



ONTARIO ENERGY BOARD

STAFF SUBMISSION

2009 ELECTRICITY DISTRIBUTION RATES

Niagara-on-the-Lake Hydro Inc.

EB-2008-0237

December 31, 2008

Introduction

Niagara-on-the-Lake Hydro Inc. (“NOTL” or the “Applicant”) is a licensed electricity distributor serving approximately 7,800 customers within the Town of Niagara-on-the-Lake. NOTL submitted an application for 2009 electricity distribution rates on August 6, 2008 (“Application”). The Application was based on a future test year cost of service methodology.

On November 17, 2008, NOTL submitted its response to interrogatories from Board staff, the School Energy Coalition (“SEC”), the Vulnerable Energy Consumers Coalition (“VECC”), and Energy Probe.

On December 5, 2008, the Board issued Procedural Order No. 4 seeking submissions from the Board staff and parties to this proceeding.

These submissions reflect observations and concerns which arise from Board staff’s review of the pre-filed evidence and interrogatory responses made by NOTL, and are intended to assist the Ontario Energy Board (the “Board”) in evaluating NOTL’s application and in setting reasonable and just rates.

The Application

NOTL has requested a revenue requirement of \$5,191,140 to be recovered in new rates effective May 1, 2008.

Rate Base

NOTL is requesting approval of \$21.7 million for the 2009 rate base. This amount is a 1.4% increase (\$306,166) from NOTL’s 2007 actuals and a 2.3% increase (\$556,471) from its 2006 actuals.

Capital Expenditures

Background

NOTL is proposing 2009 capital expenditures of \$1,877,496. This represents an increase of approximately 45% compared to the 2008 projected level of \$1,290,000, and an increase of approximately 78% compared to 2007 actual capital expenditures of \$1,054,083.

Discussion and Submission

Table 1 lists the percentage change of the capital expenditures from the 2007 actual to the 2009 Test year.

Table 1¹

	2007 Actual	2008 Bridge	2009 Test
Capital Expenditures	\$1,054,083	\$1,290,000	\$1,877,496
% change as compared to the prior year		22.4%	45.5%

NOTL's evidence outlines its five-year capital plan. This plan shows capital expenditures projected to be at approximately the \$1.3 million level in 2008, rising to approximately \$1.9 million in the 2009 Test year and then returning to approximately the \$1.3 million level in the 2010 to 2012 period.

The major reason for the 2009 increase is the Chautauqua underground project which is anticipated to cost \$1.5 million over a three year period with \$1,000,000 of these expenditures to be incurred in 2009. The remaining \$500,000 of expenditures would be split between 2008 and 2010 with \$300,000 forecast to be incurred in 2008 and \$200,000 in 2010.

The Chautauqua project is described as a system enhancement project which includes voltage conversion and area improvement in the Old Town urban area. NOTL stated that its system study demonstrated the average age of the electrical plant in this area is approaching 50 years and annual plant inspections have indicated that a majority of the area plant is reaching the end of its useful life. NOTL further stated that the decision was made to replace the existing 4kV pole line system with a 27.6kV underground system.

¹ Based on Exhibit 2/Tab 3/Schedule 1

The justification for this replacement was that it was in line with NOTL's overall long term commitment to offload the 4kV system, improve overall line losses, and meet local by-law requirements that require new facilities to be buried within the urban boundaries of the Old Town. NOTL also noted that the Town of Niagara-on-the-Lake has also committed to install new sewer and water lines in 2008/2009 and would commence construction in advance of the Chautauqua project.

NOTL stated that it had originally considered completing the Chautauqua project equally over the three year period of 2008 to 2010 at \$5,000,000 per year within the normal annual capital budget level of approximately \$1,300,000. However, three primary reasons caused it to ramp up the construction of the project in 2009 to the \$1,000,000 level. These were:

1. to ease the impact of excessive construction on local residents (the system is expected to be fully operational by the summer of 2009);
2. to gain financial savings that can reasonably be expected from having a single large construction contract versus two or three contracts; and
3. to take advantage of the Town of Niagara-on-the-Lake's schedule to complete and restore Chautauqua roadways in late 2009. Construction in 2010 will primarily include connection of individual services to the new system.

NOTL stated that a further rationale to exceed its normal annual capital project spending relates to the fact that it would be difficult to delay previously scheduled overhead projects to 2010, as its largely rural system previously acquired from Hydro One is still in a critical rebuild schedule to ensure quality and reliable supply to its customers. In addition, a majority of its regular overhead construction is conducted by its own workforce and a major gap in this construction would require a year-long layoff of quality line personnel and jeopardize the critical rebuild schedule.

Board staff and other parties asked NOTL a number of interrogatories related to this project and the justification for accelerating capital expenditures.²

In its responses, NOTL explained that a business case for overhead versus underground construction was not prepared because although overhead construction would have cost less overall at the outset, NOTL's Conditions of Service and a Town by-law both require that any reconstruction of utility plant in the Chautauqua area be of underground construction.

² Board staff interrogatory #4.1, Energy Probe interrogatories #3, #7, #10, SEC interrogatory #1

NOTL further stated that it had reviewed the option of a three year or longer construction period, but did not complete a comprehensive assessment of this option, since upon review of the project and its direct impact on the residents of the area, and after consultation with the Town of Niagara-on-the-Lake, it was determined to be in the best interest of all parties to complete the rebuild project in conjunction with the town's water main and roadway rehabilitation project.

NOTL also stated that it was not anticipating any appreciable impact on the overall costs of its maintenance program as a result of this conversion. The reason is that except for the Chautauqua project, NOTL's annual underground capital additions have been set at a rather consistent cost value over the last number of years and accordingly, it feels that it would be prudent to set its maintenance budget based on historical requirements and planned maintenance project requirements for the upcoming year. NOTL further noted that although overall budget costs for this type of project are significant, the area completed by the end of the Chautauqua project at the present early stages of its underground conversion program represents only 0.18% of its total area served and 0.06% of the total primary wire in its system. As such, NOTL prefers to maintain the maintenance budget static at this time to allow the continuation of its maintenance program across its entire system with the greater overall benefit to a larger number of customers.

NOTL stated that where the costing of the project was concerned, it had hired an engineering consulting firm with experience in tendering, awarding, and managing large electrical conversion projects to assist it in achieving best practice procedures for the awarding of the project contract. The process involved the preparation of a tender document being prepared and provided to eight qualified electrical contractors from which two replies were received and vetted by a qualified and experienced engineer. As a result of this process, two bids were received, one for approximately \$860,000 and the other for approximately \$1,215,000. After an in-depth analysis of the two bids by the engineering consultant to ensure no variables could inflate costs, the low bid was selected. NOTL further noted that additional favourable elements to minimize the costs of the project include: (1) its participation in the HD Supply Co-operative purchasing group, which provides favourable Ontario group pricing (fixed for the year) ensuring material costs lower than NOTL could achieve alone and, (2) its joint sharing of road and boulevard restoration costs with the Town of Niagara-on-the-Lake in conjunction with its sewer/water main project in Chautauqua.

Board staff invites parties to comment on whether or not NOTL has adequately justified its proposed increase in the 2009 capital expenditure budget, specifically as it relates to

the Chautauqua project and more generally related to any other concerns in this area they may have.

Asset Management

NOTL provided its asset management policy in Exhibit 2 Tab 3 Schedule 5 of its evidence. The Applicant explained that this policy forms the basis upon which its capital programs are developed and stated that the policy will be refined and updated over time to ensure its long-term effectiveness. The intent of the policy is to provide direction for the efficient and optimal management of the distributor's significant assets. The terms of betterment (replacement or improvement) and repair are stated as being in conjunction with the definitions provided in Section 410 of the Board's Accounting Procedures Handbook. NOTL added that this policy is to provide guidance as to the betterment aspect of the assets only, whereas good utility practice is assumed for the ongoing maintenance and repair of such items.

In response to a Board staff interrogatory,³ NOTL stated that its Asset Management Plan is in the early stages of development and it would be conducting an asset condition study as the program developed, but had not yet done so.

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Service Reliability

NOTL provided in Exhibit 2 Tab 3 Schedule 6 Page 1 a table summarizing its key service reliability indices for the years 1998 to 2007. This table is reproduced below:

Table 2

YEAR	SAIDI	SAIFI	CAIDI
1998	3.15	6.86	0.46
1999	3.06	1.94	1.58
2000	4.71	3.40	1.39
2001	1.68	2.06	0.82

³ Board staff interrogatory #4.2

2002	5.36	5.85	0.92
2003	0.96	1.23	0.78
2004	0.87	1.63	0.54
2005	1.24	2.11	0.59
2006	0.42	0.75	0.56
2007	2.41	2.07	1.16

SAIDI: "System Average Interruption Duration Index" measured as "Hours per Customer"

SAIFI: "System Average Interruption Frequency Index" measured as "Interruptions per Customer"

CAIDI: "Customer Average Interruption Duration Index" measured as "Hours per Interruption"

NOTL explained the shifts in reliability shown in this table by stating that in 2003 it had commissioned a new Transformer Station (MTS 1) that effectively doubled the number of 27.6 kV feeders and included modern protection and control schemes. The Applicant added that as a result of more lightly loaded and shorter feeder lengths all three indices improved, as was evident from the results in the table for the years 2003 and beyond. NOTL also stated that in late 2005 it had purchased the other supply transformer station (MTS 2) from Hydro One and its capital plan outlined the multi-year plan to modernize the protection and control elements of this 25 year old station. NOTL further noted that in general, the three service reliability indices are adversely affected by cyclic severe inclement weather patterns and its annual analysis of the indices is continuously cognizant of years during which above and below average storm activity levels are experienced.

NOTL was asked through interrogatories from both Board staff and VECC⁴ to discuss the recent adverse trends in these indices which saw all three indices deteriorate from 2006 to 2007. NOTL explained that the deterioration in 2007 is related to a single major outage resulting from a lightning arrestor failure in its main Transformer Station MTS 2 that resulted in a loss of supply to two thirds of its customers for several hours. NOTL also stated it had reviewed outage logs for 2007 and 2008, and noted that it had above average winter storm and summer lightning activity contributing to increased outages during those years. With the exception of the MTS 2 outage in 2007, NOTL stated that its outage logs do not reflect specific increased equipment failure or tree contact outages over this period that would be obvious signs of the need for an increased specific maintenance activity over and above its current proactive programs.

⁴ Board Staff Interrogatory #4.3 and VECC interrogatory #15

NOTL stated that it was undertaking a number of actions to deal with service reliability issues including an aggressive three year tree trimming cycle which would continue in 2009 and beyond, a 2008 investment of approximately \$130,000 in new protection and control equipment at Transformer Station MTS 2 and two new maintenance programs, the Overhead Services Program and a Line Transformer Program.

Board staff invites parties to comment on the adequacy of NOTL's reliability performance and on projects planned or being undertaken to address system reliability.

Smart Meters

NOTL proposed that its existing smart meter rate adder of \$0.24 per month per metered customer be increased to \$1.00 per month per metered customer.

The basis for the request was that on June 25, 2008, the government had filed amendments to three smart metering regulations, namely O. Reg. 427/06 (Smart Meters: Discretionary Metering and Procurement Principles), O. Reg. 426/06 (Smart Meters: Cost Recovery), and O. Reg. 393/07 (Designation of Smart Metering Entity).

NOTL stated that it qualified for the increased adder since amendments to O. Reg. 427/06 will authorize metering activities for distributors pursuant to the Request for Proposal (RFP) for Advanced Metering Infrastructure (AMI) – Phase 1 Smart Meter Deployment issued on August 14, 2007 by London Hydro Inc. This would include distributors named in the RFP and those distributors that procure AMI pursuant to the parameters established by the RFP.

NOTL stated that it would procure AMI pursuant to the parameters established by the RFP. NOTL noted that it was a member of the Niagara-Erie Power Alliance (NEPA) along with 8 other LDCs: Brant County Power, Brantford Power, Norfolk Power, Haldimand County Hydro, Grimsby Power, Niagara Peninsula Energy, Fortis and Welland Hydro. NOTL stated that NEPA had agreed to jointly purchase, install and operate AMI infrastructure including the local communication network and system software in accordance with the London Hydro RFP parameters, with each LDC purchasing its own meters and utility-specific hardware, but jointly operating the AMI system with NEPA members as a virtual utility.

NOTL further stated that at the time of its application, negotiations were underway with a Fairness Commissioner-designated vendor and that it anticipated that NOTL would be scheduled for full implementation of Smart Meters in mid to late 2009 through a process that is expected to take less than two months and require a capital outlay estimated at \$1.6-\$1.7 million. NOTL noted Board decisions for 2008 cost of service applicants that were in a similar situation (e.g. Lakefront Utilities Inc. and PUC Distribution Inc.). In keeping with those decisions, NOTL is seeking the \$1.00 smart meter funding adder per customer per month to fund smart meter activities.

On October 22, 2008, the Board issued its Guideline “Smart Meter Funding and Cost Recovery”. The Guideline outlined requirements for applicants wishing to request a \$1.00 smart meter funding adder. The Board noted that the standard \$1.00 funding adder would provide funding for distributors that are authorized and clearly intend to install smart meters in the rate test year. The Board stated that it had made provision for a standard funding adder in recognition of the fact that some distributors may be in the early stages of planning and may not yet have sufficient cost information to request a utility-specific smart meter funding adder. The Board further stated that an application for the standard \$1.00 smart meter funding adder should include:

- the estimated number of meters to be installed in the rate test year;
- the actual or estimated costs per installed meter and in total;
- a statement as to whether the distributor has purchased, or expects to purchase, smart meters or advanced metering infrastructure (“AMI”) whose functionality exceeds the minimum functionality adopted in O. Reg. 425/06, and an estimate of those costs; and
- a statement as to whether the distributor has incurred, or expects to incur, costs associated with functions for which the SME has the exclusive authority to carry out pursuant to O. Reg. 393/07, and an estimate of those costs.

In response to a Board staff interrogatory⁵, NOTL stated that it intends to install approximately 7,200 meters during the rate test year at an estimated cost per meter of \$141 and total cost of \$1,015,200. NOTL noted that at the time of the interrogatory response, it was still receiving tendered costs for the smart meter system and installation and that the recent drop in the value of the Canadian dollar had inflated this cost by more than 10%.

⁵ Board staff interrogatory #5

In response to the Guideline requirement that the distributor provide a statement as to whether it has purchased, or expects to purchase (including the estimated costs), smart meters or advanced metering infrastructure (“AMI”) whose functionality exceeds the minimum functionality adopted in Ontario Regulation 425/06, NOTL stated that while it would not be purchasing the bulk of its smart meters until later in 2009, it was considering conducting a small pilot project (less than 100 meters) during the spring of 2009. The purpose of this pilot project would be to test the effectiveness of customer cost reduction “tools” such as in-home displays and load control devices. NOTL added that in this context it was aware of Ontario Regulation 425/06 and the Board’s smart meter funding requirements and was currently seeking funding for this excess functionality through either the Ontario Power Authority or the Electricity Distributor Association’s Tomorrow Fund.

With respect to the Guideline requirement that the distributor indicated whether it has incurred, or expects to incur costs associated with functions for which the SME has the exclusive authority to carry out pursuant to Ontario Regulation 393/07, NOTL stated that it would, along with its NEPA partners, be seeking an Operational Data Storage service. NOTL stated that under no circumstances would this system be used for billing purposes in duplication of the SME. NOTL noted that estimated costs for this system are not expected to be available to NEPA until early 2009.

COST OF CAPITAL

Background

NOTL has provided its proposed Cost of Capital in Exhibit 6. The following table summarizes its proposals in this area:

Table 3

Cost of Capital Parameter	Applicant's Proposal
Capital Structure	Requesting Board approval of a capital structure of 56.67% debt and 43.33% equity. This is to comply with the <i>Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors</i> , issued December 20, 2006 (the "Board Report").
Short-Term Debt	Requesting a 4% short-term debt component with a rate of 4.47% in accordance with the letter from the Board of March 7, 2008 regarding cost of capital updates for 2008 cost of service applications, consistent with the Board's Report
Long-Term Debt	Proposing a weighted debt cost rate for 2009 of 6.77%. This includes affiliated debt payable to the shareholder at an imputed rate of 7.25%
Return on Equity	Proposing a return on equity rate for the 2009 Test year of 8.57% in accordance with the Board's letter of March 7, 2008 regarding cost of capital updates for 2008 cost of service applications consistent with the Board's Report.

Discussion and Submission

Capital Structure

NOTL states that it has a current (2008) capital structure of 53.33% debt and 46.67% equity and is requesting Board approval of a capital structure of 56.67% debt and 43.33% equity. It is requesting this change primarily to comply with the Board Report which requires all licensed Ontario electricity distributors to move toward a 60% debt and 40% equity ratio. NOTL states that it believes the requested capital structure and equity return will provide continued access to long-term debt at reasonable rates.

Board staff notes that NOTL's proposal appears to be consistent with the Board Report.

Short Term Debt

NOTL has included a 4% short-term debt component as part of its proposed capital structure and is proposing a short-term debt rate for the 2009 Test year of 4.47% in accordance with the letter from the Board of March 7, 2008 regarding cost of capital updates for 2008 cost of service applications, consistent with the Board Report.

Section 2.1.1 of the Board Report states:

“The Board has determined that short-term debt should be factored into rate setting, and that a deemed amount should be included in the capital structures of electricity distributors. **The short-term debt amount will be fixed at 4% of rate base.**”

[Emphasis in original]

Section 2.2.2 of the Board Report defines the short-term debt rate to be used for rate-setting:

The Board has determined that the deemed short-term debt rate will be calculated as the average of the 3-month bankers’ acceptance rate plus a fixed spread of 25 basis points. ... The Board will use the 3-month bankers’ acceptance rate as published on the Bank of Canada’s website, for all business days of the same month as used for determining the deemed long-term debt rate and the ROE. [Emphasis in original]

NOTL states that it understands the Board will update the short-term debt rate in early 2009 for rates effective May 1, 2009.

Board staff would note that NOTL’s proposal appears to be consistent with the Board Report.

Long-term debt

NOTL has proposed a weighted debt cost rate for 2009 of 6.77%, which is forecasted to consist of three instruments:

- A promissory note, issued in 2000, with a principal amount of \$6.6 million due to the Town of Niagara-on-the-Lake, a proposed rate of 7.25% and no stated term;
- A demand installment loan, issued in 2003, to finance construction of York TS with a principal amount of \$1,900,000 due to CIBC, a proposed rate of 6.03% and a 15 year term; and
- A demand installment loan, issued in 2005, to finance construction of NOTL DS with a principal amount of \$1,900,000 due to CIBC, a proposed rate of 5.38% and a 15 year term.

Section 2.2.1 of the Board Report states:

“For all variable-rate debt and for all affiliate debt that is callable on demand the Board will use the current deemed long-term debt rate. When setting distribution rates at rebasing these debt rates will be adjusted regardless of whether the applicant makes a request for a change.” [Emphasis in original]

With respect to the \$6.6 million promissory note due to the Town of Niagara-on-the-Lake, Board staff notes the following documentation in Note 9 to Niagara-on-the-Lake Hydro Inc.’s Audited Financial Statements (“AFS”) for 2006:

“On November 1, 2000, Niagara-on-the-Lake Hydro Inc. incurred a long-term note payable to the Town of Niagara-on-the-Lake in the amount of \$6,901,333. Pursuant to the transfer by-law, the long-term note payable was issued as a non-interest bearing instrument pending the establishment of permanent terms. During the year, the Board approved the repayment of \$235,000 to the Town. There is no immediate intent to redeem any further amounts of the long-term note payable.”

Note 10 of the 2007 AFS stated as follows:

“Long-term note payable to the Town of Niagara-on-the-Lake, interest is payable at 7.25% and amounts paid and accrued for the year amounted to \$483,309 (\$498,927 - 2006). During the year, the Board approved the repayment of \$100,000 (\$235,000 – 2006) to the Town. There are no fixed terms of repayment”

Board staff and other parties asked the Applicant through interrogatories⁶ to provide a copy of the loan agreement as well as additional information on these arrangements. This information was sought to clarify why NOTL believed in the absence of fixed repayment terms, the proposed rate of 7.25% would be applicable rather than the current Board deemed long-term debt rate of 6.10%.

NOTL responded that the note payable is non-callable and expires in 2018 but will automatically be renewed unless either party gives 90 days notice. NOTL further stated that the 7.25% rate was originally set and approved by the Board, has been in place since its inception in the year 2000 and has never been re-negotiated. NOTL noted in

⁶ Board staff interrogatory 3.1, Energy Probe interrogatory 21, SEC interrogatory 8, and VECC interrogatory 9

support of its views that the Board's Report states that "The Board has determined that for embedded debt the rate approved in prior Board decisions shall be maintained for the life of each active instrument, unless a new rate is negotiated, in which case it will be treated as new debt." (Emphasis added). NOTL concluded that it had explored the financial market to see if the 7.25% rate or anything close to it was available for the same loan and found that a loan which does not require repayment of principal such as this one is not available. NOTL added that while not obligated by the terms, it had made a few principal pay downs on this loan when its financial position had allowed it to do so.

In response to requests from parties to provide a copy of the loan agreement, NOTL provided a promissory note document dated July 15, 2008 in which it was stated, "This Promissory Note replaces the Promissory Note executed by WiresCo in favour of the Town dated as of the 1st day of November 2000 and remains in accordance with Town of Niagara-on-the-Lake By-law No. 3531-01." The Promissory Note also stated that where renewal is concerned "This Promissory Note shall be automatically renewed for an additional ten (10) year term upon its maturity on the same terms and conditions contained herein, save as to any further right of renewal, unless either the Town or WiresCo gives ninety (90) days' prior written notice to the other that the Promissory Note shall not be renewed."

Board staff would invite parties to the proceeding to comment upon whether or not they view the 7.25% rate proposed to be imputed on this debt to be appropriate and consistent with the Board report, given that the Promissory Note filed is dated July 15, 2008 and is stated to replace the Promissory Note dated November 1, 2000.

Common Equity

NOTL is proposing a return on equity rate for the 2009 Test year of 8.57%, in accordance with the Board's letter of March 7, 2008 regarding cost of capital updates for 2008 cost of service applications, consistent with the Board's Report.

Board staff would note that NOTL's proposal appears to be consistent with the Board Report.

Operating Revenue

NOTL is requesting approval of \$5,191,140 for the total 2009 operating revenue. This amount is a 6.0% increase (\$291,771) from 2008 and a 6.0% increase (\$295,268) from 2007 level.

Load Forecasting

Background

Exhibit 3 of the Application discusses how the customer count and load forecast are developed. Using the expected growth in customer connections, the historical number of customers is projected based on 2003-2007 data to obtain both Bridge Year (2008) and Test Year (2009) customer counts by class. The kWh forecast – and the kW forecast for appropriate classes – is presented by customer class. Variance analyses are presented in support of the forecasts.

The following table summarizes the 2009 forecast proposed by NOTL:

Table 4

Rate Class	2009 Load Forecast As Filed (Exhibit 3/ Tab 2/ Schedule 2/ Page 2/ Table 2)	2009 Number of customers/connections Forecast As Filed (Exhibit 3/ Tab 2/ Schedule 2/ Page 2/ Table 2)
	(kWh)	
Residential	66,320,829	6,584
GS < 50kW	34,349,093	1,209
GS > 50kW	80,605,864	123
Street Lights	1,086,069	1,953
Unmetered Load	302,169	32

Discussion and Submission

Customer Count Forecast

NOTL used historical annual growth rate to forecast customer connections for all classes, except Residential and Sentinel lights classes. The customer forecast for the Residential class was driven by the expected lot developments in its service area and expected load transfers to St. Catharines. In its response to the Board staff interrogatory # 7.2 (b), NOTL explained that the number of lots in subdivisions known to be under development and its estimate of in-fill opportunities were equal to 210 lots – 85 lots in 2008 and 125 lots in 2009. Therefore, NOTL submitted that the use of historical annual growth rate for Residential class would be inconsistent with the known subdivision plan.

NOTL proposed to eliminate the Sentinel Lights class in 2009; as a result no growth was expected in Sentinel Lights class.

The Applicant's forecast shows a 1.3% annual average growth in customer numbers from 2007 to the 2009 Test Year. This is less than the 2.6% average annual customer growth experienced during the 2003 to 2007 period. Based on Board staff's observation, the reduction is mainly due to Residential load transfer. Board staff submits that the forecasted growth in customer numbers is consistent with historical growth rate.

Methodology and Model

NOTL used a multifactor regression model to determine the relationship between historical system load purchases and weather data, calendar factors and economic data. NOTL presented the comparison of the results of the model with actual system load purchases for the period from 1996 to 2007. The evidence at Exhibit 3/ Tab 2/ Schedule 2/ Page 13/ Table 6, indicates that the percentage difference between the model results and the actual load was in the range of -3.1% to 3.9%.

NOTL used the following data as the inputs for the model to generate the weather normalized system purchases load forecast for the Bridge Year (2008) and Test year (2009):

- Average monthly Heating Degree Days (“HDD”) and Cooling Degree Days (“CDD”) from 1996 to 2007 and the source of data are from Environmental Canada.
- Ontario Real GDP monthly index based on Toronto Hydro Electric System Ltd. rate application (EB-2007-0680).
- Early spring factor is from March to May and Summer factor is from July to September.

NOTL made further adjustments to the load forecast for weather normalized system purchases to reflect the impact of plant closures, CDM programs, and conversion from system purchases load forecast to billed load forecast.

NOTL noted that the adjustment for the closure of one of the NOTL GS>50kW customers (Cangro) has been included in the load forecast for 2008 and 2009. In response to Energy Probe interrogatory #13, NOTL has confirmed the Cangro plant was closed at the end of June 2008. Staff also notes that NOTL has applied 0.34% adjustment for CDM to weather normalized forecast purchases kWh for 2008 and 2009.

Load Forecast

The Applicant’s forecast shows a 0.6% annual average kWh load growth from the 2007 Actual to the 2009 Test Year Normalized compared to an average annual kWh load growth of 2.1% during the 2003 to 2007 period. The forecasted lower-than-historical growth is consistent with Board staff’s observation related to the closure of the Cangro plant. The annual consumption of the Cangro plant is higher than the average annual consumption for other customers in the same class, therefore, the adjustment for the plant closure caused a reduction of the annual kWh load growth.

OM&A Costs

Background

NOTL’s Summary of Operating Costs is found at Exhibit 4 Tab 1 Schedule 2 Page 1 of the Application (“Summary”). The 2009 Total OM&A Expenses forecast is \$1,867,474. This represents an 8.7% (or \$148,721) increase compared to the 2007 actual level and a 20.7% (\$320,525) increase compared to the 2006 actual level.

Discussion and Summary

Using the Applicant's Summary as its base, Board staff created two different tables and asked interrogatories concerning each table to clarify the drivers related to the year over year increase in Total OM&A Expenses.

Table 5 below summarizes the key components of NOTL's operating costs for the 2006 Board approved and actual, 2007 actual, 2008 bridge, and 2009 test years. Table 6 highlights the significant sources of variance for OM&A expenses:

Table 5

	2006 Board Approved	2006 Actual	2007 Actual	2008 Bridge	2009 Test
Operation	\$323,382	\$260,994	\$342,844	\$377,390	\$373,710
Maintenance	\$304,410	\$388,961	\$431,315	\$474,671	\$521,359
Billing and Collection	\$270,862	\$310,202	\$355,606	\$312,374	\$318,798
Community Relations	\$713	\$29,210	\$8,783	\$1,000	\$1,020
Administrative and General Expenses	\$582,047	\$557,582	\$580,205	\$591,409	\$652,587
Total OM&A Expenses	\$1,481,414	\$1,546,949	\$1,718,753	\$1,756,844	\$1,867,474

Table 6

Niagara-on-the-Lake Hydro Inc.

Summary of OMA Expenses	2006 Board Approved	Variance 2006/2006	2006 Actual	Variance 2007/2006	2007 Actual	Variance 2008/2007	2008 Bridge	Variance 2009/2008	2009 Test	Variance 2009/2007	Variance 2009/2006
Operation	323,382	-62,388	260,994	81,850	342,844	34,546	377,390	-3,680	373,710	30,866	112,716
		-19.3%		31.4%		10.1%		-1.0%		9.0%	43.2%
Maintenance	304,410	84,551	388,961	42,354	431,315	43,356	474,671	46,688	521,359	90,044	132,398
		27.8%		10.9%		10.1%		9.8%		20.9%	34.0%
Billing & Collections	270,862	39,340	310,202	45,404	355,606	-43,232	312,374	6,424	318,798	-36,808	8,596
		14.5%		14.6%		-12.2%		2.1%		-10.4%	2.8%
Community Relations	713	28,497	29,210	-20,427	8,783	-7,783	1,000	20	1,020	-7,763	-28,190
		3996.8%		-69.9%		-88.6%		2.0%		-88.4%	-96.5%
Administrative and General Expenses	582,047	-24,465	557,582	22,623	580,205	11,204	591,409	61,178	652,587	72,382	95,005
		-4.2%		4.1%		1.9%		10.3%		12.5%	17.0%
Total OM&A Expenses	1,481,414	65,535	1,546,949	171,804	1,718,753	38,091	1,756,844	110,630	1,867,474	148,721	320,525
		4.42%		11.11%		2.22%		6.30%		8.65%	20.72%

NOTL confirmed the accuracy of each of the tables through its response to the Board staff interrogatory 1.2a, but amended the tables to provide updated figures. Board staff notes that the update was non-material in nature.

To assist in understanding the increases in Total OM&A expenses identified in Table 6, NOTL provided a listing of the cost drivers in response to the Board staff interrogatory 1.2b, as shown in Table 7 below. The table starts with the opening OM&A balance of \$1,481,413 for 2006 Board Approved costs and ends with the proposed closing OM&A balance of \$1,867,474 in the 2009 Test year.

Table 7

Opening OM&A Balance - 2006 Approved	\$ 1,481,413
External Drivers	
Inflation (GDP-IPI)	\$ 74,321
Collective Agreement Wage Rates (3%)	\$ 116,774
NOTL Energy Inc. Management Fees	\$ 20,000
2009 Rate Rebasing Costs	\$ 33,333
New Regulatory Fees	\$ 17,500
Company Priorities	
Safety	\$ 11,300
Line skills continuity	
- 2 apprentice positions (OM&A Portion)	\$ 33,646
- Apprentice annual training costs	\$ 11,000
Distribution system maintenance	\$ 82,367
GIS/SCADA system best practice	\$ 8,300
Net all other changes to 2009	(\$ 22,481)
Total Changes	\$ 1,867,473

Board staff notes that the majority of the increase in 2009 OM&A expenses compared to 2006 is a result of inflation, wages and staff changes, 2009 rate rebasing costs, and distribution system maintenance.

Inflation

From 2006 to 2009, inflation has increased by an amount of \$74,321. In response to Board staff interrogatory 1.2(c), NOTL states that the inflationary amount applies to individual non-labour OM&A expenses. NOTL's estimate for inflation is based on the Board's IRM GDP-IPI indices. For the periods 2006 to 2007 and 2008 to 2009, NOTL used an estimate of 1.92% and 1.9% respectively. Board staff notes that the GDP-IPI index includes an increase for wages and invites parties to comment on whether a material non-labour price index would be more appropriate to use.

Wages and Staff Changes

Board staff notes that an examination of Table 7 shows that 39%, or \$150,420, of NOTL's 2009 proposed increase compared to 2006 Board approved is a result of a 3% increase to wages, as part of IBEW Union collective agreement rates and staffing changes. NOTL states that the 3% increase was applied to both the union and management pay rate bands.

In response to Board staff interrogatory 1.2(c) NOTL stated that two line apprentices were hired between 2007 and 2008, as part of its long term strategic planning of employee development and retirement planning.

2009 Rate Rebasing Costs

NOTL is requesting approval of regulatory costs at an amount of \$100,000 for costs associated with the 2009 cost of service (CoS) application. The costs include consulting, potential legal fees, and potential OEB and intervenor costs. As per previous Board policy, NOTL has amortized regulatory costs associated with 2009 CoS application over a 3-year period (\$33,333/year). However, the Board's report on 3rd Generation IRM dated July 14, 2008 has increased the incentive regulation mechanism (IRM) period to a 4-year cycle. Board staff submits that given the change in the cycle time for the rate plan from 3 years to 4 years, the regulatory costs should be amortized over 4 years at an amount of \$25,000/year. The Applicant may wish to comment on this observation in its reply submission.

Distribution System Maintenance

NOTL is requesting approval of \$82,367 related to overhead services, underground services, and line transformer programs in 2009 as compared to 2006 Board approved amounts. In response to Board staff interrogatory 1.2(c), NOTL provides the following explanations for its system maintenance programs:

- Overhead services program (\$21,717) is designed to replace all two and split bolt style connections with compression style connections.
- Underground Services (\$20,903) is designed to repair and replace connections with compression style connections.
- Line Transfer Program (\$39,747) is designed to systematically test, clean, and maintain every underground transformer in the system on a five-year rotational basis.

Board staff invites parties to comment on NOTL's system maintenance programs.

PILs

Background

In the Board's PILs methodology for 2002, 2005 and 2006 EDR applications, the Board approved three blended income tax rates for the application process. One was the minimum, one was the maximum, and the third was an income tax rate that was calculated to represent a utility somewhere towards the middle of the range. For 2009, the published federal and Ontario combined maximum enacted income tax rate is 33%. Those businesses eligible for the small business deduction have a combined income tax rate of 16.5%. Thus, the applicable blended income tax rate for a distributor lies between the minimum rate of 16.5% and the maximum rate of 33%. The rate between these limits principally varies based on the company's taxable income.

For the 2nd Generation Incentive Regulation Mechanism ("2nd Generation IRM") adjustment in 2008, the Board adjusted the income tax rates that were included in 2006 EDR base rates by reference to the evidence in those proceedings. That is, the three blended income tax rates were adjusted to reflect the decrease in the federal tax rates.

Applicants filed in 2008 EDR without the assistance of a Board-approved model. This allowed each distributor to calculate an income tax rate specific to its individual regulatory tax situation. Thus, there was no pre-set tax rate between the minimum and the maximum tax rates that were established by the Board.

In 3rd Generation Incentive Regulation Mechanism (“3rd Generation IRM”), applicants calculated their specific savings of the known legislated tax reductions through 2012. These savings will be shared equally with consumers and shareholders during 3rd Generation IRM. The income tax rates used in the calculations were specific and unique to each distributor, as occurred in 2008 EDR.

The Board’s established PILs methodology derives regulatory net income as follows: rate base multiplied by equity component multiplied by ROE%. The resulting taxable income from this starting point determines the tax rate to be used in calculating the grossed-up PILs amount. Grossed up PILs are then added back to derive revenue requirement.

Discussion and Submission

NOTL’s evidence⁷ contained detailed tax calculations which showed a regulatory income tax amount of \$411,031 as payable in the 2009 Test year. This was based on an assumed tax rate of 33% and included an addition to accounting income of \$17,723 related to “Change in regulatory assets”. Board staff notes that based on the Applicant’s evidence, NOTL is eligible for the small business credit.

Board staff and other parties asked NOTL interrogatories related to its use of the 33% tax rate.⁸ NOTL stated that it had used the 33% tax rate because it reflected the approach used in the 2006 EDR Board model and, to the best of its knowledge, the approach used by 2008 rate rebasing applicants. However, in response to the questions raised about this rate in the interrogatories, NOTL revised its tax calculations to incorporate the small business income threshold and clawback rate which resulted in a lower tax rate of 31.93%. In addition, NOTL also removed the \$17,723 adjustment for “Change in Regulatory Assets” in the 2009 Test year. The effect of these adjustments was to reduce NOTL’s regulatory income tax amount for recovery in 2009 from \$411,031 to \$382,940.

⁷ Exhibit 4 Tab 3 Schedule 1

⁸ Board staff interrogatories #6.1 and #6.2, Energy Probe interrogatory #19

NOTL seems to have calculated an income tax rate by adding the grossed-up PILs, already computed, to the regulatory net income. NOTL's methodology results in a higher tax rate. Adding the PILs tax amount to the regulatory net income produces a higher taxable income. While NOTL's method is not incorrect, it diverges from the Board's established methodology. Board staff estimates that NOTL is requesting approximately \$42,000 more in PILs using its methodology than would otherwise arise using the Board's established methodology. Board staff notes that this amount is 0.88% of the base revenue requirement and therefore is immaterial.

Parties may wish to comment on the Applicant's methodology, and on the selection of the applicable income tax rate.

Cost Allocation and Rate Design

Customer Elimination

Background

The Applicant proposes to discontinue its Sentinel Light class, based on the latest version of the Affiliate Relations Code ("ARC"), which NOTL interprets as stating that LDCs must not participate in the Sentinel Light business directly or through an affiliate. In eliminating its Sentinel Light class, NOTL states that some accounts will be moved to the USL rate class, where feasible to the customer, provided that the lights are not on NOTL poles. In addition, the Town of Niagara-on-the-Lake, NOTL's largest Sentinel Light customer, plans to convert or transfer its Sentinel Lights to its Street Light account.

Board staff interrogatory 9.1 (b) asked NOTL to provide justification for the elimination of its Sentinel Light class. In its response, NOTL stated that through its service contract with Energy Services Niagara Inc. ("ESNI"), it has installed, maintained and provided billing and collection services related to Sentinel Lights. However, the business has experienced negative growth and ESNI has indicated that it is only providing Sentinel Lights as a community service with little or no return. As a result, NOTL and ESNI have decided to terminate the business and services contract related to Sentinel Lights on or before April 30, 2009.

In response to Board staff interrogatory 9.1 (c), which asked NOTL to provide the financial impacts on Sentinel Light customers who are transferred to the USL or Street Lighting rate class, the Applicant provided the following calculations in the Table 8 below.

Table 8 - Bill Impact for Sentinel Light Customer Moving to USL Rate Class

Monthly Rates & Charges	Sentinel Light Customer With 8 Lights	USL Customer
Service Charge	\$2.92 x 8 = \$23.36	\$47.83
Distribution Volumetric Rate	\$5.8909/KW x 2.2 kW = \$12.96	\$3.36
ESNI Rental	\$37.12	N/A
TOTAL	\$73.44	\$51.19

Discussion and Submission

In its interrogatories, Board staff points out that NOTL has incorrectly identified changes in the ARC to justify its proposal to eliminate its Sentinel Light class. Compliance Bulletin 200605, issued July 10, 2006, stated that “under section 71 (1) of the Ontario Energy Board Act, 1998, a distributor may not, except through one or more affiliates, carry on any business activity other than transmitting or distributing electricity”. The Bulletin further stated that Sentinel Light services is not a distribution activity and is not a permitted business activity for a distributor under section 71(1) of the Act.

Board staff invites parties to comment on NOTL’s proposal to eliminate its Sentinel Light class.

Revenue to Cost Ratios

Background

NOTL included the ratios from its Informational Filing (EB-2006-0247). The ratios included in the Table 9 below are from Run 2, with the exception of the Sentinel Light class which the application assumes has been discontinued.

The application included proposed ratios as shown in the second column of data. For ease of comparison, the Board's policy range is shown in the final column.

Table 9 - NOTL Revenue to Cost Ratios

Customer Class	Revenue to Cost Ratio [%] Informational Filing Run 2	Revenue to Cost Ratio [%] Application: Exhibit 8 / Tab 1 / Schedule 2 / p. 4	Revenue to Cost Ratio [%] Board Policy Range
Residential	88.74	94.37	85 – 115
GS < 50 kW	91.74	95.87	80 – 120
GS > 50 kW	183.49	145.15	80 – 180
Street Lights	14.85	42.43	70 – 120
Sentinel Lights	23.88	N/A	70 – 120
USL	97.26	100	80 – 120

Discussion and Submission

The revenue to cost ratio for every class is within the Board's policy range with the exception of the Street Light class. The Board's Cost Allocation Report (EB-2007-0667) specifies a range for revenue to cost ratios of 70% to 120% for Street Lights class. NOTL is proposing to change its current revenue to cost ratio of 14.85% to 42.43%. This results in a total bill impact of 29.8% for Street Light class, which exceeds the Board's 10% total bill impact threshold. Board staff notes that NOTL has followed the Board's

decisions in 2008, which directed that ratios that fell below the range be moved part way towards the minimum (70%).

Deferral and Variance Accounts

Background

NOTL is requesting that the following accounts and balances be cleared for disposition as of December 31, 2007 balances plus interest to April 30, 2009.

- 1508 Other Regulatory Assets, \$110,104
- 1550 LV Variance, \$20,926

The total of the accounts is \$131,030

In Exhibit 5, Tab 1, Schedule 2, NOTL proposes to collect these amounts from rate payers via rate riders over a three year period to “minimize monthly bill impacts” while “avoiding significant over-recovery”.

Discussion and Submission

Board staff notes that NOTL has followed the Board’s guidelines and is using its Deferral and Variance accounts in a manner consistent with the definitions in the Board’s Accounting Procedures Handbook.

- All of which is respectfully Submitted -