AIMS Commentary

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A New Plan for N.B. Power

Analysis and Comment

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INTRODUCTION

For about two decades, New Brunswick has been trying to define the proper model for N.B. Power to ensure its viability. The province's electric utility has gone from a vertically integrated, monopoly to a company ready to play in the competitive market. It has been a fully regulated utility and a corporation intended to operate like a business in the open market. In the meantime, N.B. Power's debt has climbed.

The previous N.B. government concluded that the utility could not save itself and proposed to sell some its assets and its market to Hydro Quebec. Despites its boldness, that plan left New Brunswick with considerable risk and the possibility of a continuing financial burden. The plan did not go forward, perhaps mainly because of a combination of the possibility of further costs and the reluctance of the province to cede control over one of its prime assets.

The new N.B. government has taken a far more cautious approach. Though it claims that N.B. Power should continue to operate like a business, its words belie its proposed deed – the return to a fully regulated, vertically integrated utility relying on customer payments to reduce its debt.

The extent of risk for N.B. Power, the government and utility customers is far less than the risk inherent in the Hydro Quebec proposal. In fact, the principal risk in the new plan is that it will prove to be insufficient to solve N.B. Power's problems. Only if virtually all pieces fall into place as proposed could the plan work. If it falls short of what is needed, the province will have to consider additional steps.

The new plan for N.B. Power, released in October 2011, is contained in the "Energy Blueprint", covering a 10-year period. Within that document, the three-year "Energy Action Plan" that provides for the immediate actions necessary to start the process of fulfilling the Blueprint's objectives. This paper deals mainly with measures relating to N.B. Power, the main focus of the Blueprint, contained in the Energy Action Plan; the Plan discusses other elements of the province's energy supply and some largely hortatory proposals for new, environmentally oriented policies.

1. The End of Competition

The N.B. government starts from the premise that competition in the provincial electric sector has failed. As a result, it proposes to abandon any significant attempt to make it work.

Competition grew out of actions in the United States to deregulate the generation sector and to allow the market to set power-supply prices, by far the largest part of electric rates. Investors, rather than customers, would assume the risk of failed generators. The transmission system is to be regarded as a common carrier that can be used by any generator on a non-discriminatory basis. Generators belonging to the utility that owned the transmission lines have no preference in using the grid.

In parts of the United States where there was already been regional management of generating resources, the federal regulator required the creation of independent system operators of transmission systems, entities outside the control of the utilities themselves. Otherwise, stand-alone utilities could continue to operate the transmission system but with a variety of safeguards that would insure independent and non-discriminatory operation.

Some Canadian utilities, including N.B. Power, chose to follow the regional model. N.B. Power was broken into several units, mainly for the three basic utility functions of generation, transmission and distribution. An independent transmission operator was created. The purpose of these changes was to create the conditions for competition under which customers could buy from suppliers other than the utility, which would be prevented from monopolizing the system to favour its own resources.

The conclusion that electric industry competition in New Brunswick failed hides some important facts. The split-up of N.B. Power was more illusion than reality. All parts of the company remained under central management with a common board and president. The generating company quickly captured control of almost all transmission facilities, making it almost impossible for new, competing generators to gain access. In addition, it was difficult for potential competitors to obtain the necessary ancillary services from N.B. Power to make a complete power supply package. In short, competition failed mostly because N.B. Power undermined it.

Some customers explored alternative supply. This effort gave them the ability to apply pressure in N.B. Power and get improved power supply arrangements. In P.E.I, utilities were able to use new access to the N.B. Power transmission system to buy from Emera in Nova Scotia.

The independent transmission operator – the NBSO or New Brunswick System Operator – has been successful in performing its activities to ensure system reliability and to balance supply and demand not only in New Brunswick, but also in P.E.I. and northern Maine. Its responsibilities include dealing with a power market that never really got off the ground. While it has performed essential functions, it has been prepared to support a market that did not evolve as forecast.

In short, reassembling the parts of N.B. Power makes sense if for no other reason than the fact that the utility had never truly been split apart, so the unrealistic appearance of separation did little more than impose additional costs.

The N.B. government maintains that the utility will be expected to operate as a business. The purpose of restructuring was to allow business-type operations under little regulatory control for the generation part of the industry. In contrast, a vertically integrated utility with full regulation has never been seen as operating like a business. At best, the regulator is seen as the "surrogate

for competition", and regulation has seldom been deemed as capable of providing conditions truly comparable to competition.

In the case of New Brunswick, the situation is even further removed from one in which the utility can operate as a business. The provincial government, acting as the utility's owner, determines virtually all utility policy by law, appoints its board, and also appoints its regulator, making it capable of naming appointees who will follow its policies. In the most vertically integrated utilities, which aspire to some appearance of business-type operation, the government does not own the utility, but does appoint the regulator. The utility is under independent control and, if investor owned, it has a profit motive. This model is more characteristic of the United States than Canada, where the prevalent model is government ownership and control, far removed from the business model.

2. Taming N.B. Power Debt

Both the Hydro Quebec deal and the Energy Action Plan have focused above all on reducing N.B. Power's debt, which is now estimated at $4.9 billion. One of the main reasons this debt developed was the effort to keep rates as low as possible. N.B. Power may be proud of having lower rates than other provincial utilities, but they are derived to a substantial degree by avoiding needed rate increases and using borrowing to meet operating costs. That approach simply delays the inevitable day when rates must be increased to pay debt service.

N.B. Power residential rates have been kept as low as possible because of the high penetration of electric home heating. Low rates can still produce high bills, unacceptable to customers who have no other heating choice. The problem of the residential ratepayer is politically challenging to governments.

The Energy Action Plan proposes to bring debt under control through several policies. Most important is a proposal to use revenues derived from more efficient operations to build up equity in the utility. When efficiency savings are realized, they will be retained rather than being flowed back to customers, who will, in effect, become investors in N.B. Power. The government's goal is to have 20 percent of capital financed by equity within 10 years. The remaining capital will continue to be debt financed. That way, the amount of debt can be reduced over time. The government's target is $4.1 billion at the end of the period.

As this equity target is built up, the government will forego its payment in lieu of taxes. This approach properly gives the priority to restoring the utility to financial health. The return to the utility on its growing equity component will be plowed back. Once the 20 percent goal is met, the government will be entitled to a return, presumably set at market rates. That return will represent real profit to the extent that exceeds the amount of equity required to provide enough reserves required by lenders.

Efficiency savings, which often are more of a promise than a reality, are expected from "a process improvement program", conducted with the help of outside experts. It has already resulting in some staff reductions at senior management levels. Some older programs will be reduced or eliminated. And there will be some savings from the reintegration of the utility's component parts.

Capital spending itself is expected to be limited under the 10-year life of the Energy Action Plan, because the government believes that it now has sufficient generation to meet the province's requirements during that period. N.B. Power may be able to invest $200 - $400 million a year in modernizing and enlarging existing units and

this spending is accounted for in its proposed debt reduction of $800 million or more.

Limited capital sending leaves N.B. Power with the risk that, at the end of 10 years, it will face the need for significant capital outlays. The normal practice is to phase in new capital needs over time rather than allowing them to build up. In addition, existing units could become environmental problems or simply grossly uneconomic to operate, forcing unplanned shutdowns. Under this Plan, N.B. Power continues to gamble with old units.

The plan holds out the prospect of new joint ventures between N.B. Power and outside investors as a way of reducing the utility's capital costs. But the proposal is short on specifics as to how this might work and is not considered by the government to be a major source of capital.

An entity known as the New Brunswick Electric Finance Corporation was created to take some debt off the utility's books, to make its capital situation look better. Now, to its credit, the government proposes to move the debt back to N.B. Power in the interest of transparency. The move will result in a more accurate picture of the debt situation.

If the Plan works, customers would pay, in for the form of foregone savings, for the debt-financed, lower rates they have enjoyed. It is a fair trade-off for customers to unravel some of the subsidies from which they have benefited.

If the Plan does not work, probably because it would prove impossible to achieve the major savings required to build sufficient equity, customers would have to do more than forego savings; they would face rate increases. This has to be regarded as a real possibility, especially in the absence of other measures discussed below.

3. Generation: The Monopoly Continues

The absence of competitive power supply left N.B. Power dependent on what were called "heritage" generating resources. Now, the Plan provides that N.B. Power will own virtually all generation in the province for the indefinite future.

The impetus behind electric industry restructuring, often inaccurately called deregulation, was to allow non-utility generators to set their own prices for power they supply. Regulatory price-setting would be replaced by the market. If independent power, enjoying equal transmission access with utility generators, could be produced at lower cost, it would displace utility resources. Thus, independent producers would have an incentive to beat the utility price, with consumers the beneficiary. At the same time, the risk associated with investment in independent generators would be assigned to investors not ratepayers as is the case with utility generation.

This concept worked in many parts of the United States. Five of the six New England states required utilities to sell their generation and become only wires companies. Customers in these states were relieved of generator risk.

Under the new Plan, public policy in New Brunswick will permanently assign generator risk to utility customers. Their protection will be a combination of government scrutiny of new investment and regulatory oversight, discussed below.

To restrain capital spending, it appears that the government intends to keep existing fossil fuel plants either in operation or available as reserves. The Coleson Cove station might be repowered to use natural gas. Will Dalhousie, once slated for closure, and Belledune survive for the ten-year period foreseen by the Plan? Just how far the Energy Action Plan departs from the

business model is shown by the government asking N.B. Power to find ways of keeping these plants in operation rather than leaving the determination to the utility and the regulator.

N.B. Power will be required to pursue generation planning that changes the current mix through the addition of more supply from renewable resources and a concomitant reduction in fossil fuel use. This policy is consistent with what most utilities throughout the world are attempting to do.

The principal source of new renewable supply is likely to be purchases of hydro power from outside of the province. The most significant source is likely to be Hydro Quebec. Its previous exploration of being a long-term supplier to N.B. Power was transformed into the proposal for it to acquire N.B. Power assets. Simply buying power for a fixed period from this neighbouring utility makes more sense. If N.B. Power is to rely on such imports, the interconnections with Quebec may have to be refit or expanded.

The new policy is enlightened, because it does not impose a limitation on the size, age or location of the renewable resource. It maintains its focus on the type of power without insisting that it come from new, small and local units. To impose such requirements could well amount to forcing utility customers to subsidize economic and energy development.

One of the objectives of the new Plan is to ensure New Brunswick's energy security. While the Plan assumes that there is sufficient in-province supply to meet provincial needs, it readily accepts that security will not be compromised by use of the transmission ties with neighbouring jurisdictions – Quebec, PEI, Nova Scotia and New England.

This outlook should be used to retire inefficient units and replace them with lower cost power supply, when it makes economic sense. This is particularly necessary at a time when N.B. Power will be seeking to avoid major new capital spending.

If open transmission access to the transmission system has any meaning in the new version of N.B. Power, then these same principles could be used to encourage purchases from new, in-province generators. Although the use of such generators would reduce the government's control over power supply, it could gradually come to provide significant relief to debt and promote efficiency. And it might prove to be the best way to introduce natural gas-fired generation in the province.

Another source of power supply, and perhaps the precursor of more independent generation as it was in the United States, will be planned purchases from "small scale renewable projects". N.B. Power will conduct a request for proposals process for supply from First Nations, municipalities and other non-profits to obtain this power, which will probably amount to only a small fraction of its power supply. The utility will have to integrate the supplies with ancillary services from its own portfolio. While this supply may amount to little more than a gesture to First Nations and local entities, its development should be viewed as a model for a broader power supply purchase plan. Replacing an overly ambitious attempt at competition in power supply, this approach could be instructive. However, power from these units is likely to be more costly than utility power, so inevitably its scope will be limited.

The Energy Action Plan also proposes the "Large Industrial Renewable Energy Purchase Program". This program would purchase energy from renewable resources owned by large industrial companies. On its face, it would increase the use of renewable power on the grid, though not in the province as a whole, by paying a premium price to industrial producers. But the

government readily discloses that the proposal is aimed at simply giving large industrials a rate subsidy. In terms of customer impacts, this proposal is discussed below.

4. The Role of Nuclear Power

Nuclear power supply deserves special attention. The Plan indicates that 35 percent of the province's power supply will be derived from nuclear power, meaning Point Lepreau. The government assumes that, despite the extensive delays in refurbishing the plant and getting it back into operation, the facility will be able to come back into service, presumably during the currently forecast fall 2012 period. If Lepreau does not come back into service or if its output is reduced, neither of which can entirely be excluded as possibilities, the government would certainly have to review the Energy Action Plan.

Even if it is in service, Lepreau presents a problem for N.B. Power. It is unusual for a utility to rely to such an extent on a single supply resource. Operating principles usually require at a minimum that a utility have a reserve equal to its largest contingent loss. The rule should be followed even in the case of Lepreau, which, for several years, had a record for high availability. That would mean that N.B. Power should, in theory at least, have capacity in reserve that is 35 percent of its peak requirement. The maintenance of such a large reserve, considerably higher than the more usual 15-20 percent, imposes higher costs.

When Lepreau first came into service, it was expected that only about half of the capacity of the 680 MW generating station would be used in New Brunswick, with the remainder being allocated to exports. That policy was not achieved even in the plant's early years.

The Plan contemplates that, by keeping older generating units available, N.B. Power will have adequate reserves in the event that Lepreau suffers an outage or reduced production. In all likelihood, on-system generating reserves will not be adequate and N.B. Power's arrangements with neighbouring utilities will be a source, at least on a short-term basis, of needed back-up power.

The delay in the return to service of Lepreau has caused significant costs beyond those originally foreseen. A dispute between the province and the federal government over responsibility for at least a significant share of those costs is possible, if not likely. The N.B. government says that it has included in its utility cost projects the full cost burden, though it does not accept that the province should be liable to that extent. Although the financial projections are not contained in the Plan and cannot be verified, the announced approach shows and appropriate degree of prudence in dealing with this difficult matter.

5. Transmission

N.B. Power will continue to own all transmission facilities, and no other entity will have the right to build transmission. Based on experience in the United States, this exclusive right effectively allows the transmission owners the right to control the expansion of transmission facilities, which can limit access of new generators to the grid. Recent action of the Federal Energy Regulatory Commission or FERC, the American federal regulator, has eliminated the right of first refusal for transmission owners to build in their own territory. This does not appear to be foreseen in the Energy Action Plan. In its absence, the regulator should be empowered to require new lines, when it determines independently that they are needed.

The Plan indicates that the cost of service of the transmission system will be separated from the remainder of N.B. Power's costs in order to comply with the U.S. ban on mingling

transmission and generation costs. The separate cost of service and related rates is intended to comply with the requirement that prohibits funds flowing with a common owner between generators competing in the U.S. market and transmission. While FERC cannot require Canadian entities to comply with this rule, if a Canadian transmission owner voluntarily seeks to use American facilities for its exports, as N.B. Power does, it must observe it.

Presumably, the FERC requirements for open access must be met on the N.B. Power system, allowing at least the potential for U.S.-based suppliers to serve wholesale customers, such as the province's municipal utilities in Saint John and Edmundston. Outside suppliers are not accorded access to retail customers unless those customers are allowed by provincial law to purchase from sellers other than N.B. Power. The Plan does not provide for retail market access.

In addition, open access must permit others to be allowed to cross the transmission system for power generated and delivered elsewhere. N.B. Power should more aggressively assure that its system is available for transmission from in-province resources, not only to wholesale customers, but to customers outside the province. For N.B. Power to provide open access, it must build new transmission when requested by users for whom the existing system is inadequate.

The existing facilities should be adequate for wholesale power access. If a supplier other than N.B. Power sought to transmit to a municipal utility, a so-called sale for resale, such power would simply displace N.B. Power resources on the lines. For other transmission uses, some new facilities might have to be built and, unless they contributed value to the existing system, for example by providing needed improvement to reliability, they would be financed by the user. This is a decision that should be left to the regulator.

The Energy Action Plan suggests that the separate cost of service for transmission would be able to earn a higher rate of return on investment than the return allowed for generators and distribution lines, the lower voltage wires connected to customers. As an incentive to the construction of new generation, FERC has authorized higher than usual returns on equity and has allowed debt-financed entities to deem part of their capital as equity. If a high return on transmission equity were allowed in New Brunswick, some of it would come from Hydro Quebec and other third party transmission users. But it would also have to be passed through into in-province utility rates.

The FERC policy has been challenged, and, if the challenge is successful, it could put the New Brunswick Plan into question. Much transmission that is built has a guaranteed revenue stream from users, indicating that there was little risk associated with it. Some claim that there is no need for added return in such circumstances.

As noted, the NBSO has performed essential functions, operating under continent-wide rules. After the 2003 Northeast U.S. blackout, FERC was given authority over mandatory transmission reliability standards. It exercises this authority through the North American Electric Reliability Corporation or NERC, which includes Canadian and American transmission systems, and ensures reliability on all of them.

NBSO is the reliability coordinator for New Brunswick, P.E.I. and northern Maine and has had the authority to require actions by transmission owners necessary to maintain reliability in this region. In addition, it balances supply and demand by having the authority to ensure that there is sufficient power supply

available to the region, including units that can follow electric consumption instantaneously.

FERC has also required that regional system operators adopt and maintain rules for the power market. NBSO also carried out such responsibilities. Because of the limited market that developed, by following FERC guidelines, NBSO may have been prepared to provide more services than were required in practice. Thus, there is some sense in reducing its scope.

The Plan eliminates the separate, independent agency and moves it back under N.B. Power. The actual operation of the system and the maintenance of an information system indicating available transmission capacity for use by others and future building plans can make sense within the utility. But the reliability and balancing responsibilities, which are also exercised on behalf of transmission systems outside of New Brunswick, should be kept out of N.B. Power's control in order to ensure non-discrimination. The Plan recognizes that a different management mechanism needs to be developed for these purposes, either through a separate entity or independent managers, but leaves the question open for the moment.

Because of the need to keep separate from N.B. Power some aspects of system management, an alternative model could be desirable. It is discussed below in the context of Atlantic regional cooperation.

Because, even when a vertically integrated N.B. Power is recreated, transmission must get special and separate attention, the Energy Action Plan has left unresolved several questions about how it will be managed, used and developed. Unless the Energy Action Plan is supplemented, the regulator should be given explicit authority to deal with such matters.

6. The Utility and Its Customers

N.B. Power customers are now entering the second year of a three-year rate freeze, and the Energy Action Plan covers three years. Probably for these reasons, the Energy Action Plan does not provide any significant detail relative to consumers.

Efforts to bring debt under control, based in part on modest spending plans, are intended to stabilize rates, a benefit to customers. The maintenance of low rates is a political imperative in New Brunswick. While rates are low, residential bills are high, because of the penetration of electric space heating. It is thus a political problem for any government to allow for an increase in rates for the majority of the utility's customers.

If the intent of stabilizing rates is to be fulfilled without further recourse to debt to cover operating expense, the Plan will have to meet with broad success. There is no real promise of lower rates or bills, and pressures exist that could push rates up.

As noted, efficiency savings in the operation of N.B. Power will be retained for as long as 10 years as the way to build equity in the utility's capital structure. Clearly, this approach is needed to reduce the debt burden, perhaps the greatest threat to the utility, but its effect on customers is at best neutral.

At the end of the three-year freeze period, there may be the need to raise rates if the cost of fuels for generation has increased, if not for other reasons. The Plan notes that N.B. Power will not have control over the cost of fuels used in its generators. Historically, many vertically integrated utilities under full regulatory control have had their rates split between their cost of service and their fuel costs. Rates are then adjusted annually for fuel under what amounts to a separate tariff, often called the fuel adjustment

rate. This rate mechanism has been used temporarily in the past, and the N.B. government should consider creating such a mechanism for use after the freeze.

Other factors that may exert upward pressure on rates includes a variety of costs for unexpected generation costs. Generator failure, the need for new or replacement resources, charges from external suppliers in short-term markets, the lack of sufficient operating efficiencies, higher authorized returns on transmission, the cost of small-scale power purchases, and the cost of debt are all potential causes of higher rates.

The industrial rate subsidy program – the "Large Industrial Renewable Energy Purchase Program" – can also put upward pressure on rates. Added revenue from industrials' sales of renewable energy will result in lowering their electric bills, presumably below their true cost of service as determined by the regulator. In that case, the shortfall will have to be recovered either from other customers or from government funds.

This subsidy is justified as a means or retaining these industrial entities in New Brunswick, thus preventing a hypothetical rate increase of "upwards of 3% for all N.B. Power customers." In other words, customers are presumably expected to accept somewhat higher rates to subsidize entities whose departure would cause rates to go even higher.

While retention rates are known in the utility industry, they are usually given in response to a credible possibility of early loss of the industrial customer and in return for specific and binding commitments by the recipient. In the Energy Action Plan, there is no indication of either.

Such retention rates, if financed by other customers, violate the concept of rate design in which each customer class pays the costs associated with serving it. For a long period, N.B. Power's rate design was deficient, causing significant subsidies to flow across rate classes. Much was done to reduce the variation from the true cost of service for each class. Industrial customers should generally have lower rates than other customers, because they are served at higher voltage, thus avoiding the use of some of the utilities' lines.

If such subsidies are desirable, it would make more economic sense to allow the correct cost of service for industrials to be established and then a taxpayer-provided subsidy be paid. The impacts of an industrial departing the market go far beyond electric rates, so retention might better be regarded as an economic development matter than as a utility matter.

Whatever other factors may be, many N.B. Power customers are expected to face high bills because of their use of electric heat. This form of heating yields relatively low installation costs compared with out methods, but higher life cycle costs. The N.B. Energy Commission recommended what is generally recognized as the most effective conservation mechanism – high prices. It suggested that above the amount of electricity used to meet essential needs, presumably including heating, a new and higher block rate be established to discourage more discretionary use. In that way, bills would be less likely to rise and the generation requirement for N.B. Power might be somewhat moderated. During a period in which N.B. Power would be trying to reduce its need for new generation and associated capital requirements, such an approach makes sense.

However, the government rejected this proposal. It clearly has a political downside, because it would break the rate freeze and impose higher costs on some customers. While this is understandable, it has the unfortunate effect of allowing more electric home heating installations, thus compounding the existing problem.

Solving this long-term problem should not simply be deferred. N.B. Power should establish a so-called inverted block rate for newly constructed and newly connected homes. This would discourage and possibly prevent the extension of the use of electric home heating without causing a rate increase for any existing home.

With respect to homes now using electricity for home heating, N.B. Power should more aggressively pursue thermal storage. This process involves using electricity at night, when it is less costly to produce, to heat a storage unit. Such units can serve individual rooms or an entire house. The heat is then emitted during the day to replace the need to use higher cost electricity. With time-of-use rates, this process can reduce customer costs and certainly will reduce the utility's need for additional generating capacity at peak times during the winter – the beginning of the work day and late afternoon.

It also can be a valuable adjunct to wind power. Because availability of wind power is somewhat uncertain thanks to wind speed fluctuations, storage helps increase its value. In effect, it become more reliable when it is used to produce stored heat, especially at night when it is often more available. In some utilities, where conditions may produce so much excess wind power as to cause operating problems, thermal storage is remotely started to absorb the excess.

By getting N.B. Power into the thermal heating business, the utility can diversify its revenues without detracting from its power market focus. It may find investment partners for such an undertaking, thus reducing its capital requirements. If N.B. Power enters this business, it should integrate capital cost recovery from customers with the electricity rate tariff so as to avoid imposing a significant up-front cost on the user that could deter adoption of thermal heating.

7. Regulating N.B. Power

Regulation by the provincial Energy and Utilities Board (EUB) was limited under the disaggregated system to the monopoly wires companies. And, even in that case, annual rate increases of less than three percent escaped scrutiny. Presumably, the market would provide the necessary cost control for the non-wires parts of N.B. Power that were theoretically operating in a competitive environment.

The Energy Action Plan returns the vertically integrated utility to EUB regulation. In effect, New Brunswick will return to the tradition in regulation just as it is for the utility itself. The current EUB, composed of two full-time and eight part-time members, will be changed into a board with full-time and professionally competent commissioners.

The government has not yet determined the number of members, but generally such bodies are composed of from three to five members. In their selection, if it follows some other jurisdictions, the government may be tempted to select former utility personnel, based on their training and experience or to choose former politicians. It would be wiser to find academic, engineering and business people who have relevant knowledge and supply them with a professional staff and access to consultants. Experience has shown that ex-utility officials are often conditioned as regulators by their prior viewpoint.

Whatever the ultimate composition of the EUB, it will be limited in its scope of regulation. Utility regulation is really delegated legislative power; a legislative body can do anything that a regulator can do, but generally it chooses to set broad policy and not deal with measures to achieve those objective or technical matters. Legislatures thus avoid the risk of being responsible for politically unpopular, but necessary, decisions.

In the Energy Action Plan, a broad range of decisions that might have been left to regulators have already been made by the government.

The EUB would not be able to modify the three-year rate freeze. It would be required to accept the objective of a capital structure of 20 percent equity and 80 percent debt and the manner on which equity would be accumulated. . It could not require a separate transmission operator. It seems unlikely to control small-scale power supply. It cannot disallow the industrial retention subsidy. It cannot mandate power purchases in lieu of utility-owned generation nor is it likely to be allowed to order the shutdown of generation, no matter how costly it is. It probably will not be able to make an independent determination of the appropriate return on equity for transmission.

In line with Canadian regulatory law and practice, the government of the day will be able to overrule EUB decisions. This seldom happens across the country, although it has happened in New Brunswick relative to the Lepreau refurbishment decision. While the EUB was barred by law from deciding the matter, it conducted an investigation in 2002 and concluded that the "refurbishment of Point Lepreau…is not in the public interest." The decision took the form of "advice', which was overruled by the government. Aside from eroding the regulator's authority, this practice also undermines prospects for long-term consistency of regulation. Not only can disappointed parties appeal to a government that is less qualified than its regulators, but changes in government from time to time can cause sharp changes in regulatory policy.

The Energy Action Plan is remarkably short on details about the shape regulation will take. It is possible that the only clear role for the EUB will be to monitor the operational efficiency of N.B. Power and disallow certain activities or costs when it finds inefficiency. While N.B. Power would be required to submit an Integrated Resource Plan, outlining its planned generation mix, the Energy Action Plan is careful not to give the regulator authority over the Plan.

Practice elsewhere suggest that the government should set goals, but allow the regulator the discretion in line with professional standards and good utility practice to determine the ways in which the utility will be required to meet those goals. In addition, the government should make clear that it does not intend to interfere with regulatory decisions, but will limit its review to the need for additional legislative directives to the EUB.

The Plan also calls for the establishment of a permanent Public Energy Advocate to replace the temporary customer representatives previously used. If this person is professionally competent and has access to a budget sufficient to maintain necessary staff and to hire expert consultants, this is a positive proposal and in line with the practice in many other jurisdictions. Customers, not only large industrials, will be assured of a voice in the regulatory process.

An issue that has arisen with respect to similar positions elsewhere is the advocate's relationship with the government. Should the advocate determine independently how best to protect the consumer interest or should the advocate be subject to political direction? If a government is hostile to consumer interests, the advocate's role is diminished. The evolution in policy has been toward allowing the advocate significant independence from government policy and a fixed term of office. In developing this position, the government should be clear about the ground rules for the operation of the office.

8. N.B. Power in "Atlantica"

Because of its interconnections with Quebec, P.E.I, Nova Scotia, northern Maine and ISO

New England – an area sometimes styled as Atlantica, N.B. Power is part of a regional electricity community. Because of its location, N.B. Power has the opportunity to play a key role as the keystone of this community.

Quebec is likely to be a supply resource for New Brunswick, which is expected in the Plan to draw on its hydro resources. Using the N.B. Power transmission system, Hydro Quebec will serve interconnected areas, notably New England. At this time, it uses under long-term arrangements a significant share of the N.B. Power system for exports to ISO-NE.

Under auspices of the federal government, the four Atlantic Canada provinces have been encouraged to seek ways of operating their systems in a more interdependent and economical manner. Atlantic Canada is a relatively small power market and Newfoundland and Labrador is not yet interconnected with any province other than Quebec. At this time, despite several past efforts, almost no progress has been made in developing any regional arrangement.

N.B. Power has been developing supply relationships in Maine to provide default service in markets where utilities no longer supply power. It has historically assisted in maintaining reliability on the New England grid and has a working relationship with ISO-New England.

The Energy Action Plan pays scant attention to these relationships and suggests only the possibility of cooperation with other Atlantic provinces in developing generation. Yet this is an area in which N.B. Power has the opportunity to play a leading role. Revenues may be derived from the use of its transmission system by others, and access to lower cost power supply could become available.

Among the Atlantic provinces, the question of the Newfoundland and Labrador interconnection must be resolved. An agreement between Nalcor and Emera could lead to an interconnection. Less likely is a link through Hydro Quebec to New Brunswick. The creation of a regional market could provide an added the stimulus for an interconnection.

A regional market, at least with P.E.I., Nova Scotia and northern Maine, is a reasonable objective with significant potential for New Brunswick. This area could dispatch units most efficiently for the benefit of all participants either on the basis of cost or of bid price. There would be no need for joint ownership of units, which could be developed separately. New transmission providing regional benefit could be financed on a joint basis. The New England Power Pool (NEPOOL), which preceded the market and ISO-New England, provides elements of a possible model. It dispatched power on the basis of each unit's energy cost, administered the transmission system and ensured reliability.

Such a regional market would require an impartial operator. NBSO would have been the logical candidate for this role, but it is now slated to be eliminated. However, the need for an independent way to assure reliability and to balance generation suggest that a solution may be found to New Brunswick's needs that could be then platform for an Atlantic Canada regional market.

A mechanism now used in northern Maine provides a possible solution. Instead of having an independent operator, this small area, which includes four utilities, has opted to have a common administrator with management authority while the actual day-to-day operation remains in the hands of the transmission owners. The Northern Maine Independent System Administrator (NMISA) has authority to insure non-discriminatory operation and resource adequacy.

An ISA to replace the NBSO would provide the necessary independence for key New Brunswick functions and would potentially be available for a regional role. It should be less costly than the NBSO, because the system would depend mostly on participants making bilateral arrangements for power supply. The ISA would be limited to ensuring the availability of balancing power, the maintenance of open access and the utilities' development of transmission plans.

In eliminating the NBSO, the government said that it was following the evolution in British Columbia, Alberta and Ontario. But the situation in each of these provinces is substantially different from that of New Brunswick. Their relationships with neighboring utilities are not as significant as those of a Maritime province with extensive interconnections with other small jurisdictions and a central location. Thus, New Brunswick should not necessary use those provinces as a model, especially when its particular geographic and power situation offers a chance for a profitable, leadership role. (The Plan might also have noted that Manitoba participates in the Midwest ISO, based in the United States.)

As for the relationship with New England, N.B. Power may also have the opportunity to play a greater role. Some northern Maine utilities seek improved interconnections and longer term power supply relationships. Because northern Maine is in a position virtually identical to P.E.I. in its relationship with N.B. Power, there is an opportunity for more mutually beneficial arrangements.

Northern Maine is also home to a significant wind power potential whose developers seek an affordable connection to the New England market. N.B. Power can play a key role in assisting in the development of this access, most likely at lower cost to the developers than a direct link. It now has available transmission capacity that could be used in providing a mutually beneficial arrangement. Of course, such wind power may also be helpful to N.B. Power in meeting renewable requirements.

The Energy Action Plan with its focus on the reintegration of N.B. Power and bringing debt under control is inward-looking. It does not sufficiently address the opportunities for New Brunswick for deriving revenues from the expansion of its regional role. While some of these possibilities, including the Atlantic regional market, may not be realized, action by New Brunswick could produce some tangible results and also create the conditions favourable to greater cooperation and mutual profit. There is now a leadership vacuum that New Brunswick can fill by taking realistic and practical first steps.

SUMMARY

The Energy Action Plan is a prudent attempt to improve N.B. Power's financial and operating situations. Among the positive elements of the Plan are the following:

- The reintegration of N.B. Power is reasonable, given the lack of meaningful competition.
- The debt reduction goal is reasonable and should be attained.
- Using customer supplied equity is a useful and appropriate method of debt reduction.
- Limiting capital spending and planning for it over a 10-year period is necessary and would be feasible if linked with an import policy. For limited capital outlays to work, the government would have to accept the gradual reduction in the role of utility-owned generation.

- The elimination of the N.B. Electric Finance Corporation is an important step toward transparency.

- Allowing for renewable power to be derived from units without respect to location, age or size is a most positive step.

- Small-scale power purchases can provide a model for increasing power supply from non-utility generators.

- Reforming the Energy and Utilities Board so it is composed of full-time professionals and giving it rate review of all N.B. Power operations is significant, provided that the government does not limit its authority.

- Creating a permanent, full-time Public Energy Advocate should give all customers the chance to be represented in the regulatory process.

Despite these positive elements, the goals Energy Action Plan as it applies to N.B. Power will be difficult to achieve. The principal drawback of the Plan is that it is likely to promise more than it can produce if there are not further measures beyond those proposed. Here are key problem areas and suggested actions:

- The Plan indicates long-term reliance of aging fossil fuel units and should allow for non- utility, in-province generators to be gradually integrated into the system.

- Hydro Quebec is an obvious resource with respect to generation and renewable power, as the Plan implies, and a long-term power supply relationship with the neighbouring utility needs to be given the highest priority.

- N.B. Power would accept excessive risk in relying on Point Lepreau nuclear for 35 percent of its power. And the Plan also is heavily dependent on the plant operating at highcapacity. Alternatives and contingency plans need to be developed and made public.

- While the government renews the N.B. Power's obligation to provide open transmission access, the utility should make the promise into a reality. Revenues derived from the use of the system by others can be as important and revenues from the utility's own generation.

- Relying on an artificially high return on equity for transmission could impose higher costs on N.B. Power customers and could discourage use of the system.

- The elimination of the NBSO is an error. Instead, it should be converted into an independent system administrator with a reduced budget.

- The cost of the subsidy for industrial customers should not be imposed on other customers unless there is an imminent threat that their rates will increase because of the loss of industrial load. In the absence of such a threat, the subsidy should be taxpayer-financed.

- The government should accept the need to take prompt action with respect to residential electric heating by allowing for disincentives for its extension and by adopting a strong thermal storage program.

- In the interests of consistency and professionalism, the utility regulatory

process should be depoliticized, and the EUB given more authority under legislative guidelines.

- N.B. Power should take the lead in promoting an Atlantic regional power arrangement and move aggressively to take advantage of current New England opportunities.

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