to be negotiated.

As discussed earlier, NB Power's Genco will continue to have its own responsibilities possibly for decades with its costs to be recovered in the province.

## **Summary**

- The cash price of \$4.75 billion to be paid by Quebec to New Brunswick is subject to reduction if the Lepreau nuclear generator does not return to service and because of additional debt that New Brunswick must assume.
- NB Power customers will receive significant rate relief in the initial five-year period following the sale of NB Power's assets, but the promised additional benefits are considerably more speculative and will be received over a period extending more than 30 years. The initial benefits may be as much as \$1.25 billion.
- Transmission and distribution rates will be based on actual cost plus several surcharges and can be expected to increase after the initial period much more than they have in the past.
- NB Power will retain and close, mainly at its own cost, five major generating stations with the future of the nuclear facility in some doubt. HQ will acquire only the Mactaquac hydro station, three combustion turbine facilities and possibly the Lepreau nuclear facility.
- HQ will obtain, manage and control the NB Power transmission and distribution system, which can enhance its ability to exploit its own generation resources.
- The size of the HQ power supply and its control of an extensive transmission system may cause anti-competitive concerns for entities outside of the two provinces.
- Utility regulation in New Brunswick will be required to follow the Quebec regulatory system and be subject to specific legal requirements limiting its discretion. Such a transfer of regulatory control is unprecedented.
- New Brunswick customers will continue to deal with NB Power, the HQ subsidiary.
- Full impacts, both positive and negative, will depend on a host of variables that are impossible to forecast with reasonable certainty.

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