

590 Steven Court, Newmarket, Ontario L3Y 6Z2  
Tel: [905] 895-2309  
Fax: [905] 895-8931  
Email: nmhydro@nmhydro.ca

**Newmarket-Tay Power Distribution Ltd.**

May 28, 2008

Ontario Energy Board  
P.O. Box 2319  
27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, ON  
M4P 1E4

**Attention: Ms. Kirsten Walli, Board Secretary**

Dear Ms. Walli:

**Re: Regulated Price Plan  
Consultation on Time-of-Use Pricing Framework  
Board File Number: EB-2007- 0672**

---

Newmarket – Tay Power Distribution Ltd. ("NT Power") has reviewed the Staff Discussion Paper of April 17, 2008 in this matter and offers the following input:

Preamble:

Over the last 18 months, approximately 1.1 million smart meters have been installed in Ontario. In the vast majority of cases, these installations were supported by consumer information packages describing the operation of the meter and time-of-use ("TOU") pricing as they are currently structured by the Board.

TOU pricing is complex, and consumer education for its introduction must be absolutely consistent and understandable. The confusion over commodity prices during market opening serves to underscore this point. NT Power suggests that caution be exercised in any considered changes to the present TOU structure at this time.

NT Power has deployed smart meters on all residential meter points and is currently migrating consumers to TOU pricing. At present, approximately 30% of residential customers have been migrated. We have found that consumers are very wary of TOU pricing as they believe it will cause significant increases to their bills or serious disruption to household routines. Significant effort has been expended to develop the consumer's understanding of the presently structured

**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

---

TOU periods as they relate to Ontario's electricity demand, and the parity that exists between consumption and TOU pricing.

We are very concerned that any significant change in the TOU structure at this time would cause confusion among consumers. This is particularly crucial as their understanding of this pricing is in the formative stages.

We respectfully suggest that consideration be given to maintaining the current TOU structure until mandatory TOU is declared in Ontario. This said, we also offer the following input to the questions presented by Board Staff in their Discussion Paper.

1. Structural Issues

a. Three Period Structure

As discussed in the preamble, NT Power expended significant effort to educate consumers with respect to the current TOU structure as it relates to the Ontario electricity demand curve. Ten public meetings were held over the course of 2007. This education effort has been effective. It has given transparency to the TOU structure as evidenced by the frequency of consumer inquiries since January 2008 when orderly migration of consumers to TOU began. NT Power has averaged two consumer inquiries per month from its approximately 25,000 residential consumers in this period.

TOU pricing is intended to encourage behavioural change in electricity use habits by consumers. Today's consumers are very savvy. Financial incentives alone will cause some to modify their behaviour, but many will also demand to know the underlying rationale for determining the incentive structure.

The present TOU design with seasonal variation based on the Ontario load shape is transparent, provides an essential relationship to the cost of generation, and allows consumers to equate dollar expense to environmental expense. It should be retained.

b. Critical Peak Pricing

In the Newmarket Hydro TOU pilot project referenced in the Discussion Paper (the "Newmarket Pilot"), a critical peak rebate was piloted as well as enabling technology in the form of remotely controllable thermostats.

For any critical peak price ("CPP") or rebate ("CPR") to be effective and fair, consumers must be provided advance notice of the event. While

**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

---

there are various methods of notification ranging from mass media to direct consumer contact, their effectiveness needs to be ascertained. The Newmarket Pilot used both day-of and day-ahead notification of a CPR event. Notification was provided directly to consumers through a choice of email, cell phone text messaging or automated telephone message. Interestingly enough, approximately 90% of notifications were by telephone.

The results highlight the need for day-ahead notification for residential consumers without enabling technologies if some form of critical peak pricing is implemented in Ontario. For example, participants who did not have remotely controllable thermostats did not provide much if any demand response during the critical peak period based on day-of notifications. In contrast, these same participants reduced demand throughout the critical peak day, not just during the critical peak period when they were given day-ahead notification.

NT Power was able to assemble the necessary infrastructure to provide direct CPR notification on a limited basis to support the Newmarket Pilot at little cost. However, the pilot had only 250 participants, with 100 receiving notifications. We have some knowledge of the cost of this infrastructure for large scale deployment and suspect it will be significant.

Based on this experience, NT Power suggests the issue of the effectiveness and cost of various methods of consumer notification need to be fully examined. This should be done before contemplation of instituting this pricing concept.

c. Mandatory CPP/CPR

If, as NT Power suspects, the necessary consumer notification infrastructure to support CPP/CPR is significant, mandatory implementation would result in mandatory expense.

2. Price-setting Methodology

No comment

3. Variance Account Issues

No comment

**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

---

#### 4. Billing Issues

##### a. Billing Frequency

NT Power's billing system is capable of billing on any given cycle (monthly, bi-monthly, quarterly, etc.). The decision to adopt a given cycle is based on physical constraints related to obtaining walk-up meter readings and economics. Pre smart meter billing cycles have typically been determined in consideration of:

- Physical constraints regarding walk-up meter reading
- Meter reading costs
- Bill printing and stuffing costs
- Postage costs
- Impact on cash flows; and
- Non-payment risk

NT Power issues monthly bills. We are successfully receiving a pilot set of billing quantity data from the Smart Metering Entity ("SME") and using it to produce consumer bills. As such, we have no additional infrastructure requirements to support monthly billing cycles, particularly with respect to the SME.

A sample of NT Power's TOU bill is attached. The bill is of the same format as the consumption bill, except that the three pricing blocks (on-peak, mid-peak and off-peak) are itemized. Included with the bill is a TOU Summary giving a bar chart of the consumer's daily consumption within the three pricing blocks. Please note these are mock-ups, and the TOU Summary does not correspond to the bill.

NT Power's cost to print and stuff bills is approximately \$0.09 per bill. The addition of the TOU Summary has increased this cost to \$0.18 per bill. The cost of the software module that collates the data into the TOU Summary was approximately \$50,000. This module is stand-alone and not embedded in the billing system.

In the Newmarket Pilot, a survey of participants found that approximately half the respondents agreed that the monthly electricity bill was the most helpful resource to understand the time-of-use prices, with 60% of respondents finding the tabular format for displaying the different time periods the easiest to understand. TOU data was also available on NT Power's website for pilot participants. Less than 10% of survey respondents found this source of information helpful.

**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

---

As Board Staff note in the Discussion Paper's Introduction, consumer understanding of their consumption habits is critical to the success of a TOU pricing structure. Consumers do not relate to billing cycles. They are conditioned to be fully aware of calendar months. Consumers remember if the weather in a given month was intemperate. If a bill spans more than one month, then their ability to associate electricity consumption to habits and weather is impaired.

The implementation costs of changes in billing cycles are relatively simple to calculate. As noted previously, they are the incremental costs of meter reading, bill print/stuff and postage. However, with smart meters, the physical constraints and incremental cost of walk-up meter reading are eliminated. Costs of changes in billing cycles are then determined by:

- bill print/stuff costs
- postage costs
- impact on cash flows
- non-payment risk

b. Payment Plans

We are perplexed by Board Staff's identification of equal payment as an issue in the introduction of TOU pricing. Equal payment is just that – a payment plan. Pricing regimes like TOU and consumption structures impact the amount of the bill. Payment plans impact how the consumer pays the bill. Payments by pre-authorized bank withdrawal and credit card also mask the financial impact of the bill. If one were to seriously address the "cause and effect" notion Board Staff raise, then limiting payment options to cash or cheque would be truly effective, but somewhat perverse.

The vast majority of NT Power's customers that have opted for equal payment are those with electric heat. Many of these are also residents in social housing developments. They rely on equal payment for financial stability through the winter months, and would be punished if this financial tool was to be denied to them. cursory studies completed by NT Power in the social housing sector indicate that electrically heated dwellings will fare no worse in terms of electricity cost under TOU pricing relative to consumption pricing. The factors influencing a consumer's choice to opt for equal billing do not change with TOU pricing.

NT Power is of the opinion that aligning billing cycles more closely with real time and additional information included with bills are the most effective ways of raising consumer awareness with respect to TOU pricing.

Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672

---

5. Longer Term Issues

No comment

Should the Board or Board staff require any further information in regards to these comments, please contact the undersigned.

Yours truly,

*[Original signed by]*

P.D. Ferguson, P.Eng.  
President

Tel [905] 953-8548 Ext 2240  
Fax [905] 895-8931  
Email pdf@nmhydro.ca

**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

**Newmarket Sample Bill (Front)**

Page 1 of 3

**CUSTOMER INFORMATION**

|                 |                |
|-----------------|----------------|
| NAME            | ACCOUNT NUMBER |
| MR CUSTOMER     | 00123123-01    |
| SERVICE ADDRESS |                |
| 1 SOME CRT      |                |

**BILL AT A GLANCE BILLING DATE: 16 OCT 2007**

|  |          |
|--|----------|
| BALANCE FORWARD-IMMEDIATE PAYMENT REQUIRED | \$279.73 |
| YOUR TOTAL NEW CHARGES DUE ON 05 NOV 2007  | \$227.57 |

|                     |                 |
|---------------------|-----------------|
| <b>TOTAL AMOUNT</b> | <b>\$507.30</b> |
|---------------------|-----------------|

**USAGE HISTORY (Numeric)**

| Date      | Days | Electric Use (KWh) | Elec. Usage (per day) | Water/Sew Use (per day) | Water/Sew Usage (per day) |
|-----------|------|--------------------|-----------------------|-------------------------|---------------------------|
| 25 SEP 07 | 35   | 1559               | 45                    | 806                     | 23                        |
| 21 AUG 07 | 33   | 1628               | 49                    | 1580                    | 48                        |
| 19 JUL 07 | 30   | 2105               | 70                    | 1150                    | 38                        |
| 19 JUN 07 | 30   | 748                | 25                    | 1320                    | 44                        |
| 20 MAY 07 | 30   | 789                | 26                    | 650                     | 22                        |
| 20 APR 07 | 10   | 533                | 53                    | 910                     | 31                        |
| 10 APR 07 | 19   | 1050               | 55                    | 880                     | 31                        |
| 22 MAR 07 | 28   | 1000               | 36                    | 690                     | 24                        |
| 22 FEB 07 | 29   | 1213               | 42                    | 720                     | 19                        |
| 24 JAN 07 | 37   | 1606               | 43                    | 640                     | 25                        |
| 18 DEC 06 | 26   | 1256               | 48                    | 390                     | 13                        |
| 22 NOV 06 | 30   | 1134               | 38                    | 740                     | 22                        |
| 23 OCT 06 | 33   | 1403               | 46                    | 690                     | 23                        |

**GLOSSARY OF TERMS:****Electricity:**

This is the cost of electricity supplied to you during this billing period and is the part of the bill that is subject to competition. The electricity consumed is multiplied by the adjustment factor\*. Newmarket Hydro Ltd. collects this money and pays this amount directly to our suppliers.\* When electricity is delivered over a power line, it is normal for a small amount of power to be consumed or lost as heat. Equipment, such as wires and transformers, consumes power before it gets to your home or business. The adjustment factor accounts for these losses.

**Delivery:**

These are the costs of delivering electricity from generating stations across the Province to Newmarket Hydro Ltd. then to your home or business. This includes the costs to build and maintain the transmission and distribution lines, towers and poles, and operate provincial and local electricity systems. A portion of these charges are fixed and do not change from month to month. The rest are variable and increase or decrease depending on the amount of electricity that you use.

**Regulatory Charges:**

Regulatory charges are the costs of administering the wholesale electricity system and maintaining the reliability of the provincial grid.

**Debt Retirement Charges:**

The debt retirement charge pays down the debt of the former Ontario Hydro.

**Note:**

For a detailed explanation of electricity terms, please visit [www.nmhydro.on.ca](http://www.nmhydro.on.ca) or [www.oeb.gov.on.ca](http://www.oeb.gov.on.ca).

**METERED CONSUMPTION INFORMATION**

| METER NUMBER         | READ DATES |            | Billing Days | Code | METER READING |          | Multiplier | Usage  | Usage Billed | Units  | Adj. Factor |
|----------------------|------------|------------|--------------|------|---------------|----------|------------|--------|--------------|--------|-------------|
|                      | Present    | Previous   |              |      | Present       | Previous |            |        |              |        |             |
| Electric: NM00065621 | 25-09-2007 | 21-08-2007 | 35           | MR   | 298           | 0        | 1.0        | 298.00 | 1,615.91     | kWh    | 1.0365      |
| Electric: NM00065621 | 25-09-2007 | 21-08-2007 | 35           | MR   | 464           | 0        | 1.0        | 464.00 |              | kWh    |             |
| Electric: NM00065621 | 25-09-2007 | 21-08-2007 | 35           | MR   | 797           | 0        | 1.0        | 797.00 |              | kWh    |             |
| Electric: NM00065621 | 25-09-2007 | 21-08-2007 | 35           | MR   | 0             | 0        | 1.0        | 0.00   |              | kWh    |             |
| Water : 0090112185   | 25-09-2007 | 21-08-2007 | 35           | CE   | 210586        | 209780   | 1.0        | 806.00 | 806.00       | CU.FT. |             |

N0-071179 psi

|                               |                             |
|-------------------------------|-----------------------------|
| SERVICE ADDRESS<br>1 SOME CRT | BILLING DATE<br>16 OCT 2007 |
| ACCOUNT NUMBER<br>00123123-01 | DUE DATE<br>05 NOV 2007     |
| AMOUNT DUE<br>\$507.30        | AMOUNT ENCLOSED             |

Please detach and return with payment.

**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

**Newmarket Sample Bill (Back)**

Page 2 of 3

**AUTOMATIC PAYMENT PLAN-PRE-AUTHORIZATION FORM**

Customer: MR CUSTOMER      Utility Account #: 00123123-01      Service Location: 1 SOME CRT  
Postal Code:      Home Tel. #:      Business #:      Address:  
Financial Inst.:      Account Number:      City:      Province:      This Date:      Signature:

*For a joint account, if more than one signature is required on cheques, all must sign this form.*

**Type of plan**Budget Payment Plan ☐Regular Plan ☐**I hereby authorize:**Chequing Account ☐Chequing/Savings ☐Joint Account ☐**Attach Void Cheque**

| DETAIL OF BILLING                                |          |              | BILLING DATE: 16 OCT 2007 |
|--|----------|--------------|---------------------------|
| PREVIOUS BALANCE                                 |          | \$279.73     |                           |
| BALANCE FORWARD                                  |          | \$279.73     |                           |
| <br>   |          |              |                           |
| YOUR ELECTRICITY CHARGES                         | RATE     | USAGE BILLED |                           |
| ELECTRICITY                                      |          | CHARGES      |                           |
| ON-PEAK KWH                                      | 0.092000 | 308.88       |                           |
| MID-PEAK KWH                                     | 0.072000 | 480.94       |                           |
| OFF-PEAK KWH                                     | 0.032000 | 826.09       |                           |
| DELIVERY CHARGES                                 |          | \$54.48      |                           |
| REGULATORY CHARGES                               |          | \$10.27      |                           |
| DEBT RETIREMENT CHARGE                           |          | \$10.92      |                           |
| <br>   |          |              |                           |
| OTHER CHARGES                                    |          |              |                           |
| REBATE INFORMATION                               |          |              |                           |
| GST ON ELECTRIC                                  |          | \$9.91       |                           |
| TOTAL ELECTRIC                                   |          | \$175.06     |                           |
| <br>   |          |              |                           |
| WATER AND SEWER SERVICES                         |          |              |                           |
| RESIDENTIAL WATER CHARGE                         | 0.026160 | 806.00       |                           |
| RESIDENTIAL SEWER CHARGE                         | 0.024110 | 806.00       |                           |
| UTILITY BASIC CHARGE                             |          | \$12.00      |                           |
| TOTAL WATER/SEWER                                |          | \$52.51      |                           |
| <br>   |          |              |                           |
| CURRENT CHARGES                                  |          | \$227.57     |                           |
| TOTAL AMOUNT DUE                                 |          | \$507.30     |                           |
| Overdue Interest rate 1.5% Monthly.              |          |              |                           |
| <br>   |          |              |                           |
| GST# 869077925RT                                 |          |              |                           |
| We exchange our credit information with Equifax. |          |              |                           |

**MESSAGES**

Att: Budget Plan Customers: Your Pre-Authorized Budget Amount may have been adjusted. Payment Plan balances will be reviewed twice annually for adjustments. Save on late fees and join one of our Payment Plans, see reverse side of your bill. Late payments may adversely affect your credit rating and require payment of a security deposit. A Notice of Disconnection may be issued as early as 7 days after the Due Date for overdue balances. THE SUMMER SAVINGS PROGRAM RUNS FROM JULY 1ST TO AUG 31, 2007. USE 10% LESS, & RECEIVE A 10% CREDIT. "THE GREAT REFRIGERATOR ROUNDUP" STARTS JULY 2ND, CALL 1-877-797-9473 TO BOOK AN APPT.

NR071129.ppt

**PAYMENT OF ACCOUNTS**

\*Tele-service payments by Visa or Mastercard available 24 hrs by calling 905-895-2309

\*Drop Box available at 590 Steven Crt (cheques only please)

\*By Mail: At any chartered bank before the Due Date, Tele-direct, and on-line PC Bank payments.

\*Equal Billing and Pre-Authorized Payment Plans.

Office Hours: 8:30 am - 4:00 pm Weekdays, excluding holidays

Please write hydro account number on face of your cheque

Payments must reach the office by the Due Date to avoid overdue interest. Overdue interest of 1.5% per month will be applied to all outstanding balances not paid in full by the due date and further collection charges may be applicable.

Customers in arrears are liable to disconnection of service without further notice. Charges will be made for disconnection and re-connection of service and a security deposit may be required. Newmarket Hydro Ltd. Will not be held liable for any loss, damage, or inconvenience resulting from services disconnected for non-payment.

E. & O. E. (Errors and Omissions Excepted). All bills rendered subject to correction.



**Submission to the Ontario Energy Board  
Consultation on Time-of-Use Pricing Framework  
EB-2007-0672**

## Newmarket TOU Summary



590 Steven Court, Newmarket ON L3Y 6Z2  
Tel: 905.895.2309  
Fax: 905.895.8931  
E-mail: nmhydro@nmhydro.ca  
Web: www.nmhydro.on.ca

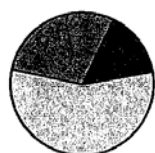
**Account**  
000123123-01  
**Name**  
MR CUSTOMER  
**Service Address**  
123 ANYWHERE ST.

### New Tools to Help Manage Your Electricity Usage and To Save Money

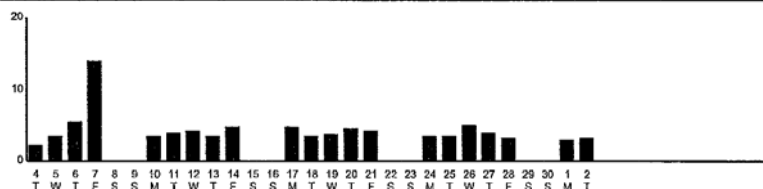
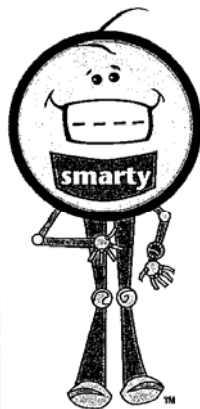
1. Visit our website at [www.nmhydro.ca](http://www.nmhydro.ca) to view the new section on Smart Meters.
2. Log into My Account for details of your usage, bill comparisons and hourly meter readings.
3. Apply for an Energy Star qualified appliance rebate. See the Programs tab under the Conserve section of our website.
4. Borrow or purchase a 'Kill A Watt' electric usage monitor from us or the Town of Newmarket to identify the big electricity users in your home. Its LCD display shows how much electricity your plug-in appliance is using so you can calculate how much it costs.
5. If you are not connected to the Internet, or would like further information please call us at (905) 895-2309.

In response to feedback from pilot participants, we have changed the format of this billing summary. Please contact our office with any comments, questions or concerns.

### September Electricity Consumption (kWh)

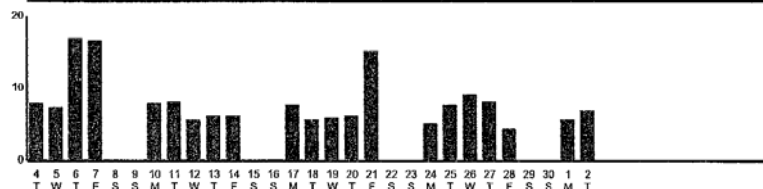


**kWh Usage**  
by the time-of-use period



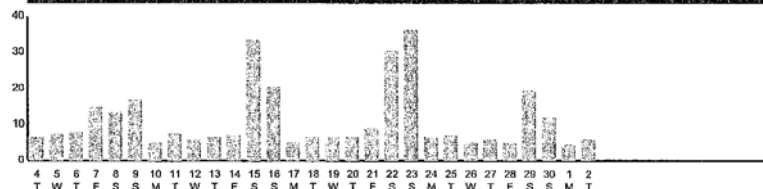
On-peak energy usage represents 15% of the total energy usage

On-peak 80.85 kWh



Mid-peak energy usage represents 29% of the total energy usage

Mid-peak 176.21 kWh



Off-peak energy usage represents 56% of the total energy usage

Off-peak 321.32 kWh

**Total Consumption: 578.38 kWh**