Written Direct Testimony of Rock Marois and Shelley Black

Q 1: Please state your names and positions.

A 1: My name is Rock Mario Marois. I am the General Manager of Enbridge Gas New Brunswick. My Curriculum Vitae is attached as Exhibit A, Schedule 1.

My name is Shelley Lynn Black and I am the Manager, Regulatory Affairs and Upstream for Enbridge Gas New Brunswick. My Curriculum Vitae is attached as Exhibit A, Schedule 2.

Q 2: What is the purpose of this pre-filed evidence?

A 2: In its June 23, 2000 decision on an application by Enbridge Gas New Brunswick Limited Partnership, as represented by its general partner Enbridge Gas New Brunswick Inc. ("EGNB" or "Company") for approval of its rates, the Board of Commissioners of Public Utilities of New Brunswick ("Board") approved EGNB's market-based approach for setting its distribution rates during the development period. In a decision dated July 19, 2000, the Board approved EGNB's current distribution rates.

On February 18, 2004, EGNB filed an application to change its market-based distribution rates for the Small General Service ("SGS"), General Service ("GS") and Contract General Service ("CGS") rate categories, effective April 1, 2004. EGNB will file an amendment to its application to include the Off Peak Service ("OPS"), Contract Large Volume Off Peak Service ("CLVOPS") and Natural Gas Vehicle Fueling ("NGVF") rates as well. This evidence presents the proposed target rates, which are filed at Exhibit A, Schedule 3, as well as supporting data, assumptions and methodology used in generating them.

Q 3: What are market based rates?

A 3: Market based rates are based on local market conditions with the objective of providing potential end-use customers with an economic incentive to convert to natural gas. The Company's approach to delivering this economic incentive is to provide the end-use customer with a reduction in their annual energy costs that can be realized by converting from their current energy choice to natural gas. The delivered price of natural gas is, therefore, designed to provide a desired level of savings.

This evidence is consistent with the methodology approved by the Board in 2000; however it does reflect changes that have taken place in the natural gas industry, specifically in relation to the sale of commodity.

Q 4: Could you review the Board approved methodology for setting target distribution rates?

A 4: At this stage of the development of the New Brunswick natural gas industry, EGNB has chosen to continue using the end-use annual cost of oil as the benchmark against which EGNB sets its rates. EGNB has adopted targeted annual savings for the market categories that, when combined with other benefits of natural gas and other economic considerations, such as the typical age of heating systems and switching costs, should provide sufficient incentive for customers to switch to natural gas:

- For the residential and small commercial sector (SGS): 20% opposite home heating oil,
- For the medium to large commercial sector (GS, CGS): 15% opposite light fuel oil.

In general, the methodology for establishing target distribution rates is as follows:

- Establish a relevant retail oil price for typical customers in each rate class.

- Calculate the annual oil cost for a typical customer in each rate class.
- Discount the annual cost by the appropriate amount to establish a target annual natural gas cost.
- Calculate the target burner tip natural gas unit price by dividing the target annual natural gas cost by the expected natural gas consumption.
- Calculate the target distribution rate by subtracting the commodity price for natural gas.

The following table summarizes this approach. In addition, an example of the SGS rate class has been provided and follows later within the response to Question 9. The table provides typical expected end use costs associated with the application of the above noted methodology.

Derivation of Target Distribution Rates

Line	Item	SGS	GS	CGS
(1)	Retail Oil Price ($/L)	0.4966	0.3742	0.3661
(2)	Retail Oil Price ($/GJ)	12.84	9.67	9.46
(3)	Typical Annual Oil Consumption (L)	3,773	37,410	140,092
(4)	Typical Annual Oil Consumption (GJ)	146	1,447	5,417
(5)	Annual Oil Cost ($) (Line 1 X Line 3)	1,874	13,999	51,288
(6)	Target Savings Level (%)	20.00%	15.00%	15.00%
(7)	Target Annual Savings ($) (Line 5 X Line 6)	375	2,100	7,693
(8)	Target Annual Natural Gas Cost ($) (Line 5 minus Line 7)	1,499	11,899	43,595
(9)	Typical Annual Natural Gas Consumption (GJ)	114	1,175	4,400
(10)	Target Natural Gas Burner Tip Unit Price ($/GJ) (Line 8 divided by Line 9)	13.15	10.13	9.91
(11)	Commodity Price ($/GJ)	7.75	7.75	7.75
(12)	**Target Distribution Rate ($/GJ) (Line 10 minus Line 11)**	**5.3996**	**2.3773**	**2.1587**
	Breakdown of Distribution Charge between Monthly and Delivery Charges:			
(13)	Annual Target Distribution Charge per Customer ($) (Line 12XLine 9)	616	2,793	9,498
(14)	**Monthly Customer Charge ($)**	**12**	**16**	**N/A**
(15)	Annual Customer Charge ($) (Line 14 X 12 months)	144	192	N/A
(16)	Annual Demand Charge ($) ($5.20/GJ X 45.9 GJ[1] X 12 months)	N/A	N/A	2,864
(17)	Annual Delivery Charge per Customer ($) (Line 13 minus Line 15 (Line 16 for CGS))	472	2,601	6,634
(18)	**Delivery Charge per GJ ($) (Line 17 divided by Line 9)**	**4.1368**	**2.2166**	**1.5091**

[1] 45.9 GJ/month is the average monthly Contract Demand of a CGS customer

Q 5: Do end use customers have to realize this precise savings level in order to convert to natural gas?

A 5: No. End user conversion decisions are based upon their own unique circumstances and as such, conversions are achievable at various pricing levels. The emphasis of this pricing mechanism is on "target" savings because the Company does not and cannot control all components of the delivered price of natural gas or competing fuels.

These target savings are guidelines and will evolve with the market for natural gas. The actual savings a customer will realize will be based on the combined costs of distribution and commodity compared with a customer's current energy costs and will vary from customer to customer and over time as energy prices evolve.

Price was only one of the factors influencing a customer's decision to switch to natural gas. In reality, EGNB is aware of end-user situations in which customers have made the switch to natural gas in the face of price premiums to their incumbent energy choice, demonstrating that price was only one aspect of the decision and not always the primary factor driving a customer's choice.

Q 6: Why has EGNB reduced target savings from 30% to 20% in the SGS class?

A 6: EGNB is attempting to strike a balance between providing sufficient incentive to convert to natural gas and recovering as much of its costs as possible during the development period. This adjustment represents an annual increase of $147 for a typical residential customer. EGNB is comfortable that the resulting 20% targeted savings will provide a sufficient incentive for customers to convert.

Q 7: Why has EGNB used retail oil prices rather than electricity or propane prices in setting target rates?

A 7: EGNB continues to feel that oil is the most appropriate benchmark because, generally, oil and natural gas commodity prices tend to track one another; that is when the price of oil goes up so does natural gas and vice-versa. The point here is that maintaining the relative competitive advantage should not require continual adjustment to the target distribution rates through the Rate Rider or by annual adjustments as may be the case if a more static benchmark such as electricity were chosen.

Q 8: Can you please indicate what retail oil prices EGNB proposes to use in setting rates and the methodology EGNB used in establishing them?

A 8: The following table presents, by rate class, the retail oil price that is being used in establishing the proposed target rates (see Line 1 and 2 of the table in A4)

Rate Class	Retail Oil Price	
	$/l	$/GJ
SGS	0.4966	12.84
GS	0.3742	9.67
CGS	0.3661	9.46

For its forecast, EGNB has used the closing settlement prices for West Texas Intermediate (WTI) crude oil from NYMEX (New York Mercantile Exchange) as the anticipated price of crude oil over the forecast period - in this case April 2004 through March 2005. WTI was selected as it is the commonly traded North American index for crude oil prices. Since NYMEX is a market view of forward pricing which changes on a daily basis as a result of market conditions and expectations, a 21-day average[2] is utilized to estimate monthly crude costs over the forecast period. The anticipated crude oil cost for this period using this methodology is $US 30.88 /barrel (bbl). These crude prices are converted to Canadian dollars using a similar 21-day average of the future strip for the

[2] 21 day average is an industry standard to reduce the effect of possible market anomalies of a particular trading day

Canada/US exchange rate. The exchange rate derived using this approach is $CDN 1.33 per $US.

In order to calculate retail oil prices, a "market spread" is needed for the New Brunswick market (the difference between the cost of crude oil and the price of refined products or distillates). For New Brunswick, historical information was used to estimate the typical market spread for each of the products and sectors. This historical information included prices collected by EnerData (Statistics Canada), New Brunswick Department of Energy as well as data independently collected by EGNB. These spreads were then added to the Canadian dollar value for the NYMEX strip for crude oil. The above table contains retail oil price estimates derived in this manner. Note that, due to the competitive nature of the retail oil market, significant variations of these typical amounts have been observed, i.e. these prices will vary on an individual customer basis.

Q 9: Once retail oil prices are established, how has EGNB developed target natural gas burner tip prices?

A 9: Please refer to the following table illustrating the derivation of target natural gas burner tip prices for a typical residential customer. After deriving the retail oil price, the annual oil cost is calculated (Line 3 in the example).

Next, the target annual savings is calculated based on the targeted savings previously discussed, i.e. 20% for the SGS class, 15% for the GS and CGS classes. To arrive at the target annual savings level, the annual oil cost is multiplied by the targeted savings level appropriate to the SGS rate class (Line 5).

Subtracting the target annual savings from the customer's annual oil cost leaves the target annual natural gas cost (Line 9).

Finally, dividing the target annual natural gas cost by the typical annual natural gas consumption results in the target natural gas burner tip price (Line 12).

SGS Target Burner Tip Price
Example – Typical Residential Customer using Oil Fired Equipment

Line								
(1)	Typical Annual Oil Consumption		3,773	Litres	OR	146	GJs	
(2)	Forecast Retail Oil Price	$	0.4966	/litres	OR	$ 12.84	/GJ	
(3)	Annual Oil Cost							$1,874
	Calculating Target Annual Savings							
(4)			Annual Oil Cost					$ 1,874
(5)			X	20%		x		20%
(6)			Target Annual Savings					$ 375
	Calculating Target Annual Natural Gas Cost							
(7)			Annual Oil Cost					$ 1,874
(8)			- Target Annual Savings			-		375
(9)			Target Annual Natural Gas Cost					$ 1,499
	Calculating Target Burner Tip Price							
(10)	Target Annual Natural Gas Cost							$ 1,499
(11)	Typical Annual Natural Gas Consumption							114 GJ
(12)	Target Natural Gas Burner Tip Price							$ 13.15 /GJ

What is important to realize in this example, is that EGNB has dealt with typical customer characteristics in the development of its target rates. At an individual level, end use customers will experience variations from the typical levels used in deriving the target rates.

~~Q 1:~~Q 10: Referring to the previous examples, why is the expected consumption for the competitive energy (in this case oil) different than that presented for natural gas?

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A 10: Different heating equipment (water heaters, furnaces or boilers) have different operating efficiencies. For example, a typical high-efficiency gas furnace will convert 92% of the energy input that goes into the equipment into heat energy.

Equipment vintage, maintenance history and energy source all have an impact on its operating efficiency.

EGNB has used the following blended efficiencies in setting the relationship between input energy requirements and typical equipment energy output. They are based on different possible equipment types and combinations relevant to a class. Again, the actual efficiency of gas and alternative equipment will vary by customer and will impact actual savings realized.

Rate Class	**Natural Gas**	**Oil**
SGS	87%	68%
GS, CGS	80%	65%

Q 11: Returning to the methodology outlined in the response to Question 4, once the target burner tip price is established, how does EGNB arrive at the target distribution rate?

A 11: The target distribution rate represents the target burner tip price less the commodity price. The commodity price is the amount end use customers will pay to have their gas supply delivered to EGNB's distribution system.

Q 12: How did EGNB arrive at the commodity price?

A 12: EGNB has used the price of Enbridge Utility Gas ("EUG") as the reference price for commodity for the purpose of setting its proposed target distribution rates. As a result, the current 12 month forecast EUG price of $7.75/GJ has been used as the commodity price.

Q 13: How did EGNB develop the forecast of the commodity price?

A 13: The forecast EUG price is based on the methodology prescribed in the *Gas Distributor Marketing Regulation – Gas Distribution Act, 1999 ("Marketing Regulation").* As set out in section 4(1) of the *Marketing Regulation,* the price of

EUG is based on the forecast average price of gas for the following 12 months based upon the cost to EGNB of purchasing gas and then selling gas to customers.

Q 14: Why is EGNB proposing to use EUG as the reference price for commodity?

A 14: First, the price of EUG is publicly available in the marketplace. Second, almost two thirds of gas users are currently purchasing EUG. The following table presents the EUG market share by rate class:

Rate Class	**EUG**	**Others**
SGS	70%	30%
GS	35%	65%
CGS	25%	75%
Total	**64%**	**36%**

Though EUG has a relatively smaller market share in the commercial GS and CGS rate classes, EGNB believes the use of EUG is appropriate because of its price transparency.

It is important to note that EGNB's objective in choosing EUG is to provide a reasonable approximation of what customers will pay on average for the provision of commodity. Each supplier will take into account its own value proposition objectives and related cost structures when establishing its prices. This is another reason why targeted savings need to be considered as an order of magnitude rather than a hard target.

Q 15: What would be the outcome if marketers charge more than EUG?

A 15: Everything else being equal, if a marketer charges more than EUG then the savings achieved by the impacted customers will be less than the targeted savings. As previously mentioned the targeted savings are more an indication of an order of magnitude rather than an absolute target to reach. Indeed, it would be impossible to achieve a specific savings level for each customer as many variables impact a customer's actual realized savings.

Q 16: What are the implications if the actual cost of natural gas proves to be materially higher or oil materially lower than reflected in the target rates?

A 16: If the competitive advantage of natural gas were to deteriorate to the point where it is negatively impacting customer additions, EGNB would apply to the Board to adjust its rates.

Q 17: Why is EGNB proposing to increase the monthly customer charge in the SGS class?

A 17: Similar to the delivery component of the distribution rates, the monthly charge is market-based. EGNB believes that its proposed allocation of the adjustment between the monthly Customer Charge and the Delivery Charge will allow it to best meet its customer acquisition objectives. This increase will position EGNB's monthly charge at a level comparable with other regulated utilities in NB.

Utility	**Monthly Residential Charge**
NB Power	$16.25
Aliant	$22.00
Edmundston Energy	$15.79
Saint John Energy	$12.51
Average	**$16.64**

Q 18: The rate schedules filed at Exhibit A, Schedule 3 include other rates as well, the Off Peak Service, Contract Large Volume Off Peak Service and Natural Gas Vehicle Fueling. How were these rates set?

A 18: The calculation of these rates is consistent with the methodology approved by the Board in 2000 and is simply a function of the GS and CGS rates. The OPS and CLVOPS rates are set at 75% of the proposed GS and CGS rates, respectively. The NGVF rate is set at the same level as the GS rate.

*** I have no further questions.

Filed: February 27, 2004