DECISION

IN THE MATTER of an application by Enbridge Gas New Brunswick to change its Small General Service Residential Electric, Small General Service Residential Oil, Small General Service Commercial, General Service, Contract General Service, Contract Large General Service Light Fuel Oil, Contract Large General Service Heavy Fuel Oil, Off Peak Service, Contract Large Volume Off Peak Service and Natural Gas Vehicle Fueling distribution rates

July 14, 2011

NEW BRUNSWICK ENERGY AND UTILITIES BOARD

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NEW BRUNSWICK ENERGY AND UTILITIES BOARD:

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	Robert Radford, Q.C.
SECRETARY:	Lorraine Légère
COUNSEL:	Ellen Desmond, Counsel

APPLICANT:

Enbridge Gas New Brunswick	Len Hoyt, Q.C. Dave Charleson

INTERVENORS:

Atlantic Wallboard L.P. and Flakeboard Company Ltd.	Christopher Stewart
Competitive Energy Services	Jon Sorenson
Department of Energy	Patrick Ervin
Public Intervenor	Basile Chiasson, Q.C.
St. Stephen Development Board Inc.	Ian Stewart
Town of St. Stephen	John Ferguson

INTRODUCTION

On November 23, 2010 Enbridge Gas New Brunswick Limited Partnership ("EGNB or Applicant") filed an application with the New Brunswick Energy and Utilities Board ("the Board") for approval to increase the maximum distribution rate for each of its customer classes pursuant to the *Gas Distribution Act, 1999*.

The rates applied for were based on the market-based formula that had been previously approved by the Board and which has been in place since 2000. In each rate application, EGNB uses the existing formula and files a derivation table which has a number of inputs. The derivation table provides a resulting rate for each rate class.

The data supporting the calculations used in the market-based formula for the present application was available for all parties to review, with the exception of the natural gas price, which contains confidential information.

Prior to the hearing, the Board engaged a consultant, John Butler of JC Butler Management, to independently review the confidential information relating to the natural gas price. Mr. Butler concluded that a small error had been made by EGNB, resulting in a slight reduction to both the price for the natural gas input used in the formula and to the requested rates. The Board ordered that EGNB recalculate the distribution rates, taking this correction into consideration. EGNB complied with the order and filed an amended derivation table, with amended rates, at the commencement of the hearing.

A pre-hearing conference was held on January 12, 2011. At that time the Board clarified the scope of the hearing and confirmed that parties would be permitted, *inter alia,* to file evidence related to alternative rate-making methodologies. Several parties registered as intervenors but the Public Intervenor was the only party, other than EGNB, to submit evidence and present final argument in this proceeding.

On May 21, 2011, EGNB applied to the Board for permission to withdraw a portion of its application. EGNB indicated that it did not wish to seek a rate increase with respect to three rate classes, namely the Contract General Service (CGS), Contract Large General

Service Light Fuel Oil (LFO) and Contract Large Volume Off-Peak Service (CLVOPS) classes. EGNB explained that it is in negotiations with the Provincial Government, which may have an impact on its costs and lead to a different rate structure for these classes. In particular, EGNB indicated that a transition to a rate structure more closely aligned with cost of service may be possible. At the commencement of the hearing, EGNB and the Public Intervenor made submissions to the Board with respect to this request and the Board permitted this amendment to the application.

EGNB also requested, as a preliminary matter, that a previously approved rate increase in the LFO class, be rescinded. This rate increase, arising from a Board order of June 2010, was scheduled to take effect on July 1, 2011. Following submissions from the parties the Board rescinded this order, pursuant to its authority under section 43 of the Energy and Utilities Board Act.

Following the resolution of these preliminary matters, EGNB indicated that it was seeking approval of the following distribution rates, per gigajoule (GJ):

Small General Service Residential Electric (SGSRE)	$10.5087
Small General Service Residential Oil (SGSRO)	$13.6475
Small General Service Commercial (SGSC)	$14.2562
General Service (GS)	$15.3116
Contract General Service (CGS)	$11.8155
Contract Large General Service Light Fuel Oil (LFO)	$ 6.4324
Heavy Fuel Oil (HFO)	$ 1.6689
Off-Peak Service (OPS)	$11.4837
Contract Large Volume Off-Peak Service (CLVOPS)	$ 8.8616
Natural Gas Vehicle Fueling (NGVF)	$15.3116

The CGS, LFO and CLVOPS distribution rates are the rates currently in place and are not proposed to change. In keeping with the methodology previously approved by the Board, the OPS rate is set at 75% of the proposed GS rate while the NGVF rate is set at the same level as the proposed GS rate.

The remaining rates are the subject of this review and a public hearing was held on May 25-27, 2011.

<u>ISSUES</u>

The following issues require determination by the Board:

A) Are the Maximum Distribution Rates requested by EGNB just and reasonable and, if not, what rates should be fixed by the Board?

B) What changes, if any, should be made to the rate-setting methodology?

<u>DECISION</u>

A. Maximum Distribution Rates

(i) <u>The current Market-Based Formula</u>

At the outset, it is useful to briefly explain why the current market-based formula, used to set distribution rates in New Brunswick, was adopted.

When EGNB was first granted the natural gas distribution franchise in New Brunswick, it was recognized that EGNB could not initially charge distribution rates based on the cost of serving its customers. This is because as the system was being developed and the infrastructure put in place, the cost of service would be higher than customers would pay. Instead of basing distribution rates on costs, a system based on the market value of the service was adopted.

Recognizing that these market-based rates would not recover the company's costs, the revenue shortfall was to be recorded in a deferral account during the development period. The intention was that the amount in the deferral account would be recovered from customers following the end of the development period.

To determine rates based on the market value of the service, a market-based formula was developed and has been the prime determinant of distribution rates since the inception of the franchise.

The formula was designed with two primary goals. First, it was intended that customers would experience some savings while using natural gas, as opposed to an alternative fuel. This would encourage customers to use natural gas and stay on the distribution system.

To achieve savings the formula was designed to allow a typical customer to achieve a set percentage savings target (target savings) on the combined delivery and gas costs (burner tip price). The target savings is a fundamental concept when customers decide whether natural gas is a viable option. To calculate the target savings, it is necessary to forecast the cost of both the alternative fuel and natural gas over the next 12 months.

The formula also involves assumptions about the gain in efficiency when customers switch to natural gas, their annual consumption and the amount of savings required to entice customers to convert to natural gas.

These assumptions have a significant impact on the resulting distribution rate. For example, if one reduces the assumed gain in efficiency when converting to natural gas, the distribution rate would be lower. The same sensitivity exists with the other assumptions.

As a second goal, the market-based formula permits EGNB to maximize its revenues and minimize additions to the deferral account during the development period. While a shortfall in revenue would be experienced as the distribution system was being developed, these shortfalls should be minimized as much as possible.

The market-based formula is unique but reflects a situation where a utility is in a "greenfield development." Traditional rate-making principles, where the cost to the utility forms the basis for a customer rate, had little applicability when the market-based formula was first introduced in New Brunswick.

Since 2000, both the formula and the market-based system have undergone important changes. Some target savings percentages have been lowered. New rate classes have been created in order to introduce the use of electricity as a competing energy source.

While changes have been made over time to the market-based formula, its objectives have remained the same. As the system develops, the Board must determine if and when certain traditional rate-setting principles should be introduced.

As noted above, EGNB withdrew part of the current application, stating that negotiations were underway with the Province of New Brunswick and that a new rate-setting approach, perhaps one based on costs, may be possible. This clearly represents a departure from a strict and consistent application of the existing formula and a recognition that cost of service can now be a consideration in certain classes when setting rates. Similarly, the Board must determine, in this application, if the introduction of more traditional rate-setting principles is appropriate.

(ii) *Fairness as a Rate-Setting Principle*

Prior to 2006 there was only one class for small customers instead of the three classes that now exist, namely the SGSRO, SGSRE and SGSC classes. In 2006, EGNB applied to the Board to split small commercial and residential customers into separate classes. In addition, residential customers were split into two classes: those who used oil before conversion to natural gas and those who used electricity prior to conversion.

In the evidence filed with the 2006 application, EGNB acknowledged that dividing the residential rate class would create a perception of inequity and stated that the subdivision of the rate classes was a temporary measure. At page 7, EGNB stated:

> *"EGNB does not anticipate the maintenance of two separate rates for residential customers in perpetuity. EGNB envisions that, as it evolves toward charging rates reflective of cost, these two rates would be merged resulting in one rate for all residential customers."*

As discussed above, the formula was introduced in 2000 to meet certain specific objectives. There are, however, other principles which need to be considered as the distribution system evolves. The gradual introduction of these principles will ensure that distribution rates will continue to be just and reasonable over the long term.

In the often-quoted text, *Principles of Utility Rates,* Bonbright discusses the attributes of a sound rate structure. Included in these attributes is the concept of "fairness" which considers cost, efficiency and equity in the design of rates. Bonbright describes "fairness" as follows at page 383:

> *"Fairness of the specific rates in the apportionment of total costs of service among the different ratepayers so to avoid arbitrariness and capriciousness and to attain equity in three dimensions: (1) horizontal (i.e. equals treated equally) (2) vertical (unequals treated unequally); and (3) anonymous (i.e. no ratepayer's demands can be diverted away uneconomically from an incumbent by a potential entrant)."*

During the course of this hearing, there was considerable discussion about "fairness" and the different treatment afforded to residential classes under the current rate regime. As described in the evidence and during cross examination, two homeowners, imposing similar costs on the system and each using 100 GJ per year to heat their homes, pay significantly different prices simply because of the different energy sources they formerly used. For a former oil customer, the heating bill for 100 GJ of natural gas would be $232 per year higher than the heating bill for a former electricity customer.

Another illustration of the perceived inequity in the current system was highlighted by the Public Intervenor. When a home is converted to natural gas, then sold, the purchaser will be placed in either the electric or oil rate class depending upon the fuel used by the previous homeowner, even though the purchaser has no relationship to the "previous fuel." This situation will occur more frequently as time passes. Mr. Robert Knecht, an expert witness for the Public Intervenor, discusses this issue and states in his evidence at page 8:

> *"... regarding the fairness criterion, the market-based rates may be increasingly irrelevant for many customers, due to the passage of time and the possible availability of other options..."*

A third issue related to "equality" is the progression of rates through the class sizes. In a more traditional rate-setting regime, the larger volume classes would typically be charged a lower rate because they are less costly to serve. This was, in fact, the situation in New Brunswick when distribution rates were first designed. However, in 2006 there was substantial volatility in the energy markets and substantial changes in the distribution rates. In the current market-based system, customers in larger volume classes are often charged higher rates than those in the smaller volume classes.

With the passage of time, these equality issues become a growing concern. In this application, EGNB proposes a greater increase to the residential oil class rate than for the residential electric class. Implementing the proposed change would increase the gap that is currently exhibited in the residential classes. Similarly, the current application, if approved, would result in a situation where the rates for two of the larger classes (SGSC and GS) would exceed those of the smaller, residential classes.

a. The SGSRE, SGSRO, SGSC and GS classes

In light of the issues described above, the Board finds that it is appropriate, at this time, to begin to introduce the traditional rate setting principle of fairness to the current rate setting regime. EGNB proposes to increase the residential electric rate by $2.1241/ GJ. The Board approves that increase and finds the resulting rate to be just and reasonable. In order to prevent the gap from widening, the Board will limit the increase for each of the SGSRO, SGSC, and GS classes to $2.1241/GJ. The Board believes this approach and the resulting rates to be just and reasonable. Later in this decision the Board will give further direction with respect to these rate classes.

b. HFO class

With respect to the HFO class, the Board finds the requested rate to be just and reasonable and approves the same.

The Board notes that rates in this class have been significantly lower than other classes for many years. Even with this increase, the HFO rate remains about one quarter of the next lowest rate class and well below its cost of service. This is an issue that EGNB must continue to monitor. When market conditions support an increase to rates, EGNB should apply to the Board for a change to this rate to bring it more in line with other rate classes and its cost of service.

c. OPS and NGVF classes

As indicated, and in keeping with the current methodology, the OPS rate is set at 75% of the proposed GS rate while the NGVF rate is set at the same level as the proposed GS rate. The Board finds the continued use of this methodology and these rates to be just and reasonable.

APPROVED RATES:

The following maximum distribution rates, per GJ, will be effective July 15, 2011:

Small General Service Residential Electric	$10.5087
Small General Service Residential Oil	$12.8347
Small General Service Commercial	$13.6383
General Service	$14.5399
Contract General Service	$11.8155
Contract Large General Service Light Fuel Oil	

First 22,000 GJ delivered in a month	$ 6.4324
For next 36,000 GJ delivered in a month	$ 0.1900
For volumes in excess of 58,000 per month	$ 0.0800
Heavy Fuel Oil	$ 1.6689
Off-Peak Service	$10.9049
Contract Large Volume Off-Peak Service	$ 8.8616
Natural Gas Vehicle Fueling	$14.5399

B. Future Rate-Setting Methodology

The market-based formula has been in use for more than a decade. At the outset of the franchise period it was anticipated that the transition to cost-based rates would have begun by now. The Board has considered this time-frame and the concerns outlined above, in addressing the future of the market-based methodology.

(i) *The SGSRE, SGSRO, SGSC and GS classes*

It is apparent that, for the smaller customer rate classes, the market-based formula produces rates that are far below the cost of service. EGNB's evidence during the current proceeding was that, to bring revenues closer to costs in these rates classes, twenty to thirty thousand new small customers are needed. There is no forecast of how long it may be before this occurs but, at current rates of growth, this will not occur in the near term.

Mr. Knecht stated, as follows, at page 11of his report:

> "*Moving toward cost-based rates for smaller customers is not feasible. Costs allocated to the SGS rate class far exceed the*

> *market price of alternative fuels. …Any change in the ratemaking method for smaller customers must therefore retain a cap in the form of the price of alternative fuels.”*

The Board agrees that, in the absence of a significant change in circumstances, this will be the case for the foreseeable future. The Board concludes, therefore, that it is vital that the market-based formula continue to meet its key objectives. The following issues, with respect to the market-based formula require further comment.

Effectiveness of the Formula:

Given the likelihood that the market-based formula will play a role in rate setting for some time, the Board must continually monitor its effectiveness, its inputs and its supporting assumptions.

One issue related to the effectiveness of the formula is “target savings.” David Charleson, General Manager of EGNB, testified that the company “lives up to its value proposition” and delivers target savings to typical customers. Under cross-examination Mr. Charleson agreed it is reasonable to expect that those customers, whose annual consumption is below the average for the class, would not achieve their target savings. In some classes the annual consumption for the majority of customers is less than the class average and therefore these customers may not achieve the target savings. The Board will provide directions later in this decision to ensure that rates will produce the projected savings for the majority of the customers for whom natural gas is a primary energy source.

Additionally, the formula is sensitive to a number of assumptions which can affect the rates charged to customers. One example is the assumption related to “furnace efficiency factors”. While Mr. Charleson testified that the use of efficiency factors remain appropriate, any change in the factors would have an impact on the resulting rate.

Given the sensitivity of the formula to all assumptions, the Board will periodically review their appropriateness. In its next rate application, for which a market-based rate with an efficiency factor is proposed, EGNB is directed to file evidence in support of any efficiency factors used in its proposed rates.

Merging of Classes

As indicated above, the division of the residential class was not intended to be in place in perpetuity. EGNB is directed to file with the Board a transition plan which will, over time, merge the residential classes into one class. The plan should also provide for a transition from the SGSC rate to the GS rate which reflects the economies of scale observed in a more traditional rate-setting regime.

(ii) *CGS and LFO Classes*

The other issue the Board wishes to address at this time relates to customers paying more than their cost of service.

At the commencement of the hearing, Mr. Charleson explained to the Board that the CGS and LFO classes consist almost entirely of customers who are already paying more than their cost of service. Mr. Charleson testified that, should the company successfully negotiate an agreement with the Provincial Government, EGNB would develop a plan to begin the transition to cost-based rates. Such a transition would likely involve lower rates for customers currently in the CGS and LFO classes.

Mr. Charleson concluded that holding the CGS and LFO rates at their current levels was in the public interest. Mr. Charleson stated as follows at page 162 of the transcript:

> *We believe that by, you know, bringing forward an application or continuing to advance an application that could move rates materially higher that where they may -- where we may see them landing, you know, say a year from now, would not necessarily be*

> *in the public interest. We have also heard in other proceedings the potential risk of increasing costs in some of the larger rate classes to some of our large customers and again the loss of load there, and revenues would not -- while we don't necessarily believe that may be an outcome, it is a risk that sits there and that would not be in the public interest as well, so that's why we saw this action as well as serving the public interest.*

In traditional rate setting, those customer classes paying rates that are above their cost of service are said to be "cross-subsidizing" those classes paying rates below their cost of service. Cross-subsidization is almost inevitable in multi-class tariffs.

To date the issue of cross-subsidization has not been considered by this Board with respect to the natural gas industry. The market-based system does not lend itself readily to such an analysis and such an analysis was not possible until the completion of an approved cost of service study. EGNB did complete and file an approved cost of service study with the Board earlier this year.

The Board's ability to consider issues relating to cross-subsidization remains imperfect as current rate classes do not precisely match those in the cost of service study. Never the less it is clear that some classes are paying rates in excess of their cost of service. This is acknowledged by EGNB.

It was always understood that some level of cross subsidization was necessary for the continued survival of the franchise, but the Board finds that some limit to the cross-subsidization is appropriate. The Board has determined that customers who are paying more than their cost of service can no longer have rates determined solely by the market value but rather, such rates must incorporate a cost-based component. The question becomes how and when to move from the current system to a revised rate-setting mechanism.

(iii) *Transition Plan*

It is clear from the testimony in the hearing that both EGNB and the Public Intervenor believe that a transition to a new system is approaching but the exact timing is in dispute. EGNB testified that the time is not right to begin a transition while the Public Intervenor argued that the transition should begin immediately.

Mr. Knecht, in his evidence, provided a “straw man” proposal, which included the first year of a five-year transition to a cost-based system. This proposal merged the small customers into one class, merged the large customers into a single class, modified customer charges, and altered some of EGNB prototype rates to ease the transition between rate classes. A key component of Mr. Knecht’s evidence is that each year the Board would need to re-evaluate the company’s performance and modify the transition accordingly.

EGNB disagrees with some significant points of Mr. Knecht’s “straw man” transition; specifically whether the time is right for such a transition and the impact that the straw man proposal has on the revenues of the company.

The Board will deal with each of these issues.

Timing of the transition

A key component of any transition to a new ratemaking system would be to move away from the market-based formula and limit the increases for those customers already paying in excess of their cost of service.

The main issue facing the Board is whether this is the appropriate time to begin this transition. EGNB asserts that this is not the right time for such a transition. The Board finds that this is the appropriate time. EGNB has held the natural gas distribution general franchise in excess of ten years. A cost of service study has been completed, reviewed and approved by the Board. The study indicates that certain groups of customers are paying more than their cost of service while others are paying much less. These costs are unlikely to change in the near future. Recent rates of growth, while significant, do not suggest that EGNB’s throughput is likely to increase substantially in the near term. This is particularly true in those classes containing larger volume customers.

The transition will take a number of years to complete. If the transition does not begin in the near future, the current franchise period may be at or near its expiration before the transition is completed. While it was appropriate in the early years of the franchise to focus on target savings and maximizing distribution revenue, the Board finds that, over the longer term, rates cannot be just and reasonable unless costs are taken into consideration.

While EGNB asserts that the time is not right to begin the transition, EGNB has already taken a first step in the transition period, given their decision not to apply the market-based formula to the CGS and LFO classes. Although EGNB indicated they might wish to return to a full market based system if their negotiations with the Province are not successful, EGNB, by its actions, has effectively acknowledged the relevance of costs in setting rates.

Revenues

The second significant concern raised by EGNB is that the Knecht proposal would reduce its revenue so significantly, that the there is little likelihood that the deferral account will be recovered. EGNB argues that the Board cannot adopt a rate-making methodology that gives the utility little likelihood that it will recover its prudent investment.

The evidence demonstrates that EGNB's revenues would be lower under the rates produced by its amended application than by Mr. Knecht's proposal. Mr. Knecht's proposal was for one year, with future years to be determined based on circumstances in place at the time. Given the modest differences in rates between the Knecht proposal and the amended EGNB proposal, the Board sees no benefit to adopting the Knecht proposal at this time. The Board will be holding a hearing prior to the next modification of the rates and this process may draw upon the concepts in Mr. Knecht's proposal.

The Board has a statutory duty to fix rates that are just and reasonable. This requires a balancing of the interests of both the customer and the utility. Since 2000, the market-based formula, with its various modifications, has produced rates that are just and reasonable. Historically, the formula did not and could not take into account issues of cross-subsidization. The Board now possesses the tools to allow it to begin to address this issue.

The Board finds that the issue of cross-subsidization cannot be ignored in perpetuity and that going forward just and reasonable rates can only be achieved by giving some consideration to the cost of service for those classes where market-based rates exceed the cost of service.

EGNB has taken the first step towards a consideration of cost of service issues. The Board directs EGNB to present a transition plan that maps the next steps in this transition. The objective of this transition would be to arrive at level of cross-subsidization which would be appropriate over the medium term, taking into consideration the interests of both the utility and its customers.

The Board will hold a hearing to deal with transition issues, as contemplated in its decision of March 20, 2009. The basis of this hearing will be the consideration of a transition plan to be filed by EGNB. This transition plan is to be filed with the Board with the next multi-class rate application or no later than April 1, 2012. The plan will contain, at a minimum, the following features:

- A transition to the new rate structure (outlined in the filed cost of service study) which includes the SGS MGS LGS CGS ICGS rate classes as approved by the Board.

- A timeline for the implementation of the plan.

- Details of rate design tools, such as flex rates, or market-based formulas EGNB wishes to propose.

- Rates which include a cost of service component for those classes where it is feasible.
- A proposal to limit the cross-subsidization between customer classes.
- For those customers paying less than the cost of service, a market related rate that ensures the resulting rates are based on sound assumptions and produces the savings projected for a majority of the customers for whom natural gas is a primary energy source.
- Distribution rates that reflect the economies of scale common in more traditional rate-setting regimes, with lower rates for customers with greater consumption.

Dated at the City of Saint John, New Brunswick this 14th day of July, 2011.

Raymond Gorman, Q.C., Chairman

Cyril Johnston, Vice-Chairman

Edward McLean, Member

Robert Radford, Q.C.,Member