# Written Direct Testimony of Andrew J. Harrington

- Q 1. Please state your name and position.
- A 1. My name is Andrew Joseph Harrington. I am the General Manager of Enbridge Gas New Brunswick. My Curriculum Vitae is attached as Exhibit A, Schedule 1.
- Q 2. What is the purpose of this evidence?
- A 2. Enbridge Gas New Brunswick Limited Partnership, as represented by its general partner Enbridge Gas New Brunswick Inc. ("EGNB"), files this evidence to request certain changes to its previously approved Small General Service ("SGS") rate. Specifically, it seeks to eliminate the current SGS rate and replace it with three new rates and reclassify all existing and signed customers to one of the three new rates as appropriate. The three proposed rates are: Small General Service Commercial ("SGSC"), Small General Service Residential Oil ("SGSRO") and Small General Service Residential Electric ("SGSRE"). The proposed rates are filed as Exhibit A, Schedule 2. Associated Rate Riders are filed as Exhibit A, Schedule 3.
- Q 3. Could you briefly outline each of the proposed rate classes?
- A 3. Certainly. In addition to this response, please see the more detailed rate sheets filed at Exhibit A, Schedule 2.

SGSC: It is proposed that this rate will be applicable to all existing and new customers who are not residential and who meet the other qualifications of the former SGS rate. EGNB is not seeking approval to modify the rate charged to this group of customers. That is, the currently approved SGS rate and associated rider would remain in effect. Currently, 813 existing customers would be reclassified into this proposed rate class.

SGSRO: It is proposed that this rate will be applicable to all prospective residential customers who do not qualify for the proposed SGSRE rate. As well, this rate would be applicable to all existing residential customers excepting those to be reclassified into the SGSRE rate. EGNB is not seeking approval to modify the rate charged to this group of customers. That is, the currently approved SGS rate and associated rider would remain in effect. Currently, 2,228 existing SGS customers would be reclassified into this proposed rate class.

SGSRE: It is proposed that this rate will be applicable to all prospective residential customers who replace both their electric primary space heating equipment and domestic hot water equipment with equipment that uses natural gas. As well, this rate would apply to all new homes built using gas for these purposes. This rate will also apply to existing SGS customers who are reclassified to this rate class. That is, all residential customers who have replaced both their electric primary space heating equipment and domestic hot water equipment with equipment that uses natural gas would be reclassified to the SGSRE rate. As well, all homes constructed previously using natural gas for these purposes would be reclassified to this rate. EGNB is not seeking to modify the approved rate for this group of customers; however, it is seeking to introduce a separate rate rider applicable only to this rate class. Currently, 977 existing SGS customers would be reclassified into this proposed rate class.

- Q 4. Why is EGNB looking to divide its SGS rate class?
- A 4. The primary reason is to facilitate EGNB's ability to grow its residential market by augmenting its value proposition in accordance with its market-based rates approach for customers who currently use or, in the case of new construction, would use electricity to meet heat and hot water requirements. At the same time, EGNB has recognized that to be as effective as it can be in selling to commercial customers it needs to offer a distinct rate to commercial customers. Most importantly for commercial accounts, EGNB has realized that 'one size does not fit all'; an example which most clearly illustrates this is

that New Brunswick Power Distribution and Customer Service Corporation's ("NB Power" or "Disco") residential rate is significantly lower than either of its General Service classes. Therefore, EGNB needs to ensure that there is a rate for smaller commercial accounts to reflect competitiveness issues in this segment. Further, over time as it progresses through the remainder of the Development Period, EGNB foresees evolution in its commercial rates. What is clearly important is that commercial customers are isolated from residential customers. Therefore, EGNB is taking the opportunity to do just that in this proposal.

- Q 5. Could you please summarize the information as it relates to rates as contained in Schedules 2 and 3 for ease of reference?
- A 5. Yes, please see the following table.

SGS	SGSC	SGSRO	SGSRE
(EXIST)	(Prop.)	(Prop.)	(Prop.)
16.00	16.00	16.00	16.00
			· · ·
7.6212	7.6212	7.6212	7.6212
-2.1776	-2.1776	-2.1776	
			-5.2725
5.4436	5.4436	5.4436	2.3487
	7.6212 -2.1776	(EXIST) (Prop.)  16.00 16.00  7.6212 7.6212  -2.1776 -2.1776	(EXIST) (Prop.) (Prop.)  16.00 16.00 16.00  7.6212 7.6212 7.6212  -2.1776 -2.1776

- Q 6. For the proposed SGSC and SGSRO rates, EGNB is not seeking to adjust the Revenue Adjustment Rate Rider. Why?
- A 6. EGNB is continuously analyzing savings levels opposite oil products. At the moment, in each of these two classes savings are approximately three to five percent above target levels and EGNB could apply to reduce the Revenue Adjustment Rate Rider ("Rider"), effectively increasing its rates for each of these two rates. As is usually the case, in the

Fall the wholesale commodity market is experiencing some volatility. For that reason, EGNB prefers to continue to assess the forward market while leaving the Rider for the SGSC and SGSRO rate classes at current levels for the time being.

- Q 7. The effective delivery charge proposed for the SGSRE rate is lower than for the other proposed SGS rates. Why?
- A 7. In all of its recent evidence, whether for its own applications or through its intervention into NB Power's applications for rate changes, EGNB has been clear that it has been unable through its existing SGS rate to offer sufficient savings against NB Power's below cost residential rate. EGNB believes that the Board is well aware of this evidence and that the Board recognizes this as is evidenced through the approval of EGNB's current Rider in effect in the SGS class as this Rider was approved solely to preserve nominal competitiveness against Disco's residential rate to allow EGNB to continue to make headway into the residential new construction market. Further, the Board's decision(s) with respect to Disco's applications recognized the ongoing deficiency of Disco's residential rate. For this reason, EGNB will not restate this evidence. EGNB needs to offer greater end-user savings opposite NB Power's residential rate in order to grow its market share. The effective delivery rate proposed for SGSRE would provide a sufficient level of savings for EGNB to achieve this.
- Q 8. In its initial application for market based rates, EGNB used retail oil prices in setting its market based rates. Further, it defended this as being the simplest approach to setting rates indicating that retail oil is "generally the least expensive of the existing energy alternatives, meaning that natural gas will be even more competitive against other alternate energy sources including electricity and propane." What has changed?
- A 8. At the time of initial rate setting, EGNB envisioned savings opposite NB Power electricity of 45%. Indeed, residential customers who converted in the early days received significant savings. However, due to the combined effects of increasing oil prices and relatively stagnant electricity prices, delivered natural gas under EGNB's oil-

targeted SGS rate has progressively lost competitiveness against NB Power's residential electricity rate. At present there is little or no difference in the annual cost incurred by a residential customer using either natural gas (delivered under the current SGS rate) or electricity. Earlier this year, through its intervention in Disco's rate application, EGNB submitted evidence which indicated that while retail oil prices had increased by 145% since 2000, residential electricity prices had increased by 18%. This evidence was not contested by any party at the proceeding. To get back to the specific question, this is what has changed – world energy prices have increased dramatically and while NB Power incurs these costs to generate electricity, it maintains relatively stagnant rates.

- Q 9. What, in EGNB's opinion, are the issues that interested parties including the Board may raise with this proposal?
- A 9. There are two issues that EGNB expects others may raise with regard to this proposal. They both revolve around the introduction of a rate to target residential electricity: inequity amongst residential customers and financial implications to the EGNB distribution system. Touching on each of these briefly, EGNB understands that a perception of inequity amongst similar customers will be created by this proposal as there will be two different groups of otherwise similar customers who will be charged two different rates; regarding financial implications, in the immediate term the issue would arise from the fact that otherwise similar customers will not generate the same amount of revenue for the system.
- Q 10. Could you please expand on each of these, explaining the perceptions that you anticipate in more detail?

#### A 10. Yes.

Dealing first with inequity, the introduction of SGSRE will result in two otherwise similar customers paying different rates. To be clear this proposal, if approved, will result in customers who switch from electricity paying a delivery charge less than one-

half of that paid by a customer who has converted from oil. This may generate customer concerns about unfair treatment.

Turning now to the question of financial issues which may be raised, interested parties will recognize that otherwise similar customers are not generating similar revenue levels despite the fact that EGNB will incur similar costs to provide services.

- Q 11. Dealing with the inequity item, can EGNB explain why it believes it appropriate to introduce this rate despite the apparent inequity?
- A 11. First and foremost, EGNB believes that, given its context and record, the issue is, from a principles perspective, one of perception only. If EGNB were in a strict cost of service rates environment, the introduction of such a rate would create a real equity issue that would have to offer substantive off-setting public interest arguments to justify. In EGNB's context such inequities are fully contemplated and accepted as is most plainly evidenced by the prior approval of EGNB's two Contract Large General Service rates wherein one targets light fuel oil and the other heavy fuel oil and where substantive differences in the rates has and continues to exist. Very simply, the proposal to introduce a market based rate opposite residential electricity is an extension of the overall rates proposal found to be in the public interest by both the Province in accepting EGNB's original proposal and by the Board in its approval of both the original and subsequent rates applications.

EGNB gained its franchise by responding to the Province's Request for Proposals ("RFP"). The RFP identified seven policy objectives that a proponent was to address in its plans. In brief, the policy objectives are:

- 1. Maximum Availability of Natural Gas
- 2. Timely Development of a Natural Gas Industry
- 3. Development of an Effective Regulatory Framework for the Gas Distribution Business
- 4. Increased Competition in the Energy Market

- 5. Market Access for Indigenous Natural Gas Supply
- 6. Regional Price Equity
- 7. Maximizing Economic Benefits in New Brunswick

If this proposal is approved, it would certainly be in furtherance of the public interest, as identified through the policy objectives of the RFP.

One thing important to profile is that the difference between the proposed SGSRE and SGSRO rates is current. The Board and EGNB are very aware that changes to the prices of natural gas and oil could eliminate or reverse this difference rapidly. The introduction of the SGSRE rate offers EGNB the ability to diversify revenue risk from the residential market to the benefit of all gas distribution customers.

It must also be recognized that the real inequity already exists in NB Power's rates. The fact that NB Power's residential rate is lower than its commercial rates despite the fact that they place more cost burden on the utility is plain evidence of this. Through this proposal EGNB is simply trying to meet its objectives given this existing inequity.

As a final point here, 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.

- Q 12. In the last response, you indicate that introducing the SGSRE rate will allow EGNB to diversify revenue risk. Could you please explain what you mean by this?
- A 12. Yes. This is a benefit that EGNB is only beginning to appreciate and may upon further consideration provide sufficient motivation for EGNB to similarly apply to diversify the basis in the commercial rates as well. To illustrate the benefit: less than three years ago if EGNB were to offer a rate targeting the same level of savings from NB Power's residential rate, it would be higher than the then current oil based rate. As mentioned

previously, it is likely that this could happen again, in very short order. By having groups of customers with rates and corresponding revenues based off of two separate energy prices, it is foreseeable that this could enable EGNB to mitigate market based revenue risk presented by the relationship of natural gas to either of the alternate energy sources as opposed to the current situation where EGNB's risk rests solely between the relationship of oil to gas. While unquantifiable, this would definitely tend to increase the stability of EGNB's overall revenue generating capability while preserving its market based rate value proposition. This would benefit all customers both current and future as it would lead to lower contributions to EGNB's deferral account. That being said, such stabilizing benefits are muted as long as NB Power's rates remain artificially low.

This diversification benefit is the primary reason why EGNB has proposed to establish the current level of the rate through the introduction of a new Rider to the previously approved SGS rate as opposed to seeking to have the Board approve a new rate level. EGNB expects that it is highly likely that the two drivers to the SGSRE rate levels: retail electricity rates and the commodity price for natural gas will change in the near term. EGNB is seeking approval for this specific approach as it will allow EGNB to adjust this rate as necessary to maintain savings levels while maximizing distribution revenues.

- Q 13. In the previous response, you explain that EGNB desires the Board to approve a new Rider as opposed to approving a new rate level. Can you elaborate on why you believe this is appropriate and important?
- A 13. Dealing with the question of appropriateness, EGNB would offer two points. First, the SGS rate level has been previously approved by the Board having been found to be just and reasonable and is currently applicable to the types of customers contemplated to be served by the SGSRE rate. Secondly, EGNB's motivation has to be considered: EGNB is only introducing this more focused rate to grow the residential electric market we are solely motivated to provide a compelling value proposition to this important customer segment. Looking at our track record, EGNB believes that it has, to the best of its ability

and in a transparent fashion, managed the charging of market based rates well: maintaining the balance between cost recovery and providing economic motivation through sufficient end-user savings to grow the market. The point here is that EGNB has no motivation to increase rates above those made effective through the combination of the previously approved SGS rate and the proposed Rider – unless and until either the retail electricity prices or natural gas commodity prices allow such to occur. Of course, the Board has full authority on granting changes to Rider applications. EGNB cannot unilaterally increase rates.

As to importance, EGNB thinks that practicality needs be kept in mind. EGNB is looking to have this rate effective on January 1, 2007. It is highly probable that by the time April comes along NB Power will increase its rates. If EGNB does not have the flexibility offered through making market-related adjustments through the Rider approach, it will have to undertake a formal rate hearing four months after the reclassification. As well, EGNB currently expects that the price of Enbridge Utility Gas will be in decline through 2007 again justifying adjustments to the effective rate charged to the SGSRE class. It is the flexibility of the requested approach which is important to EGNB.

- Q 14. At A9, you indicate that there may be financial issues raised by introducing this rate. What do you mean by this?
- A 14. Building on the last response, at present EGNB only anticipates positive financial benefit to the distribution system. Very simply, EGNB will be generating revenues that it would otherwise not be able to. The remark spurring the question found at A9 was raised from the perspective of how interested parties may perceive the proposal.

EGNB does acknowledge that this proposal does not present the same level of financial benefit to the system as that which would have been generated had NB Power's residential rates been amended so as to reflect the underlying costs (which is the outcome

EGNB has been trying to influence since commencing operations). However, after EGNB and many others invested significant effort to encourage NB Power to affect rates that are neither anti-competitive nor below cost, EGNB believes it can no longer wait to grow the residential market.

- Q 15. In the last response you state that EGNB cannot wait any longer for NB Power to affect rate changes and is taking this step to grow the residential natural gas market. Why do you believe this?
- A 15. EGNB's significant revenue growth over the last three years has come primarily from mid to large size, previously oil-consuming, commercial customers and while EGNB intends to continue to grow the commercial market, its ability to meet key long-term financial and strategic objectives requires EGNB to currently focus on growing the residential segment. The residential segment available to EGNB is significantly dominated by electricity for heat and hot water. Therefore, EGNB needs to offer a total value proposition to these customers that allow it to grow.

As well as the obvious revenue and investment growth that the residential segment presents, there are other strategic and societal reasons that make this segment critical for EGNB to penetrate.

From a system perspective, residential customers represent a higher margin, stable revenue contribution. This is as compared to commercial, institutional and industrial customers who are subject to a number of external factors that normally affect their ability to generate revenue for the system over time. They go out of business, reduce production levels, switch energy technologies, etc.

It must be remembered that EGNB has already invested in a substantive infrastructure to provide service to residential markets. This system capability will remain underutilized if more residential customers are not brought onto the system. To illustrate this, EGNB

currently has infrastructure in front of or in close proximity to 19,000 residential prospects.

From a societal perspective, more effectively penetrating the residential segment will create incremental environmental and economic benefit. Economic activity is generated from the direct savings, construction and installation activities. Of course, the environmental benefits are significant. New Brunswickers on a per-capita basis, generate 8.0 tons of greenhouse gases ("GHG") per year, this is 2.5 tons or 45% above the national average of 5.5 tons. This difference is in no small way driven by our reliance on dirty, inefficient electricity for heat. Converting one house from electricity to natural gas achieves a 15 ton reduction in GHG emissions. This is significant.

Ironically, displacing residential electric heating load will be good for NB Power and NB Power ratepayers. It will remove the load for which it loses the most money thereby decreasing taxpayer burdens and cross-subsidization levels. As important, introducing this rate should go a long way to eliminating electricity load growth from residential heating in new construction.

Q 16. In the previous response, you indicate that EGNB wants to deliver a value proposition to pursue the residential electricity market. Can you explain what this means and in doing so indicate whether, with the proposed SGSRE rate, EGNB believes it can offer a sufficient value proposition to attain this market?

A 16. Dealing with the second part of the question first, the answer is yes.

For residential customers, defining a value proposition tends to include a composition of qualitative as well as quantitative factors. For instance, EGNB has converted many electricity customers while offering a wide spectrum of end-use economic benefits over time, from substantive to neutral savings. Indoor air quality, flexibility and comfort are benefits that natural gas offers as compared to electrical systems and there are customers

who will and have switched for these qualitative benefits alone, albeit there are small numbers of these as prospective customers. For the majority, it is usually these qualitative factors combined with a credible end-use financial benefit that is found to be attractive enough to incent conversion.

Qualifying the value proposition on the basis of financial benefits, there are two subfactors which combine to form the financial value proposition: 1) savings and, 2) upfront capital cost. These two factors generally translate to most residential customers as a value proposition centered on a simple payback period.

To put this in context, EGNB's current SGS rate offers a prospective residential customer using an oil-fueled forced warm air system and an electric water heater a payback period of between two and four years. Sometimes it is shorter, sometimes longer depending on the equipment being replaced, the equipment being installed as well as the heat and hot water utilization characteristics of the homeowner.

As can be seen in the table filed as Exhibit A, Schedule 4, similar to the oil case, the SGSRE rate, should it be approved, would effectively provide a two to four year payback to a prospective customer with an electric forced warm air furnace and an electric water heater.

- Q 17. In Exhibit A, Schedule 4 at Line 24, you illustrate the payback for a typical residential customer who has replaced their electric forced warm air furnace and water heater from electricity to natural gas. Aren't the majority of existing customers who use electricity to meet these needs using electric baseboard heaters and are the costs of conversion for customers who use electric baseboard systems not more substantive?
- A 17. The answers to both parts to the question are yes. A few additional points here would be helpful.

First, in the communities where EGNB is active, of those residential customers who use electricity for heat, more than 25% use a central heating system (either a forced warm air furnace or a hot-water hydronic/boiler system). This represents a market opportunity of 3,000 customers. This group of customers will be the early focus of EGNB should this application be approved.

Second, as illustrated previously, some residential customers who currently heat with electric baseboard heaters will find the value proposition sufficient. Keep in mind that the range of cost for conversion from electric baseboard is wide with the biggest factors being the size and level of finish of the home. Indeed, some small numbers of customers have undergone whole home conversions from electric baseboard heating systems under the current SGS rate.

Third, EGNB continues to refine its expertise and technological knowledge to identify cost saving opportunities to make whole home conversions more affordable.

With all this, while having an attractive delivered price of gas is an important ingredient for the value proposition, EGNB will likely not be able to quickly move significant amounts of the electric baseboard retrofit market simply through the introduction of this rate. Unless and until a means to lower the upfront cost of capital is determined, moving that market will be a long slow process. EGNB continues to encourage both provincial and federal governments to recognize the benefits of investing in this sort of an opportunity from an efficiency perspective. However, EGNB continues to analyze the feasibility of motivating this market to move sooner by providing varying incentive levels. The benefit of the existence of centrally heated electric homes is that it provides a medium term market to focus on while EGNB attempts to find the optimal technical and financial solutions to move the electric baseboard market.

- Q 18. At Line 8 in the table provided as Exhibit A, Schedule 4, EGNB illustrates a targeted level of savings of 20%. Does EGNB intend on using this as the target savings level for the SGSRE rate?
- A 18. Yes. EGNB intends on using the same principles in deriving the SGSRE rate as it does for setting its other market based rates. One of these principles is to establish a target level of relative savings opposite the competitive energy. In this case, the 20% level was assessed as adequate for use in establishing a value proposition as explained in A16.
- Q 19. Referencing the same table, at Line 22 EGNB uses an average installed cost of a furnace and water heater of \$1,500. Is this reasonable?
- A 19. Yes. EGNB currently has an offer to install a natural gas high-efficiency forced air furnace and a domestic water heater for \$1,499. This pricing represents a typical installation price as it uses the most commonly installed size of furnace and water heater.
- Q 20. Referring once again to Exhibit A, Schedule 4, at Lines 24 and 31 you illustrate the simple payback periods for oil and electricity conversions. The difference in payback periods is 0.9 years, favouring customers who convert from oil. Is this concern for EGNB?
- A 20. No. Based on our experience, residential customers will find both payback periods similarly attractive.
- Q 21. At A16, EGNB makes reference to customers who have previously converted to natural gas from electricity. If this application is approved, does EGNB plan on reclassifying any of these customers?
- A 21. Yes. As indicated at A3, EGNB expects to reclassify 977 existing customers from the existing SGS rate class to SGSRE. Simply, EGNB intends on reclassifying all existing and signed residential customers who are either new construction or residential retrofit

according to the terms specified in the rate sheet. To this end, EGNB is able through its records to qualify existing and residential customers for the proposed SGSRE rate. Additionally, we will take requests for reclassification, investigate eligibility and reclassify as appropriate.

- Q 22. In the last response you indicate that you will take requests from existing customers. Do you plan on communicating these changes to all existing SGS customers?
- A 22. EGNB plans on communicating that changes are taking place to all SGS customers and to provide an overview of the nature of the changes. EGNB proposes to develop a communication for all SGS customers in consultation with Board staff in which EGNB will provide an opportunity for customers to ask questions via email and telephone about the changes.
- Q 23. Does this conclude your testimony?
- A 23. Yes.

## Schedule 1

**Curriculum Vitae of Andrew Harrington** 

## **CURRICULUM VITAE**

## Andrew J. Harrington

## **EDUCATION**

1997 Master of Business Administration, Schulich School of Business, York University

1991 Bachelor of Science, Engineering (Civil Engineering), University of Guelph

#### PROFESSIONAL AFFILIATIONS

Association of Professional Engineers and Geoscientists of New Brunswick

Professional Engineers of Ontario

## **BUSINESS EXPERIENCE**

1999 - Present Enbridge Gas New Brunswick, Fredericton, New Brunswick

2004 - Present General Manager Responsible for providing overall strategic and policy direction for EGNB and for overseeing its ongoing development and operations. 2002 - 2004Manager, Business Operations Responsible for management and development of EGNB business units including distribution operations. installation services, marketing and sales. 2001 - 2002Manager, Distribution Operations Responsible for management of natural gas distribution system design, construction, operation and maintenance. 1999 - 2001Manager, Business Development Responsible for analyzing, pursuing and implementing financial and general business opportunities; assisting in preparation of EGNB strategic plans.

1998-1999 Enbridge Consumers Energy Inc., North York, Ontario

Manager, Marketing-Gas New Brunswick

Responsible for pursuing natural gas distribution rights and researching existing energy market; establishing communications with retail energy supply chain; implementing marketing programs and communication strategies.

1993-1998 Consumers Gas Company Ltd., North York, Ontario

1997-1998 Senior Business Analyst, Interactive Marketing

Responsible for developing and implementing an "electronic gateway" strategy enabling the offering of information based services; developing business concept and product/service marketing.

1995-1997 Senior Engineer, Operations & Engineering

Responsible for training and development of Junior Engineers and Technicians; approving pipeline designs for operations; developing engineering policies and procedures; designing specialized pipeline configurations; negotiating with municipal authorities and private developers.

1993-1995 Supervisor, Special Projects

Responsible for the design and execution of multimillion dollar capital projects; coordinating between municipal authorities, other utility owners and company construction forces.

Schedule 2

**Rate Schedules** 

## RATE NUMBER SGSRE

### SMALL GENERAL SERVICE RESIDENTIAL ELECTRIC

### APPLICABILITY

Small General Service Residential Electric Rate is applied to any Applicant who resides in a dwelling unit where the primary electric space heating and domestic hot water equipment was replaced with equipment using natural gas or any Applicant who resides in a dwelling unit that was built using natural gas equipment for heat and hot water requirements, requiring to use the Company's Distribution System to have a supply of natural gas transported to that single dwelling unit served through one meter.

RATE	
Monthly Distribution Customer Charge:	
\$ per month	16.00
Monthly Distribution Delivery Charge:	
For all volumes delivered per month (\$ per GJ)	7.6212

The rates quoted above shall be subject to adjustments that reflect all taxes including HST. The rates will also be subject to the Revenue Adjustment Rate Rider contained in Rider A.

## Minimum Monthly Charge:

The minimum monthly charge shall be the Monthly Distribution Customer Charge.

## Minimum Annual Charge:

None.

## Term of Service:

One (1) year with automatic annual renewal unless the Applicant notifies the Company thirty (30) days prior to the annual roll over date that service is to be discontinued.

## Terms and Conditions of Service:

The provisions of Parts II, III, IV, V, VI and VII of the Company's Handbook of Rates and Distribution Services apply, as contemplated therein, to service under this Rate Schedule.

#### **Effective Date:**

To apply to all bills rendered for gas transported on and after January 1, 2007.

## RATE NUMBER SGSRO

#### SMALL GENERAL SERVICE RESIDENTIAL OIL

## **APPLICABILITY**

Small General Service Residential Oil Rate is applied to any Applicant requiring to use the Company's Distribution System to have a supply of natural gas transported to a single dwelling unit served through one meter that does not meet the applicability requirements of the SGSRE Rate.

RATE	
Monthly Distribution Customer Charge:	
\$ per month	16.00
Monthly Distribution Delivery Charge:	
For all volumes delivered per month (\$ per GJ)	7.6212

The rates quoted above shall be subject to adjustments that reflect all taxes including HST. The rates will also be subject to the Revenue Adjustment Rate Rider contained in Rider A.

## Minimum Monthly Charge:

The minimum monthly charge shall be the Monthly Distribution Customer Charge.

## Minimum Annual Charge:

None.

## Term of Service:

One (1) year with automatic annual renewal unless the Applicant notifies the Company thirty (30) days prior to the annual roll over date that service is to be discontinued.

## Terms and Conditions of Service:

The provisions of Parts II, III, IV, V, VI and VII of the Company's Handbook of Rates and Distribution Services apply, as contemplated therein, to service under this Rate Schedule.

#### **Effective Date:**

To apply to all bills rendered for gas transported on and after January 1, 2007.

## RATE NUMBER SGSC

### SMALL GENERAL SERVICE COMMERCIAL

## APPLICABILITY

Small General Service Commercial Rate is applied to any Applicant requiring to use the Company's Distribution System to have a supply of natural gas transported to a single Terminal Location served through one meter that does not meet the applicability requirements of either the SGSRE or SGSRO Rate. Service under this rate schedule is limited to Applicants using less than 400 GJ per year.

RATE	
Monthly Distribution Customer Charge:	
\$ per month	16.00
Monthly Distribution Delivery Charge:	
For all volumes delivered per month (\$ per GJ)	7.6212

The rates quoted above shall be subject to adjustments that reflect all taxes including HST. The rates will also be subject to the Revenue Adjustment Rate Rider contained in Rider A.

## Minimum Monthly Charge:

The minimum monthly charge shall be the Monthly Distribution Customer Charge.

## Minimum Annual Charge:

None.

#### Term of Service:

One (1) year with automatic annual renewal unless the Applicant notifies the Company thirty (30) days prior to the annual roll over date that service is to be discontinued.

#### Terms and Conditions of Service:

The provisions of Parts II, III, IV, V, VI and VII of the Company's Handbook of Rates and Distribution Services apply, as contemplated therein, to service under this Rate Schedule.

#### **Effective Date:**

To apply to all bills rendered for gas transported on and after January 1, 2007.

## Schedule 3

Revenue Adjustment Rate Rider

## REVENUE ADJUSTMENT RATE RIDER

The following adjustments shall be applicable to all bills issued on and after January 1, 2007:

Rate Class	Approved Delivery Rate (\$/GJ)	Rate Reduction (\$/GJ)	Reduced Delivery Rate (\$/GJ)
Small General Service Commercial (SGSC)	7.6212	2.1776	5.4436
Small General Service Residential Oil (SGSRO)	7.6212	2.1776	5.4436
Small General Service Residential Electric (SGSRE)	7.6212	5.2725	2.3487

## Schedule 4

**Derivation of Target Distribution Rates – Small General Service Residential Electric** 

	Derivation of Target Distribution Rates - Small General Service Residential Electric		
Line	lfem .		
(1)	NB Power Average Rate (\$/kWh)		0.07514
(2)	NB Power Average Rate (\$/GJ)		20.88
(3)	Typical Annual Electric Consumption (kWh)		27,310
(4)	Typical Annual Electric Consumption (GJ)		98
(5)	Annual Electric Cost (\$) (Line 1 x Line 3)		2,052
(6)	NB Power Rental Water Heater Charge (60 Gallon)		83
(7)	Total Cost Electric Heating and Domestic Hot Water (Line 5 plus Line 6)		2,135
(8)	Target Savings Level (%)		20.0%
	Target Annual Savings (\$) (Line 7 x Line 8)		427
(9)			
	Typical Annual Natural Gas Cost (\$) (Line 7 minus Line 9) Typical Annual Natural Gas Consumption (GJ)		1,708 114
` `	Target Natural Gas Burner Tip Unit Price (\$/GJ) (Line10 divided by Line 11)		14.98
	Commodity Price (\$/GJ)		10.95
l ' '	Target Distribution Rate (\$/GJ) (Line 12 minus Line 13)		4.0328
Breakdown of Distribution Charge between Monthly and Delivery Charges:			
(15)	Annual Target Distribution Charge per Customer (\$) (Line 14 x Line 11)		459.74
(16)	Monthly Customer Charge (\$)		16.00
	Annual Customer Charge (\$) (Line 16 x 12 months)		192.00
	Annual Delivery Charge per Customer (\$) (Line 15 minus Line 17)		267.74
	Delivery Charge per GJ (\$) (Line 18 divided by Line 11)		2.3487
	Jan 2006 Approved SGS Rate (\$/GJ)		7.6212
(21)	Increase/(Decrease) (\$/GJ) - Proposed Revenue Adjustment Rider (Line 19 minus Line 20)		(5.2725)
	Typical Conversion From Forced Air Electric Heat and Tank-Type Water Heater		
(22)	Typical Installed Cost of Furnace and Water Heater	\$	1,500.00
(23)	Annual Savings (Line 9)	\$	427.01
(24)	Simple Payback (Line 22 divided by Line 23)		3.5 Years
	Typical Conversion From Forced Air Oil Heat and Tank-Type Water Heater		
(25)	Typical Installed Cost of Furnace and Water Heater	\$	1,500.00
(26)	Oil Tank Removal	\$	250.00
(27)	Total Conversion Cost (Line 25 plus Line 26)	\$	1,750.00
(28)	Annual Energy Cost Savings	\$	595.28
(29)	NB Power Rental Water Heater Charge (60 Gallon)	\$	83.04
(30)	Annual Savings (Line 28 plus Line 29)	\$	678.32
(31)	Simple Payback (Line 27 divided by Line 30)		2.6 Years