CANADIAN NIAGARA POWER INC.

HEARING MATERIALS

FILED: JANURARY 3, 2017

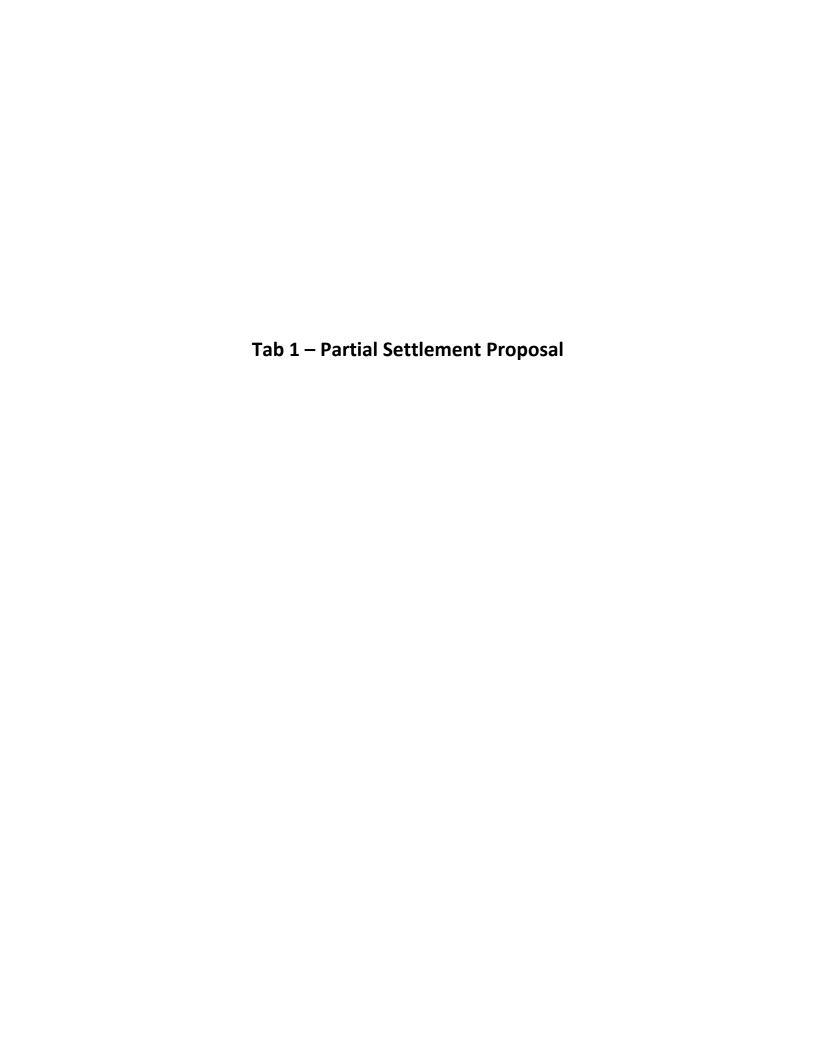


EB-2016-0061 HEARING MATERIALS FILED: JANUARY 3, 2017

INDEX

TAB 1	Partial Settlement Proposal
TAB 2	Bios of Witnesses
TAB 3	Acknowledgement of Expert's Duty
Tab 4	OM&A Annual Comparison
TAB 5	Summary of Cost Drivers
TAB 6	Emerald Ash Borer Materials
TAB 7	Productivity Summary
TAB 8	Adjusted PEG Econometric Model
TAB 9	Analysis of LDC Other Revenues
TAB 10	Board Staff Report on Community Meetings
TAB 11	Summary of Port Colborne Customer Sessions
TAB 12	EOP Reliability Presentation





Canadian Niagara Power Inc.

2017 Cost of Service Application

Settlement Proposal

EB-2016-0061

Filed: December 1, 2016

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 2 of 49 Filed: December 1, 2016

Contents

LI	ST O	F ATTACHMENTS	. 3
S	ETTLE	EMENT PROPOSAL	. 4
SI	JMMA	N RY	.8
R	RFE C	DUTCOMES	11
1	PL/	ANNING	12
	1.1	Capital	12
	1.2	OM&A	14
2	RE'	VENUE REQUIREMENT	16
	2.1 acco	Are all elements of the Revenue Requirement reasonable, and have they been appropriately determined in rdance with OEB policies and practices?	
	2.2	Has the revenue requirement been accurately determined based on these elements?	27
3	LO	AD FORECAST, COST ALLOCATION AND RATE DESIGN	28
		Are the proposed load and customer forecast, loss factors, CDM adjustments and resulting billing rminants appropriate, and, to the extent applicable, are they an appropriate reflection of the energy and and requirements of Canadian Niagara Power'scustomers?	28
	3.2 appro	Is the proposed cost allocation methodology, and are the allocations and revenue-to-cost ratios, opriate?	34
	3.3	Are the Canadian Niagara Power's proposals for rate design appropriate?	36
	3.4	Are the proposed Retail Transmission Service Rates and Low Voltage service rates appropriate?	38
4	AC	COUNTING	41
	4.1 prope	Have all impacts of any changes in accounting standards, policies, estimates, and adjustments been erly identified and recorded, and is the rate-making treatment of each of these impacts appropriate?	41
		Are Canadian Niagara Power's proposals for deferral and variance accounts, including the balances in the ing accounts and their disposition, requests for new accounts and the continuation of existing accounts, opriate?	
5	ΑT	TACHMENTS	46

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 3 of 49 Filed: December 1, 2016

LIST OF ATTACHMENTS

- A. Revenue Requirement Workform
- B. 2016 and 2017 Fixed Asset Continuity Schedule

Note:

Canadian Niagara Power Inc. has filed revised models as evidence to support this Settlement Proposal. The models have been filed through the OEB's e-filing service and include:

- a) Filing Requirements Chapter 2 Appendices
- b) 2017 Revenue Requirement Workform
- c) 2017 Test Year Income Tax PILs Model
- d) 2017 Cost Allocation Model

The models listed below do not require changes as a result of this Settlement Proposal, and therefore have not been revised. The most current versions of these models have been filed in conjunction with Interrogatory Responses, or in conjunction with Technical Conference Undertakings, as required:

- a) 2017 Load Forecast Model Wholesale
- b) 2017 EDDVAR Continuity Schedule
- c) 2017 RTSR Model
- d) LRAMVA Model & Burman Report

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 4 of 49 Filed: December 1, 2016

SETTLEMENT PROPOSAL

Canadian Niagara Power Inc. (the "Applicant" or "CNPI") filed a Cost of Service application with the Ontario Energy Board (the "OEB") on April 29, 2016 under section 78 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B) (the "Act"), seeking approval for changes to the rates that CNPI charges for electricity distribution, to be effective January 1, 2017 (OEB file number EB-2016-0061) (the "Application").

The OEB issued a Letter of Direction and Notice of Application on August 17, 2016. In Procedural Order No. 1, dated September 16, 2016, the OEB approved VECC, Energy Probe, and SEC for intervenor status as well as prescribing dates for the following: written interrogatories from OEB staff, VECC, Energy Probe, and SEC; CNPI's responses to interrogatories; a Technical Conference and a Settlement Conference; and various other elements in the proceeding.

Following the receipt of interrogatories, CNPI filed its interrogatory responses with the OEB on October 19, 2016.

On November 3, 2016, following interrogatories, OEB Staff submitted a proposed issues list as agreed to by the parties. On November 11, 2016 the OEB issued its decision on the proposed issues list, approving the list submitted by OEB staff as the final issues list (the "Issues List").

The settlement conference was convened on November 8 and 9, 2016 in accordance with the OEB's *Rules of Practice and Procedure* (the "Rules") and the OEB's Practice Direction on Settlement Conferences (the "Practice Direction"). Mr. Chris Haussmann acted as facilitator for the settlement conference.

CNPI and the following intervenors (the "Intervenors"), participated in the settlement conference:

- Vulnerable Energy Consumers Coalition ("VECC");
- Energy Probe Research Foundation ("EP" or "Energy Probe");
- School Energy Coalition ("SEC").

CNPI and the Intervenors are collectively referred to below as the "Parties".

Ontario Energy Board staff ("OEB staff") also participated in the settlement conference. The role adopted by OEB staff is set out on page 5 of the Practice Direction. Although OEB staff is not a party to this Settlement Proposal, as noted in the Practice Direction, OEB staff who did participate in the settlement conference are bound by the same confidentiality and privilege rules that apply to the Parties to the proceeding.

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 5 of 49 Filed: December 1, 2016

This document is called a "Settlement Proposal" as this is a proposal by the Parties presented to the OEB to settle the issues in this proceeding. It is termed a proposal as between the Parties and the OEB. However, as between the Parties, and subject only to the OEB approval of this Settlement Proposal, this document is intended to be a legal agreement, creating mutual obligations, and binding and enforceable in accordance with its terms. As set forth later in this Preamble, this agreement is subject to a condition subsequent, that if it is not accepted by the OEB in its entirety, then unless amended by the Parties it is null and void and of no further effect. In entering into this agreement, the Parties understand and agree that, pursuant to the Act, the OEB has exclusive jurisdiction with respect to the interpretation and enforcement of the terms hereof.

These settlement proceedings are subject to the rules relating to confidentiality and privilege contained in the Practice Direction. The Parties acknowledge that this settlement proceeding is confidential in accordance with the OEB's Practice Direction on settlement conferences. The Parties understand that confidentiality in that context does not have the same meaning as confidentiality in the OEB's Practice Direction on Confidential Filings, and the rules of that latter document do not apply. Instead, in this settlement conference, and in this Settlement Proposal, the specific rules with respect to confidentiality and privilege set out in the Practice Direction on Settlement Conferences, as amended on October 28, 2016. Parties have interpreted the revised Practice Direction to mean that the documents and other information provided during the course of the settlement proceeding, the discussion of each issue, the offers and counter-offers, and the negotiations leading to the settlement – or not – of each issue during the settlement conference are strictly privileged and without prejudice. None of the foregoing is admissible as evidence in this proceeding, or otherwise, with one exception, the need to resolve a subsequent dispute over the interpretation of any provision of this Settlement Proposal. Further, the Parties shall not disclose those documents or other information to persons who were not attendees at the settlement conference. However, the Parties agree that "attendees" is deemed to include, in this context, persons who were not physically in attendance at the settlement conference but were a) any persons or entities that the Parties engage to assist them with the settlement conference, and b) any persons or entities from whom they seek instructions with respect to the negotiations; in each case provided that any such persons or entities have agreed to be bound by the same confidentiality provisions.

This Settlement Proposal provides a brief description of each of the settled and partially settled issues, as applicable, together with references to the evidence. The Parties agree that references to the "evidence" in this Settlement Proposal shall, unless the context otherwise requires, include a) additional information included by the Parties in this Settlement Proposal, and b) the Appendices to this document. The supporting Parties for each settled and partially settled issue, as applicable, agree that the evidence in respect of that settled or partially settled issue, as applicable, is sufficient in the context of the overall settlement to support the proposed settlement, and the sum of the evidence in this proceeding provides an appropriate evidentiary record to support acceptance by the OEB of this Settlement Proposal. The Parties agree that references to the evidence in this Settlement Proposal shall, unless the context otherwise requires, include, in addition to the Application, the responses to interrogatories, responses to clarification

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 6 of 49 Filed: December 1, 2016

questions and undertakings, and all other components of the record up to and including the date hereof, including additional information included by the Parties in this Settlement Proposal and the Attachments to this document.

Included with the Settlement Proposal are Attachments that provide further support for the proposed settlement. The Parties acknowledge that the Attachments were prepared by CNPI. While the Intervenors have reviewed the Attachments, the Intervenors are relying on the accuracy of the Attachments and the underlying evidence in entering into this Settlement Proposal.

For ease of reference, this Settlement Proposal follows the format of the final Approved Issues List.

The Parties have reached a full settlement with respect to many of the issues in this proceeding, with only the following 5 discrete issues going to hearing:

- Issue 1.2 OM&A, no settlement, full issue to hearing.
- Issue 2.1.1 Cost of Capital, partial settlement, the issue of whether and how expected changes in the cost of long-term debt in 2018 should be reflected in rates will go to hearing.
- Issue 4.1 Accounting Standards etc., partial settlement, the discrete issue of the appropriate accounting for Pension and OPEB costs in rates (cash vs. accrual) will go to hearing.
- Issue 4.2 Deferral and Variance Accounts, partial settlement, the issue of whether a variance
 account related to pension and OPEBs is appropriate will go to hearing, and the issue of whether a
 variance account should be established for future changes to the cost of long-term debt will go to
 hearing.
- Issue 4.2.1 Effective Date, no settlement, the issue of whether rates should be effective January 1, 2017 will go to hearing.

According to the Practice Direction (p.4), the Parties must consider whether a Settlement Proposal should include an appropriate adjustment mechanism for any settled issue that may be affected by external factors. These adjustments are specifically set out in the text of the Settlement Proposal.

The Parties have settled the issues as a package, and none of the parts of this Settlement Proposal are severable. If the OEB does not accept this Settlement Proposal in its entirety, then there is no settlement (unless the Parties agree in writing that any part(s) of this Settlement Proposal that the OEB does not accept may continue as a valid settlement without inclusion of any part(s) that the OEB does not accept.

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 7 of 49 Filed: December 1, 2016

In the event that the OEB directs the Parties to make reasonable efforts to revise the Settlement Proposal, the Parties agree to use reasonable efforts to discuss any potential revisions, but no Party will be obligated to accept any proposed revision. The Parties agree that all of the Parties must agree with any revised Settlement Proposal as it relates to that issue, or take no position, prior to its resubmission to the OEB.

Unless stated otherwise, the settlement of any particular issue in this proceeding and the positions of the Parties in this Settlement Proposal are without prejudice to the rights of the Parties to raise the same issue and/or to take any position thereon in any other proceeding, whether or not CNPI is a party to such proceeding, provided that no Party shall take a position that would result in the Agreement not applying in accordance with the terms contained herein.

Where in this Agreement, the Parties "Accept" the evidence of CNPI, or "agree" to a revised term or condition, including a revised budget or forecast, then unless the Agreement expressly states to the contrary, the words "for the purpose of settlement of the issues herein" shall be deemed to qualify that acceptance or agreement.

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 8 of 49 Filed: December 1, 2016

SUMMARY

In reaching this Settlement, the Parties have been guided by the Filing Requirements for 2017 rates and the Approved Issues List.

This Settlement Proposal reflects a partial settlement of the issues in the proceeding. The Parties have described below, in detail, areas where they have either settled an issue by agreeing to adjustments to the application as updated, and highlighted areas where one, some, or all aspects of an issue will be subject to a hearing by the Board.

For ease of reference, the following list contains all of the issues that will proceed to hearing if the Board accepts this Settlement Proposal:

- Issue 1.2 OM&A, no settlement, full issue to hearing.
- Issue 2.1.1 Cost of Capital, partial settlement, the issue of whether and how expected changes in the cost of long-term debt should be reflected in rates will go to hearing.
- Issue 4.1 Accounting Standards etc., partial settlement, the discrete issue of the appropriate
 accounting for Pension and OPEB costs in rates (cash vs. accrual) will go to hearing and the issue
 of whether a variance account should be established for future changes to the cost of long-term
 debt will go to hearing.
- Issue 4.2 Deferral and Variance Accounts, partial settlement, the issue of whether a variance account related to pension and OPEBs is appropriate will go to hearing.
- Issue 4.2.1 Effective Date, no settlement. The issue of whether rates should be effective January 1, 2017 will go to hearing.

Various other issues are fully settled in principle, but their final determination in support of rates depends in part on one or more of the issues that will go to hearing. Accordingly, while the Parties have noted those "consequential" issues as settled, the final calculations for such issues cannot be provided until the issues that are going to hearing are decided by the Board.

The Parties note that this settlement proposal includes all tables, appendices and the live Excel models that represent the evidence and the settlement between the Parties at the time of filing the settlement proposal. Some of this evidence may need to be updated subject to the OEB's determination of the unsettled issues.

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 9 of 49 Filed: December 1, 2016

A Revenue Requirement Work Form, incorporating all terms that have been agreed to in this Proposal is filed with the Settlement Proposal. Through the settlement process, CNPI has agreed to certain adjustments to its original 2016 Application. The changes are described in the following sections.

CNPI has provided the following Table 1 highlighting the changes to its Rate Base and Capital, Operating Expenses and Revenue Requirement from CNPI's Application as filed as a result of interrogatories, technical conference questions and this Settlement Proposal. This Table, together with that of Table 2, and the other relevant Tables herein, does not reflect any further changes to the Application for the issues not settled and yet to be determined by the OEB.

Table 1: Revenue Requirement

I	Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Cost of Capital	Regulated Return on Capital	6,456,937	6,129,330	(327,608)	6,128,463	(866)
Cost of Capital	Regulated Rate of Return	7.18%	6.84%	-0.34%	6.84%	0.00%
Rate Base & Capital	Rate Base	89,924,481	89,662,520	(261,962)	89,649,845	(12,675)
Expenditures	Working Capital	72,787,072	75,183,128	2,396,056	75,014,128	(169,000)
Experiultures	Working Capital Allowance	5,459,030	5,638,735	179,704	5,626,060	(12,675)
	Amortization/Depreciation	4,766,329	4,724,996	(41,333)	4,724,996	0
Operating Expenses	Grossed up Income Taxes	526,758	521,759	(4,999)	521,599	(161)
Operating Expenses	Property Taxes	103,000	103,000	0	103,000	0
	OM&A	10,441,723	10,471,723	30,000	10,471,723	0
	Service Revenue Requirement	22,294,747	21,950,808	(343,939)	21,949,781	(1,027)
Revenue	Other Revenues	2,424,445	2,448,193	23,748	2,548,193	100,000
	Base Revenue Requirement	19,870,302	19,502,615	(367,687)	19,401,588	(101,027)
Requirement	Grossed up Revenue					
	Deficiency / (Sufficiency)	2,316,325	1,769,650	(546,675)	1,668,623	(101,027)

Based on the foregoing, and the evidence and rationale provided below, the Parties accept this Settlement Proposal as appropriate and recommend its acceptance.

Table 2 below illustrates the updated Bill Impacts based on the results of this Settlement Proposal, which are subject to change as a result of the determination of the outstanding issues.

Table 2: Bill Impact Summary

Bill Impact Summary - Fort Erie

Customer Classification and Billing	Energy	Demand	Total Bill				
Туре	kWh	kW	Current	Partial Settlement	Change		
			Rates	Partial Settlement	\$	%	
Residential; TOU	750		157.55	156.72	(0.83)	(0.53%)	
GS<50 kW	2,000		392.12	392.68	0.56	0.14%	
GS>50 kW	20,000	60	3,825.76	4,036.03	210.27	5.50%	
USL	3,500		647.69	675.40	27.71	4.28%	
Sentinel Lighting	1,400	5	355.13	361.89	6.76	1.90%	
Street Lighting	5,400	15	1,713.23	1,572.34	(140.89)	(8.22%)	
Residential (10th %); TOU	210		64.03	68.57	4.54	7.09%	
Residential (10th %); Retailer	210		75.64	82.42	6.78	8.96%	

Bill Impact Summary - EOP

Customer Classification and Billing	Energy	Demand	Total Bill					
Type	kWh	kW	Current	Dortical Cottlement	Change			
			Rates	Partial Settlement	\$	%		
Residential; TOU	750		155.17	156.72	1.55	1.00%		
GS<50 kW	2,000		397.77	404.21	6.44	1.62%		
GS>50 kW	20,000	60	4,278.76	4,151.29	(127.47)	(2.98%)		
USL	3,500		657.18	695.57	38.39	5.84%		
Sentinel Lighting	1,400	5	362.05	369.96	7.91	2.18%		
Street Lighting	5,400	15	1,821.86	1,603.46	(218.40)	(11.99%)		
Residential (10th %); TOU	210		63.37	68.57	5.20	8.21%		
Residential (10th %); Retailer	210		78.96	82.42	3.46	4.38%		

Bill Impact Summary - Port Colborne

Customer Classification and Billing	Energy	Demand	Total Bill				
Type	kWh	kW	Current	Partial Settlement	Change		
			Rates	Fartial Settlement	\$	%	
Residential; TOU	750		156.11	156.72	0.61	0.39%	
GS<50 kW	2,000		404.10	408.50	4.40	1.09%	
GS>50 kW	20,000	60	3,912.40	4,194.23	281.83	7.20%	
Embedded Distributor	433,813	1,160	79,550.01	85,315.54	5,765.53	7.25%	
USL	3,500		665.88	703.09	37.21	5.59%	
Sentinel Lighting	1,400	5	370.51	372.97	2.46	0.66%	
Street Lighting	5,400	15	1,743.79	1,615.05	(128.74)	(7.38%)	
Residential (10th %); TOU	210		63.63	68.57	4.94	7.76%	
Residential (10th %); Retailer	210		74.72	82.42	7.70	10.31%	

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 11 of 49 Filed: December 1, 2016

RRFE OUTCOMES

The Parties accept the Applicant's compliance with the Board's required outcomes as defined by the Renewed Regulatory Framework for Electricity (RRFE). For the purpose of the settlement of the issues in this proceeding, and subject to the adjustments noted in this Settlement Proposal, the Parties accept that CNPI's proposed rates in the 2017 Test Year will, in all reasonably foreseeable circumstances, allow the Applicant to meet its obligations to its customers while maintaining its financial viability.

1 PLANNING

1.1 Capital

Is the level of planned capital expenditures appropriate and is the rationale for planning and pacing choices appropriate and adequately explained, giving due consideration to:

- Customer feedback and preferences;
- Productivity;
- Compatibility with historical expenditures;
- Compatibility with applicable benchmarks;
- Reliability and service quality;
- Impact on distribution rates;
- Trade-offs with OM&A spending;
- Government-mandated obligations; and
- The objectives of Canadian Niagara Power and its customers.

Complete Settlement

The Parties accept the 2017 capital expenditures as appropriate.

The Parties note that the sub-issues relating to "Productivity" and "Trade-offs with OM&A spending", while settled in relation to the proposed Capital Plan, remain unsettled to the extent that they relate to the appropriateness of the proposed OM&A budget under unsettled issue 1.2 "OM&A".

A summary of gross capital expenditures is presented in Table 3 below.

Table 3: 2017 Gross Capital Expenditures

Category	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
System Access	908,897	908,897	0	908,897	0
System Renewal	4,990,817	4,990,817	0	4,990,817	0
System Service	1,841,678	1,841,678	0	1,841,678	0
General Plant	2,015,766	2,015,766	0	2,015,766	0
Total Expenditure	9,757,158	9,757,158	0	9,757,158	0

For the purposes of settlement of all the issues in this proceeding, the Parties accept the evidence of CNPI that the level of planned capital expenditures and the rationale for planning and pacing choices are

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 13 of 49 Filed: December 1, 2016

appropriate in order to maintain system reliability, service quality objectives and the reliable and safe operations of the distribution system.

Evidence References

- Ex.1/Tab 1/Sch.2 Management Discussion and Analysis
- Ex.1/Tab 2/Sch.4 Rate Base and Capital Plan
- Ex.1/Tab 10/Sch.2 Impact of RRFE on the Current Application
- Exhibit 2: Rate Base, Including Ex.2/Tab 2/Sch.1/App.A Distribution System Plan

IR Responses

- 2-Staff-18 to 2-Staff-56
- 2-Energy Probe-5 to 2-Energy Probe-9
- 2-VECC-7 to 2-VECC-16

Technical Conference Undertakings

None

Supporting Parties

1.2 OM&A

Is the level of planned OM&A expenditures appropriate and is the rationale for planning choices appropriate and adequately explained, giving due consideration to:

- Customer feedback and preferences;
- Productivity;
- Compatibility with historical expenditures;
- Compatibility with applicable benchmarks;
- Reliability and service quality;
- Impact on distribution rates;
- Trade-offs with capital spending;
- Government-mandated obligations; and
- The objectives of Canadian Niagara Power and its customers.

No Settlement

The issue of OM&A is not settled and will proceed to hearing.

A summary of the OM&A expenditures, adjusted for IR responses and answers given at the technical conference is presented in Table 4 below for the purposes of the hearing of this issue.

The parties specifically note that one aspect of the unsettled OM&A issue relates to the accounting treatment for Pension and OPEB costs in rates, including the possibility of a new variance account related to Pension and OPEB costs; accordingly the related issues 4.1 and 4.2 remain unsettled in recognition of the Pension and OPEB cost issue, described in more detail under those issues.

Table 4: 2017 Test Year OM&A Expenditures

Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)
Operations	1,847,897	1,847,897	0
Maintenance	2,259,049	2,259,049	0
Billing and Collecting	1,960,026	1,960,026	0
Community Relations	40,150	40,150	0
Administrative and General	4,437,601	4,467,601	30,000
Total Expenditure	10,544,723	10,574,723	30,000

Not Settled

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 15 of 49 Filed: December 1, 2016

Evidence References

- Ex.1/Tab 1/Sch.2 Management Discussion and Analysis
- Ex.1/Tab 2/Sch.5 Operations, Maintenance and Administrative Expense
- Ex.1/Tab 10/Sch.2 Impact of RRFE on the Current Application
- Exhibit 4: Operating Costs

IR Responses

- 4-Staff-58 to 4-Staff-82
- 4-Energy Probe-14 to 4-Energy Probe-16
- 4-VECC-25 to 4-VECC-30

Technical Conference Undertakings

None

Supporting Parties

2 REVENUE REQUIREMENT

Are all elements of the Revenue Requirement reasonable, and have they been appropriately determined in accordance with OEB policies and practices?

Complete Settlement

This issue is settled to the extent that the parties agree that the methodology used by CNPI to calculate the Revenue Requirement is appropriate. However, as that calculation relies on inputs from issues that remain outstanding, the final calculation cannot be performed until the incorporation of the results of the Board's decision on unsettled issues.

A summary of the adjusted Revenue Requirement reflecting adjustments and settled issues in accordance with the above is presented in Table 5 below.

Table 5: Revenue Requirement

	Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Cost of Capital	Regulated Return on Capital	6,456,937	6,129,330	(327,608)	6,128,463	(866)
Cost of Capital	Regulated Rate of Return	7.18%	6.84%	-0.34%	6.84%	0.00%
Rate Base & Capital	Rate Base	89,924,481	89,662,520	(261,962)	89,649,845	(12,675)
Expenditures	Working Capital	72,787,072	75,183,128	2,396,056	75,014,128	(169,000)
Expenditures	Working Capital Allowance	5,459,030	5,638,735	179,704	5,626,060	(12,675)
	Amortization/Depreciation	4,766,329	4,724,996	(41,333)	4,724,996	0
Operating Expenses	Grossed up Income Taxes	526,758	521,759	(4,999)	521,599	(161)
Operating expenses	Property Taxes	103,000	103,000	0	103,000	0
	OM&A	10,441,723	10,471,723	30,000	10,471,723	0
	Service Revenue Requirement	22,294,747	21,950,808	(343,939)	21,949,781	(1,027)
Revenue	Other Revenues	2,424,445	2,448,193	23,748	2,548,193	100,000
	Base Revenue Requirement	19,870,302	19,502,615	(367,687)	19,401,588	(101,027)
Requirement	Grossed up Revenue					
	Deficiency / (Sufficiency)	2,316,325	1,769,650	(546,675)	1,668,623	(101,027)

An updated Revenue Requirement Work Form Model has been filed though the OEB's e-filing service.

Evidence References

- Ex.1/Tab 2/Sch.1 Revenue Requirement
- Exhibit 6
- Test Year RRWF

IR Responses

- 6-Energy Probe-19
- Updated RRWF

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 17 of 49 Filed: December 1, 2016

Technical Conference Undertakings

- JTC1.1
- JTC1.3
- Updated RRWF

Supporting Parties

All

2.1.1 Cost of Capital

Partial Settlement

The Parties agree to CNPI's proposed cost of capital parameters as updated to reflect the Board's deemed cost of capital parameters for the 2017 test year. The parties note that any changes to the cost of capital calculations that result from the Board's decision on unsettled issues will be recognized in an update to these calculations.

The parties have not agreed on whether it is appropriate to recognize and if so how to recognize in revenue requirement or rates any differential between the Applicant's cost of long term debt and current market rates for long term debt, or any change in the cost of long-term debt in 2018.

Table 6 below details the cost of capital calculation.

Table 6: Cost of Capital Calculation

	Initial A	pplication			
	(%)	(\$)	(%)		(\$)
Debt					
Long-term Debt	56.00%	\$50,357,710	6.14%		\$3,091,963
Short-term Debt	4.00%	\$3,596,979	1.65%	_	\$59,350
Total Debt	60.00%	\$53,954,689	5.84%	_	\$3,151,314
Equity					
Common Equity	40.00%	\$35,969,793	9.19%		\$3,305,624
Preferred Shares	0.00%	\$-	0.00%		\$ -
Total Equity	40.00%	\$35,969,793	9.19%	_	\$3,305,624
Total	100.00%	\$89,924,481	7.18%		\$6,456,937
	Settlemen	t Agreement			
	Settlemen	t Agreement (\$)	(%)		(\$)
Debt		-	(%)		(\$)
Debt Long-term Debt		-	(%) 5.81%	(1)	(\$) \$2,916,847
	(%)	(\$)		(1) (1)	
Long-term Debt	(%) 56.00%	(\$) \$50,203,913	5.81%		\$2,916,847
Long-term Debt Short-term Debt	(%) 56.00% 4.00%	(\$) \$50,203,913 \$3,585,994	5.81% 1.76%		\$2,916,847 \$63,113
Long-term Debt Short-term Debt Total Debt	(%) 56.00% 4.00%	(\$) \$50,203,913 \$3,585,994	5.81% 1.76%		\$2,916,847 \$63,113
Long-term Debt Short-term Debt Total Debt	(%) 56.00% 4.00% 60.00%	(\$) \$50,203,913 \$3,585,994 \$53,789,907	5.81% 1.76% 5.54%	(1)	\$2,916,847 \$63,113 \$2,979,961
Long-term Debt Short-term Debt Total Debt Equity Common Equity	(%) 56.00% 4.00% 60.00%	(\$) \$50,203,913 \$3,585,994 \$53,789,907 \$35,859,938	5.81% 1.76% 5.54% 8.78%	(1)	\$2,916,847 \$63,113 \$2,979,961 \$3,148,503

<u>Notes</u>

(1)

Cost of capital rate changes per JTC 1.1. Additional changes in \$ amounts due to cumulative impact of adjustments required based on IR and TC responses.

Evidence References

- Ex.1/Tab 2/Sch.6 Cost of Capital
- Exhibit 5 Capital Structure

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 20 of 49 Filed: December 1, 2016

IR Responses

- 5-Staff-84
- 5-Energy Probe-18
- 5-VECC-32

Technical Conference Undertakings

None

Supporting Parties

Complete Settlement

The Parties accept the evidence of CNPI that the rate base calculations, after making the adjustment to the working capital rate base as detailed in this Settlement Proposal, is reasonable and have been appropriately determined in accordance with OEB policies and practices. Table 7 below outlines CNPI's Rate Base calculation. However as there are unsettled issues that impact the final Rate Base calculation, the issue remains unsettled until unsettled issues that are proceeding to hearing are resolved.

Table 7: Rate Base

Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Gross Fixed Assets (Average)	147,209,031	146,726,031	(483,000)	146,726,031	0
Accumulated Depreciation (Average)	(62,743,580)	(62,702,246)	41,334	(62,702,246)	0
Net Fixed Assets (Average)	84,465,451	84,023,785	(441,666)	84,023,785	0
Working Capital Base	72,787,072	75,183,128	2,396,056	75,014,128	(169,000)
Working Capital Allowance (%)	7.5%	7.5%	0.0%	7.5%	0
Allowance for Working Capital	5,459,030	5,638,735	179,704	5,626,060	(12,675)
Total Rate Base	89,924,481	89,662,520	(261,962)	89,649,845	(12,675)

Note - Placeholder values used for the following unsettled items:

Working Capital Base (Settled with exception of OM&A component)

Allowance for Working Capital (Settled with exception of OM&A impact on Working Capital Base)

Total Rate Base (calculation includes both settled and placeholder values)

Evidence References

- Ex.1/Tab 2/Sch.4 Rate Base and Capital Plan
- Exhibit 2

IR Responses

- 2-Staff-20
- 2-Energy Probe-5

Technical Conference Undertakings

None

Supporting Parties

2.1.3 Working Capital Allowance

Complete Settlement

The Working Capital Allowance base has been updated to reflect the agreed upon updates to:

• The removal of amounts related to vehicle depreciation from the OM&A component of the calculation.

The Parties accepted the revised Working Capital Allowance amount incorporating the changes noted above. Table 8 below illustrates the calculation of the Working Capital Allowance, subject to any adjustments for components of the Working Capital Allowance calculation that are proceeding to hearing.

Table 8: Working Capital Allowance Calculation

Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Operations	1,847,897	1,847,897	0	1,847,897	0
Maintenance	2,259,049	2,259,049	0	2,259,049	0
Billing and Collecting	1,960,026	1,960,026	0	1,960,026	0
Community Relations	43,150	43,150	0	43,150	0
Administrative and General	4,331,601	4,361,601	30,000	4,361,601	0
Property Taxes	103,000	103,000	0	103,000	0
Total	10,544,723	10,574,723	30,000	10,574,723	0
Cost of Power	62,242,349	64,439,405	2,197,056	64,439,405	0
Working Capital Base	72,787,072	75,014,128	2,227,056	74,845,128	(169,000)
Working Capital Allowance (%)	7.5%	7.5%	0%	7.5%	0%
Working Capital Allowance (\$)	5,459,030	5,626,060	167,029	5,613,385	(12,675)

Evidence References

• Ex.2/Tab 1/Sch.4-7 – Allowance for Working Capital

IR Responses

- 1-Staff-17
- 3-VECC-18
- 4-Energy Probe-15

Technical Conference Undertakings

None

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 23 of 49 Filed: December 1, 2016

Supporting Parties All

2.1.4 Depreciation

Complete Settlement

The parties accept that the updated forecast of depreciation/amortization expenses are appropriate.

Table 9: Depreciation

Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Depreciation	4,766,330	4,724,996	(41,334)	4,724,996	0

Evidence References

• Ex.4/Tab 11 – Depreciation/Amortization/Depletion

IR Responses

- 2-Staff-19
- 2-Staff-21
- 2-Energy Probe-5
- 4-Staff-83
- 4-Energy Probe-17

Technical Conference Undertakings

• JTC1.9

Supporting Parties

2.1.5 Taxes

Complete Settlement

The Parties accept the evidence of CNPI that its forecast taxes as adjusted are appropriate and have been correctly determined in accordance with OEB accounting policies and practices, subject to any adjustments for components of the calculation that are proceeding to hearing.

A summary of the adjusted Taxes is presented in Table 10 below.

Table 10: Income Taxes

Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Grossed-Up Income Taxes	526,758	521,759	(4,999)	521,599	(161)

An updated Tax Model has been submitted in Live Excel format as part of this Settlement Proposal.

Evidence References

- Ex. 4/Tab 12 Income Taxes/Property Taxes
- CNPI Income Tax Model

IR Responses

4-Staff-76 to 4-Staff-77

Technical Conference Undertakings

- JTC1.1
- JTC1.3

Supporting Parties

2.1.6 Other Revenue

Complete Settlement

The Parties accept the evidence of CNPI that its proposed Other Revenues are appropriate and have been correctly determined in accordance with OEB accounting policies and practices, subject to an increase to the total forecast other revenue of \$100,000 for the test year to more closely match the historical trend in Other Revenues.

Table 11: Other Revenue

Description	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Specific Service Charges	158,264	158,264	0	158,264	0
Late Payment Charges	354,100	354,100	0	354,100	0
Other Revenue	449,635	449,635	0	449,635	0
Other Income of Deductions	1,462,446	1,486,194	23,748	1,586,194	100,000
Total Revenue Offsets	2,424,445	2,448,193	23,748	2,548,193	100,000

Evidence References

- Ex.3/Tab 1/Sch.1 Overview of Operating Revenue
- Ex.3/Tab 4 Other Distribution Revenue

IR Responses

- 3-Staff-57
- 3-Energy Probe-11 to 3-Energy-Probe-13
- 3-VECC-23 to 3-VECC-24

Technical Conference Undertakings

- JTC1.3
- JTC1.4

Supporting Parties

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 27 of 49 Filed: December 1, 2016

2.2 Has the revenue requirement been accurately determined based on these elements?

Complete Settlement

The Parties accept the evidence of CNPI that the proposed Base Revenue Requirement has been determined accurately, such that any changes to the components that make up the Base Revenue Requirement as a result of a Board Decision can be properly incorporated into an accurate redetermination of the Base Revenue Requirement.

3 LOAD FORECAST, COST ALLOCATION AND RATE DESIGN

3.1 Are the proposed load and customer forecast, loss factors, CDM adjustments and resulting billing determinants appropriate, and, to the extent applicable, are they an appropriate reflection of the energy and demand requirements of Canadian Niagara Power's customers?

Complete Settlement

The Parties accept the evidence of CNPI and its methodology used for the load forecast, customer forecast, loss factors and CDM adjustments, based on the updates resulting from CNPI's response to 3.0-VECC-18(c).

The resulting billing determinants are presented in Table 12 below.

Table 12: 2017 Test Year Billing Determinants (for Cost Allocation and Rate Design)

	Customers /	Application (A)		IR/TC Responses (B) V		Variance (C) = (B) - (A)		Settlement (D)		Variance (E) = (D) - (B)	
Rate Class	Connections	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW
Residential	26,074	198,077,803		201,294,289		3,216,486		201,294,289		0	
GS < 50	2,489	67,907,332		69,390,323		1,482,991		69,390,323		0	
GS > 50	217	184,944,203	593,383	190,144,345	610,067	5,200,142	16,684	190,144,345	610,067	0	0
Embedded Distributor	1	5,129,448	13,717	5,205,754	13,921	76,306	204	5,205,754	13,921	0	0
Street Light	5,713	2,781,556	8,591	2,991,556	9,240	210,000	649	2,991,556	9,240	0	0
Sentinel Light	695	629,014	1,916	629,014	1,916	0	0	629,014	1,916	0	0
USL	35	1,462,761		1,462,761		0		1,462,761		0	
Total	35,224	460,932,117	617,607	471,118,042	635,144	10,185,925	17,537	471,118,042	635,144	0	0

An updated copy of CNPI's Load Forecast Model has been submitted in Live Excel format as part of this Settlement Proposal.

Evidence References

- Ex.1/Tab 2/Sch.3 Load Forecast Summary
- Ex.3/Tabs 1-3 Load and Revenue Forecast, CDM Adjustments to Load Forecast, Accuracy of Load Forecast and Variance Analysis
- CNPI(Elenchus) 2017 Load Forecast Model

IR Responses

• 3-VECC-17 to 3-VECC-22

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 29 of 49 Filed: December 1, 2016

Technical Conference Undertakings

• JTC1.5

Supporting Parties

All

3.1.1 Customer/Connection Forecast

The Parties accepted CNPI's 2017 Test year customer / connection forecast as proposed in the Application with no changes and summarized below:

Table 13: Summary of Load Forecast Customer Counts/Connections

Rate Class	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Residential	26,074	26,074	0	26,074	0
GS < 50	2,489	2,489	0	2,489	0
GS > 50	217	217	0	217	0
Embedded Distributor	1	1	0	1	0
Street Light	5,713	5,713	0	5,713	0
Sentinel Light	695	695	0	695	0
USL	35	35	0	35	0
Total	35,224	35,224	0	35,224	0

Evidence References

- Ex.1/Tab 2/Sch.3 Load Forecast Summary
- Ex.3/Tabs 1-3 Load and Revenue Forecast, CDM Adjustments to Load Forecast, Accuracy of Load Forecast and Variance Analysis
- CNPI(Elenchus) 2017 Load Forecast Model

IR Responses

• 3-Energy Probe-10

Technical Conference Undertakings

None

Supporting Parties

3.1.2 Load Forecast

The Parties agreed to the following updates in the Load Forecast Model:

• Re-evaluation of CDM persistence, corresponding adjustment to the Trend variable, and updates to employment forecasts as outlined in CNPI's response to 3.0-VECC-18(c)

Table 14 below provides the weather normalized billed kWh and billed demand forecast by rate class. The billed demand forecast for the 2017 Test Year is based on an average ratio of kW to kWh for the classes that are billed distribution on a demand basis.

Table 14: Summary of Load Forecast Billed kWh (CDM Adjusted)

	Customers /	Application (A)		IR/TC Resp	onses (B)	(B) Variance (C) = (B) - (A)		Settlement (D)		Variance (E) = (D) - (B)	
Rate Class	Connections	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW
Residential	26,074	198,077,803		201,294,289		3,216,486		201,294,289		0	
GS < 50	2,489	67,907,332		69,390,323		1,482,991		69,390,323		0	
GS > 50	217	184,944,203	593,383	190,144,345	610,067	5,200,142	16,684	190,144,345	610,067	0	0
Embedded Distributor	1	5,129,448	13,717	5,205,754	13,921	76,306	204	5,205,754	13,921	0	0
Street Light	5,713	2,781,556	8,591	2,991,556	9,240	210,000	649	2,991,556	9,240	0	0
Sentinel Light	695	629,014	1,916	629,014	1,916	0	0	629,014	1,916	0	0
USL	35	1,462,761		1,462,761		0		1,462,761		0	
Total	35,224	460,932,117	617,607	471,118,042	635,144	10,185,925	17,537	471,118,042	635,144	0	0

Evidence References

- Ex.1/Tab 2/Sch.3 Load Forecast Summary
- Ex.3/Tabs 1-3 Load and Revenue Forecast, CDM Adjustments to Load Forecast, Accuracy of Load Forecast and Variance Analysis
- CNPI(Elenchus) 2017 Load Forecast Model

IR Responses

• 3-VECC-17 to 3-VECC-22

Technical Conference Undertakings

• JTC1.5

Supporting Parties

3.1.1 Loss Factors

Complete Settlement

The Parties agree to the Loss Factors proposed in the Application with no changes as summarized below:

Table 15: Loss Factors

Description	2017 Proposed
Total Loss Factor – Secondary Metered Customer <5,000kW	1.0530
Total Loss Factor – Primary Metered Customer <5,000kW	1.0425

Evidence References

• Ex.8/Tab 1/Sch.8 – Loss Adjustment Factors

IR Responses

None

Technical Conference Undertakings

None

Supporting Parties

3.1.2 LRAMVA Baseline

Complete Settlement

The Parties agree to the LRAMVA baseline for 2017 (and persisting until CNPI's next Cost of Service proceeding) as proposed in CNPI's response to 3.0-VECC-18(c) and presented in Table 16 below.

Table 16: LRAMVA Baseline kWhs and kWs

	2017 kWh		LRAMVA	LRAMVA
Rate Class	Pre-CDM Adjustment	Share	Baseline kWh	Baseline kW
Residential	202,582,789	14.02%	1,648,000	
GS < 50	70,434,323	11.16%	1,312,000	
GS > 50	196,138,345	67.91%	7,981,000	25,607
Street Light	3,720,056	6.90%	811,000	2,505
Total	472,875,514	100.00%	11,752,000	28,111

Evidence References

- Ex.3/Tab 1/Sch.2/App.A 2016-2017 Weather Normalized Load Forecast Elenchus Report
- CNPI(Elenchus) 2017 Load Forecast Model
- Ex.3/Tab 2/Sch.1 CDM Adjustments to Load Forecast

IR Responses

• 3-VECC-17 to 3-VECC-22

Technical Conference Undertakings

None

Supporting Parties

3.2 Is the proposed cost allocation methodology, and are the allocations and revenue-to-cost ratios, appropriate?

Complete Settlement

The Parties accept the evidence of CNPI that, subject to the adjustments identified below, the cost allocation methodology, allocations and revenue-to-cost ratios are appropriate.

CNPI agrees to reset the newly created Embedded Distributor Class to a revenue to cost ratio of 100%. CNPI updated its Cost Allocation Model to reflect all changes up to Partial Settlement, set the Embedded Distributor Class revenue to cost ratio to 100%, and then re-balanced its revenue requirement across classes by bringing the Streetlight revenue to cost ratio to the 120% ceiling of the Board's policy range and increasing both the Residential and USL ratios until the revenue requirement balanced.

Table 17: Summary of 2017 Revenue to Cost Ratios

Rate Class	Application (A)	IR/TC Responses (B)	Variance (C) = (B) - (A)	Settlement (D)	Variance (E) = (D) - (B)
Residential	95.37%	94.84%	(0.53%)	94.85%	0.01%
GS < 50	109.22%	109.56%	0.34%	109.49%	(0.07%)
GS > 50	106.96%	108.32%	1.36%	108.19%	(0.13%)
Embedded Distributor	95.37%	94.84%	(0.53%)	100.00%	5.16%
Street Light	120.00%	120.00%	0.00%	120.00%	0.00%
Sentinel Light	105.08%	104.46%	(0.62%)	104.35%	(0.11%)
USL	95.37%	94.84%	(0.53%)	94.85%	0.01%

Methodology and target for Embedded Distributor class settled

Final results subject to change based on update of placeholder values for unsettled items in the Cost Allocation model

The Parties accept the evidence of CNPI that all elements of the cost allocation methodology allocation and Revenue-to-Cost ratios have been correctly determined in accordance with OEB policies and practices.

Evidence References

- Exhibit 7
- 2017 Test Year Cost Allocation Model

IR Responses

- 7-Staff-85
- 7-Energy Probe-20
- 7-VECC-33 to 7-VECC-36

Technical Conference Undertakings

• JTC1.12

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 35 of 49 Filed: December 1, 2016

Supporting Parties All

3.3 Are Canadian Niagara Power's proposals for rate design appropriate?

Complete Settlement

The Parties accept the evidence of CNPI that all elements of the rate design have been correctly determined in accordance with OEB policies and practices. Table 18 shows the rates that result from the Application as adjusted by the interrogatory and technical conference responses and the settled issues in this Proposal, with those rates being subject to further adjustments based on the results of the hearing of the unsettled issues.

Table 18: January 1, 2017 Distribution Rates

Rate Class	Fix	ced Rate	Billing Determinant	Var	iable Rate	Fixed %	Variable %
Residential	\$	29.45	kWh	\$	0.0112	80.37%	19.63%
GS < 50	\$	30.92	kWh	\$	0.0252	34.59%	65.41%
GS > 50	\$	166.12	kW	\$	7.2864	9.26%	90.74%
Embedded Distributor	\$	604.27	kW	\$	8.3238	5.89%	94.11%
Street Light	\$	3.97	kW	\$	8.6511	77.32%	22.68%
Sentinel Light	\$	5.57	kW	\$	6.4563	78.97%	21.03%
USL	\$	48.32	kWh	\$	0.0262	34.58%	65.42%

Methodology settled

Final rates subject to change based on update of placeholder values for unsettled items in the Rate Design model

Evidence References

- Exhibit 8
- 2017 Test Year Rate Design Model

IR Responses

• 8-VECC-37 to 8-VECC-38

Technical Conference Undertakings

None

Supporting Parties

3.3.1 Residential Rate Design

Complete Settlement

The Parties accept that CNPI's proposal to move to a fully fixed monthly charge by 2020 is in accordance with OEB policies, subject to any adjustments that flow from the decision on unsettled issues.

Evidence References

- Ex.8/Tab 1/Sch.1 Rate Design Overview
- 2017 Test Year Rate Design Model

IR Responses

None

Technical Conference Undertakings

None

Supporting Parties

CNPI, VECC, ENERGY PROBE

Parties Taking No Position

SEC

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 38 of 49 Filed: December 1, 2016

3.4 Are the proposed Retail Transmission Service Rates and Low Voltage service rates appropriate?

Complete Settlement

The Parties accept the evidence of CNPI that all elements of the Retail Transmission Service Rates and Low Voltage Service Rates have been correctly determined in accordance with OEB policies and practices.

- Issue 3.4.1 Low Voltage Service Rates
- Issue 3.4.2 Retail Transmission Service Rates

3.4.1 Low Voltage Service Rates

Complete Settlement

The Parties have agreed to the Low Voltage rates presented in Table 19 below.

Table 19: Low Voltage Service Rates

Rate Class	% Allocation	Charges	Volume	Rate	Determinant
Residential	42.1%	\$ 59,743.43	211,962,886	\$ 0.0003	kWh
GS < 50	12.5%	\$ 17,754.14	73,068,010	\$ 0.0002	kWh
GS > 50	43.5%	\$ 61,674.53	610,067	\$ 0.1011	kW
Embedded Distributor	1.0%	\$ 1,407.34	13,921	\$ 0.1011	kW
Street Light	0.5%	\$ 712.74	9,240	\$ 0.0771	kW
Sentinel Light	0.1%	\$ 158.07	1,916	\$ 0.0825	kW
USL	0.3%	\$ 381.75	1,540,287	\$ 0.0002	kWh
Total	100.0%	\$ 141,832.00	285,666,040		

Evidence References

• Ex.8/Tab 1/Sch.7 – Low Voltage Service Charges

IR Responses

• 8-VECC-38

Technical Conference Undertakings

None

Supporting Parties

3.4.2 Retail Transmission Service Rates

Complete Settlement

The Parties have agreed to the RTSR rates presented in Table 20 below. An updated copy of the OEB's RTSR model has been submitted in live Excel format as part of this settlement proposal.

Table 20: RTSR Network and Connection Rates

Rate Class	Billing Determinant	Propo	osed Network	Propo	osed Connection
Residential	kWh	\$	0.0067	\$	0.0057
GS < 50	kWh	\$	0.0057	\$	0.0049
GS > 50	kW	\$	2.4230	\$	2.0556
Embedded Distributor	kW	\$	2.4230	\$	2.0556
Street Light	kW	\$	1.7934	\$	1.5684
Sentinel Light	kW	\$	2.0649	\$	1.6775
USL	kWh	\$	0.0060	\$	0.0050

Evidence References

- Ex.8/Tab 1/Sch.2 Retail Transmission Service Rates
- RTSR Workform

IR Responses

• Updated RTSR Workform

Technical Conference Undertakings

None

Supporting Parties

4 ACCOUNTING

4.1 Have all impacts of any changes in accounting standards, policies, estimates, and adjustments been properly identified and recorded, and is the rate-making treatment of each of these impacts appropriate?

Partial Settlement

The Parties accept the evidence of CNPI that all impacts of changes to accounting standards, policies, estimates, and adjustments have been properly identified and recorded in accordance with the OEB's policies and properly reflected in rates, with the exception of the manner in which Pension and OPEB costs have been accounted for in rates.

CNPI has incorporated Pension and OPEB costs into rates on an accrual accounting basis; one or more intervenors may explore at the hearing the appropriateness of including Pension and/or OPEB costs in rates on a cash accounting basis, an accounting change that would impact the revenue requirement for the test period. CNPI notes that the issue of the appropriate regulatory treatment of Pensions and OPEB costs is currently being fully reviewed by the Ontario Energy Board in consultation EB-2015-0040 "Regulatory Treatment of Pensions and Other Post-Employment Benefit Costs", such that in CNPI's view it would be premature to decide that issue in this case prior to the Board's determination of the issue for the all LDCs.

An updated EDDVAR Continuity Schedule is provided in working Excel format reflecting this Settlement Proposal and includes the calculation of the various riders discussed above.

Evidence References

Ex.1/Tab 4/Sch.1 – Accounting Standard

IR Responses

None

Technical Conference Undertakings

None

Supporting Parties

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 42 of 49 Filed: December 1, 2016

4.2 Are Canadian Niagara Power's proposals for deferral and variance accounts, including the balances in the existing accounts and their disposition, requests for new accounts and the continuation of existing accounts, appropriate?

Partial Settlement

With three exceptions, detailed below, the Parties accept the evidence of CNPI that all elements of the applied for deferral and variance accounts are appropriate, including the balances in the existing accounts and their disposition on a harmonized basis commencing January 1, 2017 and the continuation of existing accounts.

Table 21 below summarizes the amounts for disposition and associated rate riders by rate class.

Table 21: DVA and LRAMVA Rate Riders

		[Disposition	of [IST/Stranded Meters		
Rate Class	Billing Determinant		\$/kWh		\$/kW		month/customer
Residential	kWh	-\$	0.0033			-\$	0.1500
GS < 50	kWh	-\$	0.0035				
GS > 50	kW			-\$	1.1120	\$	10.6500
Embedded Distributor	kW			-\$	1.3389		
Street Light	kW			-\$	1.1592		
Sentinel Light	kW			-\$	1.1754		
USL	kWh	-\$	0.0036				

Rate Class	Disposition of DVA's (2017) - Applicable to Non-RPP Only (\$/kWh)
Residential	\$ 0.0066
GS < 50	\$ 0.0066
GS > 50	\$ 0.0066
GS > 50 - Class A	\$ 0.0023
Embedded Distributor	\$ 0.0066
Street Light	\$ 0.0066
USL	\$ 0.0066

			Disposit	ion of LRAMVA			
Rate Class	Billing Determinant	\$/kWh		\$/kWh			\$/kW
Residential	kWh	\$	0.0006				
GS < 50	kWh	\$	0.0023				
GS > 50	kW			\$	0.1687		

In connection with the unsettled issue concerning the proper accounting treatment of Pension and OPEB related OM&A costs, parties may make submissions in support of a new variance account related to Pension and OPEB costs, such that issue 4.2 remains unsettled to account for the possibility of that new variance account as a result of the resolution of the unsettled issue.

The Parties note that the likelihood of the Board releasing a decision on the unsettled issues prior to the proposed January 1, 2017 implementation date for all proposed rates is unlikely. CNPI in its application requested an order making its current rates interim as of January 1, 2017. The Parties acknowledge that the DVA and LRAMVA rate riders may be impacted as a result of an implementation date other than January 1, 2017.

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 44 of 49 Filed: December 1, 2016

In connection with the unsettled issue concerning the cost of long-term debt, some parties may take the position that a variance account should be established to capture some or all changes in the cost of long-term debt.

Evidence References

- Ex.1/Tab 2/Sch.8 Deferral and Variance Accounts
- Exhibit 9
- 2017 Test Year EDDVAR Continuity Schedule

IR Responses

- 4-Staff-66 to 4-Staff-75
- 4-VECC-31
- 9-Staff-86 to 9-Staff-88
- 9-Energy Probe-21
- 9-VECC-39

Technical Conference Undertakings

- JTC1.6
- JTC1.7
- JTC1.10

Supporting Parties

4.2.1 Effective Date

No Settlement

The Parties note that the likelihood of the Board releasing a decision on the unsettled issues prior to the proposed January 1, 2017 implementation date for all proposed rates is unlikely. CNPI in its application requested an order making its current rates interim as of January 1, 2017. The issue of the appropriateness of a January 1, 2017 effective date for rates remains an unsettled issue.

Evidence References

- Ex.1/Tab 6/Sch.1 The Application
- Ex.1/Tab 6/Sch.9 List of Approvals Requested

IR Responses

None

Technical Conference Undertakings\

None

Supporting Parties

5 ATTACHMENTS

Attachment A	Revenue Requirement Workform
Attachment B	2016 and 2017 Fixed Asset Continuity Schedule

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 47 of 49 Filed: December 1, 2016

Attachment A – Revenue Requirement Workform





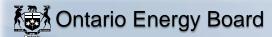
Version 7.02

Utility Name	Canadian Niagara Power Inc.
Service Territory	
Assigned EB Number	EB-2016-0061
Name and Title	Brian Vander Vloet, Manager Regulatory Accountin
Phone Number	905-871-0330 ext 3208
Email Address	brian.vandervloet@cnpower.com

The RRWF has been enhanced commencing with 2017 rate applications to provide estimated base distribution rates. The enhanced RRWF is not intended to replace a utility's formal rate generator model which should continue to be the source of the proposed rates as well as the final ones at the conclusion of the proceeding. The load forecasting addition made to this model is intended to be demonstrative only and does not replace the information filed in the utility's application. In an effort to minimize the incremental work required from utilities, the cost allocation and rate design additions to this model do in fact replace former appendices that were required to be filed as part of the cost of service (Chapter 2) filing requirements.

This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your application. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing the application or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.

While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.



1. Info 8. Rev Def Suff

2. Table of Contents 9. Rev_Reqt

3. Data_Input_Sheet 10. Load Forecast

4. Rate_Base 11. Cost Allocation

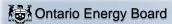
5. Utility Income 12. Residential Rate Design

6. Taxes_PILs 13. Rate Design and Revenue Reconciliation

7. Cost_of_Capital 14. Tracking Sheet

Notes:

- (1) Pale green cells represent inputs
- (2) Pale green boxes at the bottom of each page are for additional notes
- (3) Pale yellow cells represent drop-down lists
- (4) Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.
- (5) Completed versions of the Revenue Requirement Work Form are required to be filed in working Microsoft Excel format.



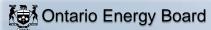
Data Input (1)

		Initial Application	(2)	Adjustments			Settlement Agreement	(6)	Adjustments	Per Board Decision	
1	Rate Base										
	Gross Fixed Assets (average)	\$147,209,031		(\$483,000)	###	\$	146,726,031			\$146,726,031	
	Accumulated Depreciation (average)	(\$62,743,580)	(5)	\$41,334	###		(\$62,702,246)			(\$62,702,246)	
	Allowance for Working Capital:	*				_					
	Controllable Expenses Cost of Power	\$10,544,723 \$62,242,349		(\$139,000) \$2,366,056	###	\$	10,405,723 64,608,405			\$10,405,723 \$64,608,405	
	Working Capital Rate (%)	7.50%	(9)	φ2,300,030	****	φ	7.50%	(9)		7.50%	9)
2	Utility Income Operating Revenues:										
	Distribution Revenue at Current Rates	\$17.535.614		\$197.351			\$17.732.965	###	\$0	\$17.732.965	
	Distribution Revenue at Proposed Rates	\$19.870.307		(\$468.715)			\$19.401.592	###	\$0	\$19.401.592	
	Other Revenue:	0.010.0100.							**	***************************************	
	Specific Service Charges	\$158,264		\$0			\$158,264		\$0	\$158,264	
	Late Payment Charges	\$354,100		\$0			\$354,100		\$0	\$354,100	
	Other Distribution Revenue Other Income and Deductions	\$449,635		\$0			\$449,635		\$0	\$449,635	
	Other Income and Deductions	\$1,462,446		\$123,748			\$1,586,194	###	\$0	\$1,586,194	
	Total Revenue Offsets	\$2,424,445	(7)	\$123,748			\$2,548,193	###	\$0	\$2,548,193	
	Operating Expenses:										
	OM+A Expenses	\$10,441,723		\$30,000	###	\$	10,471,723		\$ -	\$10,471,723	
	Depreciation/Amortization	\$4,766,330		(\$41,334)	###	\$	4,724,996		\$ -	\$4,724,996	
	Property taxes	\$103,000		\$ -		\$	103,000		\$ -	\$103,000	
	Other expenses										
3	Taxes/PILs										
	Taxable Income:										
	Adjustments required to arrive at taxable income	(\$1,844,756)	(3)				(\$1,651,012)	###		(\$1,651,012)	
	Utility Income Taxes and Rates:										
	Income taxes (not grossed up)	\$387,167					\$383,375			\$383,375	
	Income taxes (grossed up)	\$526,758					\$521,599			\$521,599	
	Federal tax (%)	15.00%					15.00%			15.00%	
	Provincial tax (%)	11.50%					11.50%			11.50%	
	Income Tax Credits	(\$13,460)					(\$13,460)			(\$13,460)	
4	Capitalization/Cost of Capital Capital Structure:										
	Long-term debt Capitalization Ratio (%)	56.0%					56.0%			56.0%	
	Short-term debt Capitalization Ratio (%)	4.0%	(8)				4.0%	(8)		4.0%	8)
	Common Equity Capitalization Ratio (%)	40.0%					40.0%			40.0%	
	Prefered Shares Capitalization Ratio (%)						,				
	•	100.0%					100.0%			100.0%	
	Cost of Capital										
	Long-term debt Cost Rate (%)	6.14%					5.81%	###		5.81%	
	Short-term debt Cost Rate (%)	1.65%					1.76%	###		1.76%	
	Common Equity Cost Rate (%)	9.19%					8.78%	###		8.78%	
	Prefered Shares Cost Rate (%)										

General

Data inputs are required on Sheets 3. Data from Sheet 3 will automatically complete calculations on sheets 4 through 9 (Rate Base through Revenue Requirement). Sheets 4 through 9 do not require any inputs except for notes that the Applicant may wish to enter to support the results. Pale green cells are available on sheets 4 through 9 to enter both footnotes beside key cells and the related text for the notes at the bottom of each sheet.

- All inputs are in dollars (\$) except where inputs are individually identified as percentages (%)
- Data in column E is for Application as originally filed. For updated revenue requirement as a result of interrogatory responses, technical or settlement conferences, etc., use column M and Adjustments in column I
- Net of addbacks and deductions to arrive at taxable income.
- Average of Gross Fixed Assets at beginning and end of the Test Year
- Average of Accumulated Depreciation at the beginning and end of the Test Year. Enter as a negative amount.
- Select option from drop-down list by clicking on cell M10. This column allows for the application update reflecting the end of discovery or Argument-in-Chief. Also, the outcome of any Settlement Process can be reflected.
- Input total revenue offsets for deriving the base revenue requirement from the service revenue requirement
- 4.0% unless an Applicant has proposed or been approved for another amount.
- The default Working Capital Allowance factor is 7.5% (of Cost of Power plus controllable expenses), per the letter issued by the Board on June 3, 2015. Alternatively, a WCA factor based on lead-lag study, with supporting rationale could be provided.
- (10) See 2-Energy Probe-5. Reduction in 2016 capitalized expenditures of \$483k and corresponding depreciation expense and CCA adjustments.
- (11) See 1-Staff-17. Increase relates to \$30k Letter of Credit fees; -\$169k WCA adjustment for vehicle depreciation included in OM&A per Settlement.
- (12) COP adjustment based 3.0-VECC-18 (load forecast and other price updates)
- (13) +\$30k per 3.0-VECC-23 (Interest and Dividend Income); Offset \$6k adjustment related to JTC 1.3 (OEB 4375 revenue decrease); +\$100k per Settlement
- (14) Adjustment based on load forecast update as per 3.0-VECC-18.
 (15) Decrease in total revenue required at proposed rates resulting from the net impact of all adjustments required based on IR and TC responses and partial settlement.
- (16) JTC 1.1. Cost of capital update per OEB release on Oct 27, 2016.



Rate Base and Working Capital

Rate Base

	Nate Base						
Line No.	Particulars	Initial Application	Adjustments	;	Settlement Agreement	Adjustments	Per Board Decision
1	Gross Fixed Assets (average) (2	\$147,209,031	(\$483,000)	(3)	\$146,726,031	\$ -	\$146,726,031
2	Accumulated Depreciation (average) (2	(\$62,743,580)	\$41,334	(3)	(\$62,702,246)	\$ -	(\$62,702,246)
3	Net Fixed Assets (average) (2	\$84,465,451	(\$441,666)		\$84,023,785	\$ -	\$84,023,785
4	Allowance for Working Capital (1	\$5,459,030	\$167,029	,	\$5,626,060	\$ -	\$5,626,060
5	Total Rate Base	\$89,924,481	(\$274,637)		\$89,649,845	<u> </u>	\$89,649,845

(1) Allowance for Working Capital - Derivation

Controllable Expenses		\$10,544,723	(\$139,000) (4)	\$10,405,723	\$ -	\$10,405,723
Cost of Power		\$62,242,349	\$2,366,056 (5)	\$64,608,405	\$ -	\$64,608,405
Working Capital Base	<u></u>	\$72,787,072	\$2,227,056	\$75,014,128	\$ -	\$75,014,128
Working Capital Rate %	(1)	7.50%	0.00%	7.50%	0.00%	7.50%
Working Capital Allowance		\$5,459,030	\$167,029	\$5,626,060	\$ -	\$5,626,060

Notes

6 7

9

Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2017 cost of service applications is 7.5%, per the letter issued by the Board on June 3, 2015.

(3) See 2-Energy Probe-5. Reduction in 2016 capitalized expenditures of \$483k and corresponding depreciation expense adjustments.

See 1-Staff-17. Increase relates to \$30k Letter of Credit fees. \$169k WCA adjustment for vehicle depreciation included in OM&A per Settlement.

COP adjustment based 3.0-VECC-18 (load forecast and other price updates).

Average of opening and closing balances for the year.



Utility Income

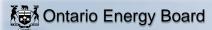
Line No.	Particulars	Initial Application	Adjustments	•	Settlement Agreement	Adjustments	Per Board Decision
1	Operating Revenues: Distribution Revenue (at Proposed Rates)	\$19,870,307	(\$468,715)	##	\$19,401,592	\$ -	\$19,401,592
2	Other Revenue (1	\$2,424,445	\$123,748	##	\$2,548,193	<u> </u>	\$2,548,193
3	Total Operating Revenues	\$22,294,752	(\$344,967)	,	\$21,949,785	\$ -	\$21,949,785
4 5 6 7 8	Operating Expenses: OM+A Expenses Depreciation/Amortization Property taxes Capital taxes Other expense	\$10,441,723 \$4,766,330 \$103,000 \$ - \$ -	\$30,000 (\$41,334) \$ - \$ -	##	\$10,471,723 \$4,724,996 \$103,000 \$ -	\$ - \$ - \$ - \$ - \$ -	\$10,471,723 \$4,724,996 \$103,000 \$ -
9	Subtotal (lines 4 to 8)	\$15,311,053	(\$11,334)		\$15,299,719	\$ -	\$15,299,719
10	Deemed Interest Expense	\$3,151,314	(\$171,353)		\$2,979,961	<u> \$ -</u>	\$2,979,961
11	Total Expenses (lines 9 to 10)	\$18,462,367	(\$182,687)		\$18,279,680	<u> </u>	\$18,279,680
12	Utility income before income taxes	\$3,832,385	(\$162,280)	;	\$3,670,105	<u> </u>	\$3,670,105
13	Income taxes (grossed-up)	\$526,758	(\$5,159)		\$521,599	<u> </u>	\$521,599
14	Utility net income	\$3,305,628	(\$157,121)	:	\$3,148,507	<u> \$ -</u>	\$3,148,507
Notes	Other Revenues / Reven	ue Offsets					
(1)	Specific Service Charges Late Payment Charges Other Distribution Revenue Other Income and Deductions	\$158,264 \$354,100 \$449,635 \$1,462,446	\$ - \$ - \$ - \$123,748	##	\$158,264 \$354,100 \$449,635 \$1,586,194	\$ - \$ - \$ - \$ -	\$158,264 \$354,100 \$449,635 \$1,586,194
	Total Revenue Offsets	\$2,424,445	\$123,748	:	\$2,548,193	<u> \$ - </u>	\$2,548,193

⁽¹⁾ Decrease in total revenue required at proposed rates resulting from the net impact of all adjustments required based on IR and TC responses.

^{(2) \$30}k adjustment based on 3.0-VECC-23. Increase relates to Interest and Dividend Income. Offset \$6k adjustment related to JTC 1.3. Decrease relates to

⁽³⁾ See 1-Staff-17. Increase relates to \$30k Letter of Credit fees.

⁽⁴⁾ See 2-Energy Probe-5. Reduction in 2016 capitalized expenditures of \$483k and corresponding depreciation expense adjustments.

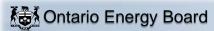


Taxes/PILs

Line No.	Particulars	Application	Settlement Agreement		Per Board Decision	
	<u>Determination of Taxable Income</u>					
1	Utility net income before taxes	\$3,305,624	\$3,148,503		\$3,148,503	
2	Adjustments required to arrive at taxable utility income	(\$1,844,756)	(\$1,651,012)	(1)	(\$1,651,012)	
3	Taxable income	\$1,460,868	\$1,497,491		\$1,497,491	
	Calculation of Utility income Taxes					
4	Income taxes	\$387,167	\$383,375	(1)	\$383,375	
6	Total taxes	\$387,167	\$383,375		\$383,375	
7	Gross-up of Income Taxes	\$139,591	\$138,224		\$138,224	
8	Grossed-up Income Taxes	\$526,758	\$521,599		\$521,599	
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$526,758	\$521,599		\$521,599	
10	Other tax Credits	(\$13,460)	(\$13,460)		(\$13,460)	
	Tax Rates					
11 12 13	Federal tax (%) Provincial tax (%) Total tax rate (%)	15.00% 11.50% 26.50%	15.00% 11.50% 26.50%		15.00% 11.50% 26.50%	

Notes

(1) Changes are due to cumulative impact of all adjustments required based on IR and TC responses and partial settlement.



Capitalization/Cost of Capital

Line No.	Particulars	Capitaliz	ation Ratio	Cost Rate	_	Return
		Initial A	pplication			
	Debt	(%)	(\$)	(%)		(\$)
1 2 3	Long-term Debt Short-term Debt Total Debt	56.00% 4.00% 60.00%	\$50,357,710 \$3,596,979 \$53,954,689	6.14% 1.65% 5.84%	_	\$3,091,963 \$59,350 \$3,151,314
4 5 6	Equity Common Equity Preferred Shares Total Equity	40.00% 0.00% 40.00%	\$35,969,793 \$ - \$35,969,793	9.19% 0.00% 9.19%		\$3,305,624 \$- \$3,305,624
7	Total	100.00%	\$89,924,481	7.18%	_	\$6,456,937
		Settlemen	t Agreement			
		(%)	(\$)	(%)		(\$)
1 2 3	Long-term Debt Short-term Debt Total Debt	56.00% 4.00% 60.00%	\$50,203,913 \$3,585,994 \$53,789,907	5.81% 1.76% 5.54%	(1) (1)	\$2,916,847 \$63,113 \$2,979,961
4 5 6	Equity Common Equity Preferred Shares Total Equity	40.00% 0.00% 40.00%	\$35,859,938 \$ - \$35,859,938	8.78% 0.00% 8.78%	(1)	\$3,148,503 \$ - \$3,148,503
7	Total	100.00%	\$89,649,845	6.84%	=	\$6,128,463
		Per Boar	d Decision			
8 9 10	Debt Long-term Debt Short-term Debt Total Debt	(%) 56.00% 4.00%	(\$) \$50,203,913 \$3,585,994	(%) 5.81% 1.76%		(\$) \$2,916,847 \$63,113
10	Equity	60.00%	\$53,789,907	5.54%	=	\$2,979,961
11 12 13	Common Equity Preferred Shares Total Equity	40.00% 0.00% 40.00%	\$35,859,938 \$- \$35,859,938	8.78% 0.00% 8.78%	_	\$3,148,503 \$ - \$3,148,503
14	Total	100.00%	\$89,649,845	6.84%	=	\$6,128,463

Notes

(1)

Cost of capital rate changes per JTC 1.1. Additional changes in \$ amounts due to cumulative impact of adjustments required based on IR and TC responses, and partial settlement. See Tab 14 for details.

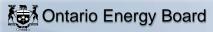


Revenue Deficiency/Sufficiency

		Initial Appli	cation	Settlement Agreement		Per Board Decision		
Line No.	Particulars	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	
1 2 3	Revenue Deficiency from Below Distribution Revenue Other Operating Revenue Offsets - net	\$17,535,614 \$2,424,445	\$2,441,458 \$17,428,849 \$2,424,445	\$17,732,965 \$2,548,193	\$1,668,623 \$17,732,969 \$2,548,193	\$17,732,965 \$2,548,193	\$1,668,623 \$17,732,969 \$2,548,193	
4	Total Revenue	\$19,960,059	\$22,294,752	\$20,281,158	\$21,949,785	\$20,281,158	\$21,949,785	
5 6 8	Operating Expenses Deemed Interest Expense Total Cost and Expenses	\$15,311,053 \$3,151,314 \$18,462,367	\$15,311,053 \$3,151,314 \$18,462,367	\$15,299,719 \$2,979,961 \$18,279,680	\$15,299,719 \$2,979,961 \$18,279,680	\$15,299,719 \$2,979,961 \$18,279,680	\$15,299,719 \$2,979,961 \$18,279,680	
9	Utility Income Before Income Taxes	\$1,497,692	\$3,832,385	\$2,001,478	\$3,670,105	\$2,001,478	\$3,670,105	
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$1,844,756)	(\$1,844,756)	(\$1,651,012)	(\$1,651,012)	(\$1,651,012)	(\$1,651,012)	
11	Taxable Income	(\$347,064)	\$1,987,629	\$350,466	\$2,019,093	\$350,466	\$2,019,093	
12 13	Income Tax Rate Income Tax on Taxable Income	26.50% \$ -	26.50% \$526,722	26.50% \$92,874	26.50% \$535,060	26.50% \$92,874	26.50% \$535,060	
14 15	Income Tax Credits Utility Net Income	(\$13,460) \$1,511,152	(\$13,460) \$3,305,628	(\$13,460) \$1,922,065	(\$13,460) \$3,148,507	(\$13,460) \$1,922,065	(\$13,460) \$3,148,507	
16	Utility Rate Base	\$89,924,481	\$89,924,481	\$89,649,845	\$89,649,845	\$89,649,845	\$89,649,845	
17	Deemed Equity Portion of Rate Base	\$35,969,793	\$35,969,793	\$35,859,938	\$35,859,938	\$35,859,938	\$35,859,938	
18	Income/(Equity Portion of Rate Base)	4.20%	9.19%	5.36%	8.78%	5.36%	8.78%	
19	Target Return - Equity on Rate Base	9.19%	9.19%	8.78%	8.78%	8.78%	8.78%	
20	Deficiency/Sufficiency in Return on Equity	-4.99%	0.00%	-3.42%	0.00%	-3.42%	0.00%	
21 22	Indicated Rate of Return Requested Rate of Return on Rate Base	5.18% 7.18%	7.18% 7.18%	5.47% 6.84%	6.84% 6.84%	5.47% 6.84%	6.84% 6.84%	
23	Deficiency/Sufficiency in Rate of Return	-2.00%	0.00%	-1.37%	0.00%	-1.37%	0.00%	
24 25 26	Target Return on Equity Revenue Deficiency/(Sufficiency) Gross Revenue Deficiency/(Sufficiency)	\$3,305,624 \$1,794,471 \$2,441,458 ⁽¹⁾	\$3,305,624 \$4	\$3,148,503 \$1,226,438 \$1,668,623 (1)	\$3,148,503 \$4	\$3,148,503 \$1,226,438 \$1,668,623 (1)	\$3,148,503 \$4	

Notes:

Revenue Deficiency/Sufficiency divided by (1 - Tax Rate)



Revenue Requirement

Line No.	Particulars	Application		Settlement Agreement		Per Board Decision	
1	OM&A Expenses	\$10,441,723		\$10,471,723	(3)	\$10,471,723	
2	Amortization/Depreciation	\$4,766,330		\$4,724,996	(4)	\$4,724,996	
3	Property Taxes	\$103,000		\$103,000	` ,	\$103,000	
5	Income Taxes (Grossed up)	\$526,758		\$521,599	(5)	\$521,599	
6	Other Expenses	\$ -			` ,		
7	Return						
	Deemed Interest Expense	\$3,151,314		\$2,979,961	(5)	\$2,979,961	
	Return on Deemed Equity	\$3,305,624		\$3,148,503	(5)	\$3,148,503	
8	Service Revenue Requirement						
ŭ	(before Revenues)	\$22,294,748		\$21,949,781	(5)	\$21,949,781	
9	Revenue Offsets	\$2,424,445		\$2,548,193	(6)	\$2,548,193	
10	Base Revenue Requirement	\$19,870,303		\$19,401,588	(5)	\$19,401,588	
	(excluding Tranformer Owership Allowance credit adjustment)	<u> </u>			(-)	<u> </u>	
11	Distribution revenue	\$19,870,307		\$19,401,592	(5)	\$19,401,592	
12	Other revenue	\$2,424,445		\$2,548,193	(6)	\$2,548,193	
13	Total revenue	\$22,294,752		\$21,949,785	(5)	\$21,949,785	
	Total Tovolido	ΨΕΕ,ΕΟ 1,1 ΘΕ		Ψ21,010,700	(0)	Ψ21,010,100	
14	Difference (Total Revenue Less Distribution Revenue Requirement						
	before Revenues)	\$4	(1)	\$4	(1)	\$4	(1)

Summary Table of Revenue Requirement and Revenue Deficiency/Sufficiency

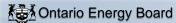
	Application	Settlement Agreement	Δ% (2)	Per Board Decision	Δ% (2)
Service Revenue Requirement Grossed-Up Revenue	\$22,294,748	\$21,949,781	(\$0)	\$21,949,781	(\$1)
Deficiency/(Sufficiency)	\$2,441,458	\$1,668,623	(\$0)	\$1,668,623	(\$1)
Base Revenue Requirement (to be recovered from Distribution Rates)	\$19,870,303	\$19,401,588	(\$0)	\$19,401,588	(\$1)
Revenue Deficiency/(Sufficiency) Associated with Base Revenue					
Requirement	\$2,334,693	\$1,668,627	(\$0)	\$1,668,627	(\$1)

Notes

(1) Line 11 - Line 8

Percentage Change Relative to Initial Application

- See 1-Staff-17. Increase relates to \$30k Letter of Credit fees.
- (4) See 2-Energy Probe-5. Reduction in 2016 capitalized expenditures of \$483k and corresponding depreciation expense adjustments.
- (5) Changes are due to cumulative impact of all adjustments required based on IR and TC responses and partial settlement. See Tab 14 for
 - \$30k adjustment based on 3.0-VECC-23. Increase relates to Interest and Dividend Income. Offset \$6k adjustment related to JTC 1.3. +\$100k per Settlement



Load Forecast Summary

This spreadsheet provides a summary of the customer and load forecast on which the test year revenue requirement is derived. The amounts serve as the denominators for deriving the rates to recover the test year revenue requirement for purposes of this RRWF.

The information to be input is inclusive of any adjustments to kWh and kW to reflect the impacts of CDM programs up to and including CDM programs planned to be executed in the test year. i.e., the load forecast adjustments determined in **Appendix 2-IB** and in Exhibit 3 of the application.

Appendix 2-IB is still required to be filled out, as it also provides a year-over-year variance analysis of demand growth andf trends from historical actuals to the Bridge and Test Year forecasts.

Stage in Process:

Settlement Agreement

Customer Class
Input the name of each customer class.
Residential
GS < 50 GS > 50
Embedded Distributor
Street Light
Sentinel Light USL
USL

	In	itial Application	
Customer / Connections		kWh	kW/kVA (1)
Test Year average or mid-year		Annual	Annual
26,074 2,489		198,077,803 67,907,332	
217 1		184,944,203 5,129,448	593,383 13,717
5,713		2,781,556	8,591
695		629,014	1,916
35		1,462,761	

Settlement Agreement								
Customer / Connections Test Year average	kWh Annual	kW/kVA ⁽¹⁾ Annual						
or mid-year								
26,074 2,489 217 1 5,713 695 35	201,294,289 69,390,323 190,144,345 5,205,754 2,991,556 629,014 1,462,761	610,067 13,921 9,240 1,916						

Per Board Decision								
Customer /	kWh	kW/kVA (1)						
Connections Test Year average or mid-year	Annual	Annual						

Total 460,932,117

Notes:

(1) Input kW or kVA for those customer classes for which billing is based on demand (kW or kVA) versus energy consumption (kWh)



Cost Allocation and Rate Design

Name of Customer Class (9)		rational Strate of Strate			llocated Class mue Requirement	%
					(7A)	
Residential	S	11.876.815	62.62%	S	13.857.162	63 13%
38 < 50	S	2.376.032	12.53%	S	2.718.979	12 39%
38 > 50	S	4.090.319	21.57%	S	4.783.667	21 79%
Embedded Distributor				S	134.692	0.61%
Street Light	S	503.635	2.66%	s	323.227	1.47%
Sentinel Light	S	82.426	0.43%	S	62.797	0.29%
USL	8	38.954	0.19%	S	69.260	0.32%
				_		
Total	\$	18,966,181	100.00%	\$	21,949,785	100.00%
			Service Revenue		21,949,781,02	
			Requirement (from			

- (1) Case Miscaré Revea Replanear, firm Dars C-1, Reveau v. Catil (ER, vv. 6), form to Cast Alexation Daily in the application. This excludes casts in defends del ordinates. Account 470:: Les village (EV) Casts and size excluded.

 20 texts Districtors, "Ordinated Collection," account 470:: Les village (EV) Casts and size excluded.

 31 texts Districtors, "Ordinates account account of the Collection Collect

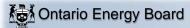
Name of Customer Class	Customer Class Load Forecast (LF) X current approved			F X current roved rates X	LFX	Proposed Rates	Miscellaneous Revenues		
		(7B)		rrcn -		(7D)	(7E)		
Residential	2	10.393.768	S	11.371.795	S	11.466.427	S	1.677.078	
GS < 50	S	2.440.047	S	2.689.649	S	2.689.649	S	307.463	
GS > 50	S	4.270.634	S	4.672.489	S	4.672.489	S	502.892	
Embedded Distributor	S	94.935	S	103.869	S	123.127	S	11.565	
Street Light	S	439.797	S	481.181	S	352.402	S	35.470	
Sentinel Light	S	53.757	S	58.815	S	58.815	S	6.711	
USL	2	40.027	8	43.793	S	58.682	S	7.013	
			=		-		=		
Total		17.732.965	8	19.401.592	8	19.401.592	8	2.548.193	

- (4) In claims 78 to 70, LF mans Last Fericaci of Armal Billing Quarties (i.e., costernes or convections, as applicable X12 months, and VM). Will visible applicable customer classes. Exclusive reviews from the addes and may dispute the applicable customer classes. Exclusive reviews from the addes and may dispute the contract applicable customer classes. Exclusive reviews from the addes and may dispute the contract applicable contract the participant of the addes and the addes and the residence of the addes and th

Name of Customer Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year	(7C + 7E) / (7A)	(7D ± 7F) / (7A)	
	2016 %	4.	46	%
	~	**	-	~
Residential	01 42%	04 17%	04.85%	85.115
2 GS < 50	109 94%	109.49%	109 49%	80 - 120
3 GS > 50	119 94%	108 19%	108 10%	80 - 120
4 Embedded Distributor		85 70%	100.00%	
5 Street Light	98 28%	150 84%	120 00%	80 - 120
Sentinel Light	91.42%	104 35%	104 35%	80 - 120
7 USL	120.00%	79.98%	0.4 85%	80 - 120
3				
9				
3				
1				
2				
3				
4				
5				
8				
7				
3				
9				

- (8) Providing Approved Reseaus-to-Cost (RC) Raises For most applicates, the most source year would be the third year (at the bisself) of the Rinci Cop IR period. For exemple, if the significant collection (1) and the Rinci Cop IR period. For exemple, if the significant is the research on the year, he lead the Rinci Cop IR 2015. Foreign 1, 2015 reseal be equal to these in Blass Cop Rinci Cop IR 2015. Foreign 1, 2015 research the equal to these in Blass Cop Rinci Cop IR 2015. Foreign 1, 2015 research the equal to these in Blass Cop Rinci Cop IR 2015. Foreign 1, 2015 research the equal to the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015. Foreign 2, 2015 research the Rinci Cop IR 2015 research t

Name of Customer Class		Proposed Revenue-to-Cost Ratio									
	Test Year	Price Cap IR I									
	2017	2018	2019								
Residential	94.85%	94.85%	94.85%	85.115							
GS < 50	109.49%	109.49%	109.49%	80 - 120							
GS > 50	108.19%	108.19%	108.19%	80 - 120							
Embedded Distributor	100.00%	100.00%	100.00%								
Street Light	120.00%	120.00%	120.00%	80 - 120							
Sentinel Light	104.35%	104.35%	104.35%	80 - 120							
USL	94.85%	94.85%	94.85%	80 - 120							



New Rate Design Policy For Residential Customers

Please complete the following tables.

A Data Inputs (from Sheet 10. Load Forecast)

Test Year Billing Determinants for Residential Class									
Customers	26,074								
kWh	201,294,289								
Proposed Residential Class Specific	\$ 11,466,426.90								
Revenue Requirement ¹									

Residential Base Rates on Current Tariff								
Monthly Fixed Charge (\$)	\$	23.44						
Distribution Volumetric Rate (\$/kWh)	\$	0.0152						

B Current Fixed/Variable Split

	Base Rates	Billing Determinants	Revenue	% of Total Revenue
Fixed	23.44	26,074	\$ 7,334,094.72	70.56%
Variable	0.0152	201,294,289	\$ 3,059,673.19	29.44%
TOTAL	-	-	\$ 10,393,767.91	-

C Calculating Test Year Base Rates

Number of Remaining Rate Design Policy	
Transition Years ²	4

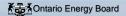
	 st Year Revenue @ Current F/V Split	Test Year Base Rates @ Current F/V Split		econciliation - Test 'ear Base Rates @ Current F/V Split
Fixed	\$ 8,090,988.92	25.86	\$	8,091,283.68
Variable	\$ 3,375,437.98	0.0168	\$	3,381,744.06
TOTAL	\$ 11,466,426.90	-	\$	11,473,027.74

		Revenue @ new	Final Adjusted	Revenue Reconciliation @
	New F/V Split	F/V Split	Base Rates	Adjusted Rates
Fixed	77.92%	\$ 8,934,848.41	\$ 28.56	\$ 8,936,081.28
Variable	22.08%	\$ 2,531,578.49	\$ 0.0126	\$ 2,536,308.04
TOTAL	-	\$ 11,466,426.90	-	\$ 11,472,389.32

Checks ³										
Change in Fixed Rate	\$	2.70								
Difference Between Revenues @		\$5,962.42								
Proposed Rates and Class Specific		0.05%								

Notae:

- 1 The final residential class specific revenue requirement, excluding allocated Miscellaneous Revenues, as shown on Sheet 11. Cost Allocation, should be used (i.e. the revenue requirement after any proposed adjustments to R/C ratios).
- The distributor should enter the number of years remaining before the transition to fully fixed rates is completed. A distributor transitioning to fully fixed rates over a four year period and began the transition in 2016 would input the number "3" into cell D40. A distributor transitioning over a five-year period would input the number "4". Where the change in the residential rate design will result in the fixed charge increasing by more than \$4/year, a distributor may propose an additional transition year.
- 3 Change in fixed rate due to rate design policy should be less than \$4. The difference between the proposed class revenue requirement and the revenue at calculated base rates should be minimal (i.e. should be reasonably considered as a rounding error)



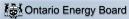
Rate Design and Revenue Reconciliation

This sheet replaces Appendix 2-V, and provides a simplified model for calculating the standard monthly and voluentric rates based on the allocated class revenues and fixed/variable split resulting from the cost allocation study and rate design and as proposed by the applicant. However, the RRWF does not replace the rate generator model that an applicant distributor may use in support of its application. The RRWF provides a demonstrative check on the derivation of the revenue requirement and on the proposed base distribution rates to recover the revenue requirement, based on summary information from a more detailed rate generator model and other models that applicants use for cost allocation, load forecasting, taxes/PILs, etc.

	Stage in Process:	cess: Settlement Agreement				Clas	ss Allocated Reve	nues					Dist	tribution Rates			Revenue Reconciliation	on				
		Customer and Lo	oad Forecast				From Sheet 11. Cost Allocation and Sheet 12. Residential Rate Design			able Splits ² se entered as a veen 0 and 1	as a											
	Customer Class From sheet 10, Load Forecast	Volumetric Charge Determinant	Customers / Connections	kWh	kW or kVA	Total Class Revenue Requirement	Monthly Service Charge	Volumetric	Fixed	Variable	Transformer Ownership Allowance ¹ (\$)	Monthly Ser	No. of decimals	Volumeti	ic Rate No. of decimals	MSC Revenues	Volumetric revenues	Distribution Revenues less Transformer Ownership				
1223344556677889#################################	Residential GS < 50 GS > 50 Embedded Distributor Street Light Sentinel Light USL	KWh KWh KW KW KW KW KW	26,074 2,489 217 1 5,713 695 35	201,294,289 69,390,323 199,144,355 5,205,754 2,991,556 629,014 1,462,761	- 610,067 13,921 9,240 1,916 - - - - - - - - - - -	\$ 11,466,427 \$ 2,669,649 \$ 4,672,489 \$ 123,127 \$ 352,402 \$ 58,815 \$ 58,682	\$ 9,215,196 \$ 923,494 \$ 432,568 \$ 7,251 \$ 272,466 \$ 46,445 \$ 20,295	\$ 2,251,230 \$ 1,746,155 \$ 4,239,921 \$ 115,875 \$ 79,936 \$ 12,370 \$ 38,387	80.37% 34.59% 9.29% 5.89% 77.32% 74.97% 34.59%	19.63% 65.41% 99.74% 94.11% 22.68% 21.03% 65.42%	\$ 205,287	\$29.44 \$30.9; \$166.1: \$604.2 \$3.9; \$5.5; \$48.3;		\$0.0112 AW \$0.0252 AW \$7.2864 AW \$3.238 AW \$3.6511 AW \$6.4653 AW \$0.0262 AW	h	\$ 9,214,551.60 \$ 923,518.56 \$ 432,576.48 \$ 7,251.24 \$ 272,676.48 \$ 20,294.40 \$ 20,294.40 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5 \$ 5	\$ 2,254,496.0368 \$ 1,748,636.1396 \$ 1,445,192.1888 \$ 115,875.6198 \$ 79,335.1640 \$ 12,270.2793 \$ 38,324.382 \$ \$ \$. \$. \$. \$. \$. \$. \$. \$. \$.	\$11,469,047.64 \$2,672,154.70 \$123,128,67 \$123,128,68 \$58,224,07 \$58,824,07 \$58,618,74 \$5 \$- \$- \$5 \$- \$				
								т	otal Transformer Owr	ership Allowance	\$ 205,287					Total Distribution R		\$19,406,357.16				
	tes: Transformer Ownership Allowance is	entered as a positive a	amount, and only for	those classes to w	hich it applies.									Rates recover revenu	e requirement	Base Revenue Requi Difference % Difference	uirement	\$19,401,588.02 \$ 4,769.14 0.025%				

Transformer Ownership Allowance is entered as a positive amount, and only for those classes to which it applies.

The Fixed/Variable split, for each customer class, drives the "tate generator" portion of this sheet of the RRWF. Only the "fixed" fraction is entered, as the sum of the "fixed" and "variable" portions must sum to 100%. For a distributor that may set the Monthly Service Charge, the "fixed" ratio is calcutated as: [MSC x (average number of customers or connections) x 12 months] / (Class Allocated Revenue Requirement).



Tracking Form

The first row shown, labelled "Original Application", summarizes key statistics based on the data inputs into the RRWF. After the original application filing, the applicant provides key changes in capital and operating expenses, load forecasts, cost of capital, etc., as revised through the processing of the application. This could be due to revisions or responses to interrogatories. The last row shown is the most current estimate of the cost of service data reflecting the original application and any updates provided by the applicant distributor (for updated evidence, responses to interrogatories, undertakings, etc.)

Please ensure a Reference (Column B) and/or Item Description (Column C) is entered. Please note that unused rows will automatically be hidden and the PRINT AREA set when the PRINT BUTTON on Sheet 1 is activated.

(1) Short reference to evidence material (interrogatory response, undertaking, exhibit number, Board Decision, Code, Guideline, Report of the Board, etc.)

(2) Short description of change, issue, etc.

Summary of Proposed Changes

		Cost of Capital			Capital	pital Rate Base and Capital Expenditures							Operating Expenses						Revenue Requirement						
	Reference ⁽¹⁾	Item / Description ⁽²⁾	R	egulated leturn on Capital	Regulated Rate of Return		Rate Base		Vorking Capital		king Capital owance (\$)		nortization / epreciation	Та	axes/PILs		OM&A	II	Service Revenue equirement	R	Other Revenues			Reve Defic	
		Original Application	\$	6,456,937	7.18%	\$	89,924,481	\$ 7	72,787,072	\$	5,459,030	\$	4,766,330	\$	526,758	\$	10,441,723	\$	22,294,748	\$	2,424,445	\$	19,870,303	\$ 2,	,441,458
1	N/A	Formula error correction in tab 8. cell F34 to get to correct starting point for Grossed up Rev Def/Suff.	\$	6,456,937	7.18%	\$	89,924,481	\$ 7	72,787,072	\$	5,459,030	\$	4,766,330	\$	526,758	\$	10,441,723	\$	22,294,748	\$	2,424,445	\$	19,870,303	\$ 2,	,316,326
		Change	\$	-	0.00%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	-\$	125,132
2		Reduced 2016 capitalized expenditures of \$483,000, 2017 depreciation of \$41,334	\$	6,425,224	7.18%	\$	89,482,815	\$ 7	72,787,072	\$	5,459,030	\$, ,	\$	572,394	\$	10,441,723	\$	22,267,337	\$	2,424,445	\$	19,842,892	\$ 2,	,288,915
		Change	-\$	31,713	0.00%	-\$	441,666	\$	-	\$	-	-\$	41,334	\$	45,636	\$	-	-\$	27,411	\$	-	-\$	27,411	-\$	27,411
3	1-Staff-17	\$30,000 letter of credit fees	\$	6,425,386	7.18%				72,817,072	\$	5,461,280	\$	4,724,996	\$			10,471,723		22,297,529		2,424,445	\$			
		Change	\$	162	0.00%	\$	2,250	\$	30,000	\$	2,250	\$	-	\$	30	\$	30,000	\$	30,192	\$	-	\$	30,192	\$	30,192
4	3.0-VECC-23	\$30,000 interest and dividend income	\$	6,425,386	7.18%	\$	89,485,065	\$ 7	72,817,072	\$	5,461,280	\$	4,724,996	\$	572,424	\$	10,471,723	\$	22,297,529	\$			19,843,084		
		Change	\$	-	0.00%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	30,000	-\$	30,000	-\$	30,000
5	3.0-VECC-18	Cost of power updated based on new load forecast and other price updates	\$	6,438,128	7.18%	\$	89,662,520	\$ 7	75,183,128	\$	5,638,735	\$	4,724,996	\$	574,776	\$	10,471,723	\$	22,312,623	\$	2,454,445	\$	19,858,178	\$ 2,	,304,200
		Change	\$	12,742	0.00%	\$	177,454	\$	2,366,056	\$	177,454	\$	-	\$	2,352	\$	-	\$	15,094	\$	-	\$	15,094	\$	15,094
6	3.0-VECC-18	Change in revenue due to new load forecast	\$	6,438,128	7.18%		89,662,520	\$ 7	75,183,128	\$	5,638,735	\$	4,724,996	\$	574,776	\$	10,471,723	\$	22,312,623	\$	2,454,445	\$	19,858,178		
		Change	\$	-	0.00%	5		\$	-	\$	-	\$	-	5	-	\$	-	\$	-	5	-	\$	-	-\$	178,988
7	JTC 1.3	Change in OEB 4375 revenue based on inclusion of grossed up PILS and adjusted for cost of capital changes	\$	6,438,128	7.18%	\$	89,662,520	\$ 7	75,183,128	\$	5,638,735	\$	4,724,996	\$	574,776	\$	10,471,723	\$	22,312,623	\$	2,448,193	\$	19,864,430	\$ 2,	131,464
		Change	\$	-	0.00%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	-\$	6,252	\$	6,252	\$	6,252
8	JTC 1.1	Change in cost of capital parameters Change	\$ -\$	6,129,330 308,798	6.84% -0.34%		89,662,520	\$ 7	75,183,128	\$	5,638,735	\$	4,724,996	\$ -\$	521,759 53,017		10,471,723	\$	21,950,808 361,815		2,448,193	\$	19,502,615 361,815		.769,650 361,814
			ľ	,		ľ		l				ľ		ľ	,	•			,	ľ		ľ	,		

Attachment B – 2016 and 2017 Fixed Asset Continuity Schedule

	Fixed Asset Continuity Schedule 1																
			Accour	nting Standard Year	MIFRS 2016												
CCA	OEB		Onening	1		Cost	Cost End of	1	Closing	Opening	Accumulated	Depreciation		Cost End of		Closina	Net Book
Class 2	Account 3	Description ³	Balance	Additions 4	Disposals	Adjustments	Period	Allocations	Balance	Balance	Additions	Disposals	Adjustments	Period	Allocations	Balance	Value
ECE	1608	Franchises & Consents	\$ 156,053	\$ -	\$ -	s -	\$ 156,053	\$ -	\$ 156,053	-\$ 46,816		\$ -	\$ -	-\$ 50,717	\$ -	\$ 50,717	\$ 105,336
1	1610	Misc. Intangible Plant Computer Software (Formally known as	\$ 40,576	\$ -	\$ -	\$ -	\$ 40,576	\$ -	\$ 40,576	-\$ 6,724	-\$ 1,014	\$ -	\$ -	-\$ 7,738	\$ -	-\$ 7,738	\$ 32,837
12	1611	Account 1925) Computer Software (Formally known as	\$ 964,671	\$ 679,305	\$ -	s -	\$ 1,643,976	s -	\$ 1,643,976	-\$ 419,256	-\$ 224,456	s -	s -	\$ 643,712	s -	\$ 643,712	\$ 1,000,264
12	1611A	Account 1925)	\$ 11,040,525	\$ 603,891	\$ -	\$ 4,500	\$ 11,648,916	\$ -	\$ 11,648,916	-\$ 7,205,019	-\$ 659,095	\$ -	-\$ 225	\$ 7,864,339	\$ -	\$ 7,864,339	\$ 3,784,577
CEC	1612	Land Rights (Formally known as Account 1906)	\$ 325,919	\$ 20.377	s -	s -	\$ 346.296	s -	\$ 346 296	-\$ 105.585	-S 7 146	s -	s -	-\$ 112 730	s -	-\$ 112.730	\$ 233.566
N/A	1805	Land	\$ 206,654	\$ 4,862	\$ -	s -	\$ 211,516	\$ -	\$ 211,516	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 211,516
47	1808	Buildings	\$ 3,475,850	\$ 233,975	\$ -	\$ -	\$ 3,709,825	\$ -	\$ 3,709,825	-\$ 1,069,628	-\$ 71,857	\$ -	\$ -	\$ 1,141,485	\$ -	\$ 1,141,485	\$ 2,568,340
13	1810	Leasehold Improvements					\$ -		\$ -					s -		\$ -	\$ -
47	1815	Transformer Station Equipment >50 kV					\$ -		\$ -					\$ -		\$ -	\$ -
47	1820	Distribution Station Equipment <50 kV	\$ 11,677,936		\$ -	\$ -	\$ 12,020,736	\$ -	\$ 12,020,736	-\$ 3,327,685		s -	\$ -	\$ 3,556,228	\$ -	\$ 3,556,228	\$ 8,464,508
47	1820A 1825	Distribution Station Equipment <50 kV Storage Battery Equipment	\$ 2,213,650	\$ 1,705,161	\$ -	3	\$ 3,918,811	3	\$ 3,918,811	-\$ 331,338	-\$ 76,065	\$.	3 .	-\$ 407,403	3 ·	\$ 407,403	\$ 3,511,408
47	1830	Poles, Towers & Fixtures	\$ 25.667.632	\$ 2.344.593	s -	s -	\$ 28.012.225	s -	\$ 28.012.225	-\$ 10.413.291	-\$ 625.581	s -	s -	\$ 11.038.872	s -	\$ 11.038.872	\$ 16.973.353
47	1835	Overhead Conductors & Devices	\$ 32,517,505	\$ 1,311,266	\$ -	s -	\$ 33,828,771	\$ -	\$ 33,828,771	-\$ 9,872,643		\$ -	\$ -	-\$ 10,626,791	\$ -	-\$ 10,626,791	\$ 23,201,980
47	1840	Underground Conduit	\$ 1,173,463	\$ 208,790	\$ -	\$ -	\$ 1,382,253	\$ -	\$ 1,382,253	-\$ 466,866		\$ -	\$ -	-\$ 500,814	\$ -	-\$ 500,814	\$ 881,439
47	1845	Underground Conductors & Devices	\$ 9,262,719	\$ 412,827	\$ -	\$ -	\$ 9,675,545	\$ -	\$ 9,675,545	-\$ 2,290,628	-\$ 231,806	\$ -	\$ -	-\$ 2,522,435	\$ -	-\$ 2,522,435	\$ 7,153,111
47	1850	Line Transformers	\$ 15,232,767	\$ 1,714,937	\$ -	s -	\$ 16,947,704	\$ -	\$ 16,947,704	-\$ 6,137,668		\$ -	\$ -	-\$ 6,590,404	\$ -	-\$ 6,590,404	\$ 10,357,301
47	1855	Services (Overhead & Underground)	\$ 10,879,936	\$ 724,666	\$ -	s -	\$ 11,604,602	\$ -	\$ 11,604,602	-\$ 3,287,542		\$ -	\$ -	-\$ 3,545,670	\$ -	-\$ 3,545,670	\$ 8,058,932
47	1860	Meters	\$ 624,091	\$ -	\$ -	\$ -	\$ 624,091	\$ -	\$ 624,091	-\$ 200,989		\$ -	\$ -	-\$ 220,805	\$ -	-\$ 220,805	\$ 403,286
47	1860A	Meters (Smart Meters)	\$ 5,267,102	\$ 228,500	\$ 79,179	\$ 244,865	\$ 5,661,288	\$ -	\$ 5,661,288	-\$ 2,162,516		\$ 31,289	\$ 23,767	-\$ 2,587,944 -\$ 348,991	\$ -	\$ 2,587,944	\$ 3,073,344
1	1860B 1865	Meters D Other Install on Cust Prem	\$ 592,403 \$ 133,938	\$ 79,807	\$ -	9 .	\$ 672,210 \$ 133,938	\$.	\$ 672,210 \$ 133,938	-\$ 329,631 -\$ 70,947		\$.	\$ -	-\$ 346,991 -\$ 84,341	\$.	-\$ 348,991 -\$ 84,341	\$ 323,219 \$ 49,597
	1875	D St Lites & Signal Systems	\$	\$.	š .	¢ .	\$ 100,000	\$.	\$	\$	\$ 10,004	\$.	\$.	\$.	š .	\$ 04,041	\$ 40,007
N/A	1905	Land			-	1	s -	Ť	s -	-	ľ	*	Ť	š -	*	š -	s -
47	1908	Buildings & Fixtures	\$ 912,520	\$ 20,000	\$ -	s -	\$ 932,520	\$ -	\$ 932,520	-\$ 218,453	-\$ 18,450	\$ -	\$ -	-\$ 236,903	\$ -	-\$ 236,903	\$ 695,617
13	1910	Leasehold Improvements	\$ 885,142	\$ 49,746	\$ -	s -	\$ 934,889	\$ -	\$ 934,889	-\$ 546,456		\$ -	\$ -	-\$ 677,631	\$ -	-\$ 677,631	\$ 257,257
8	1915	Office Furniture & Equipment (10 years)	\$ 1,500,666	\$ 23,000	\$ -	S -	\$ 1,523,666	\$ -	\$ 1,523,666	-\$ 1,337,297	-\$ 24,719	\$ -	\$ -	-\$ 1,362,016	\$ -	-\$ 1,362,016	\$ 161,650
8	1915	Office Furniture & Equipment (5 years)					\$ -	٠.	\$ -					s -		\$ -	\$ -
10	1920	Computer Equipment - Hardware	\$ 3,792,341	\$ 475,768	\$ -	S -	\$ 4,268,108	\$ -	\$ 4,268,108	-\$ 3,187,926	-\$ 298,642	\$ -	\$ -	-\$ 3,486,568	\$ -	-\$ 3,486,568	\$ 781,541
45	1920	Computer EquipHardware(Post Mar. 22/04)					s -		\$ -					s -		s -	\$ -
45.1	1920	Computer EquipHardware(Post Mar. 19/07)					s -		s -					s -		s -	s -
10	1930	Transportation Equipment (5 years)	\$ 594,329	\$ 72,700	\$ -	s -	\$ 667,029	\$ -	\$ 667,029	-\$ 433,206	-\$ 75,811	\$ -	\$ -	-\$ 509,017	\$ -	-\$ 509,017	\$ 158,012
10	1930A	Transportation Equipment (10 years)	\$ 3,464,915	\$ 294,300	\$ -	\$ -	\$ 3,759,215	\$ -	\$ 3,759,215	-\$ 1,990,779		\$ -	\$ -	-\$ 2,293,451	\$ -	-\$ 2,293,451	\$ 1,465,764
8	1935	Stores Equipment	\$ 166,638	\$ -	\$ -	s -	\$ 166,638	\$ -	\$ 166,638	-\$ 166,638		\$ -	\$ -	-\$ 166,638	\$ -	\$ 166,638	\$ -
8	1940	Tools, Shop & Garage Equipment	\$ 869,792	\$ 50,000	\$ -	\$ -	\$ 919,792	\$ -	\$ 919,792	-\$ 710,816		\$ -	\$ -	-\$ 736,211	\$ -	-\$ 736,211	\$ 183,582
8	1945 1950	Measurement & Testing Equipment	\$ 515,191 \$ 109,339	\$ 18,000	\$ -	\$ -	\$ 515,191 \$ 127,339	\$ -	\$ 515,191 \$ 127,339	-\$ 471,665 -\$ 100,148		\$ -	\$ -	-\$ 483,792 -\$ 103,462	\$ -	-\$ 483,792 -\$ 103,462	\$ 31,399 \$ 23,878
8	1950	Power Operated Equipment Communications Equipment	\$ 1,113,327	\$ 18,000	\$ -	8 -	\$ 127,339 \$ 1,148,487	\$ -	\$ 1,148,487	-\$ 100,148 -\$ 774,362		s -	\$ -	-\$ 103,462 -\$ 854,574	\$ -	-\$ 103,462 -\$ 854,574	\$ 23,878
8	1955	Communications Equipment (Smart Meters)	9 1,110,027	\$ 30,100	9 -	3	\$ 1,140,467	9	\$ 1,140,407	-9 174,302	-9 00,212	9	9	\$ -	9 -	\$ -	\$ 253,512
8	1960	Miscellaneous Equipment (10 years)	\$ 85.031	s -	s -	s -	\$ 85.031	s -	\$ 85.031	-\$ 67.483	-\$ 4.358	s -	s -	-\$ 71.841	s -	-\$ 71,841	\$ 13,190
8	1960A	Miscellaneous Equipment (5 years)	\$ 91,387	\$ -	\$ -	s -	\$ 91,387	\$ -	\$ 91,387	-\$ 71,984		\$ -	\$ -	-\$ 76,780	\$ -	-\$ 76,780	\$ 14,606
47	1975	Load Management Controls Utility Premises					s -		s -					s -		s -	s -
47	1980	System Supervisor Equipment	\$ 1,046,816	\$ -	\$ -	s -	\$ 1,046,816	\$ -	\$ 1,046,816	-\$ 719,618	-\$ 21,396	\$	\$ -	-\$ 741,014	\$ -	-\$ 741,014	\$ 305,802
47	1985	Miscellaneous Fixed Assets					\$ -		\$					\$		\$ -	\$
47	1990	Other Tangible Property					\$ -		\$ -					S -		\$ -	\$ -
47	1995	Contributions & Grants	-\$ 13,707,783	-\$ 1,470,207	\$ -	\$ -	-\$ 15,177,990	\$ -	-\$ 15,177,990	\$ 2,600,323	\$ 309,718	\$ -	\$ -	\$ 2,910,041	\$ -	\$ 2,910,041	-\$ 12,267,950
47	2440	Deferred Revenue ⁵				-	a -		.				-	-		ş -	ş -
\vdash		Sub-Total	\$ 132,893,041	\$ 10.184.225	-\$ 79.179	\$ 249,365	\$ 143.247.451	s -	\$ 143,247,451	-\$ 55,941,279	-\$ 4,807,293	\$ 31,289	-\$ 23,992	-\$ 60,741,275	\$.	\$ 60,741,275	\$ 82.506.177
			- 102,000,041	10,104,225	,175	240,303	- 140,241,401	· ·	- 140,241,401	- 55,541,215	4,007,255	- 51,205	20,552	50,741,275	1	. 00,141,210	- 02,000,177
	2055	Asset Under Construction	\$ 3,372,695	-\$ 1,037,000	\$ -	-\$ 234,065	\$ 2,101,630	\$ -	\$ 2,101,630	-\$ 7,802	s -	\$ -	\$ 7,802	s -		\$ -	\$ 2,101,630
Г		Less Socialized Renewable Energy															
		Generation Investments (input as negative)												I			
\vdash									\$ -							\$ -	\$ -
		Less Other Non Rate-Regulated Utility												I			
\vdash	-	Assets (input as negative) Total PP&E	\$ 136,265,736	\$ 9 147 225	\$ 79.170	\$ 15 200	\$ 145,349,082		\$ 145 349 000	-\$ 55,949,081	-\$ 4,807,293	\$ 31,289	\$ 16 100	-\$ 60,741,275		\$ - -\$ 60.741.275	\$ 84,607,807
\vdash									\$ 140,349,082	-9 53,949,061	-9 4,007,293	φ 31,269	10,190	1-9 00,741,275		-φ 00,/41,2/5	\$ 04,007,007
	Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable ⁶ Total \$4,807,203																
	lin along trees.																
	Less: Fully Allocated Degreciation																
	Transportation C 270 492																

10 Transportation
8 Stores Equipment

 Less: Fully Allocated Depreciation

 Transportation
 \$ 378,482

 Stores Equipment

 Net Depreciation
 \$ 4,428,810

Canadian Niagara Power Inc. EB-2016-0061 Settlement Proposal Page 49 of 49 Filed: December 1, 2016

Fixed Asset Continuity Schedule ¹

Accounting Standard MIFRS

		1				Cost						Accumulated I	Denreciation					
CCA	OEB		Opening			COSK	Cost End of		Closing	Open	ina	Accumulated i	repreciation		Cost End of		Closing	Net Book
Class 2	Account 3	Description 3	Balance	Additions 4	Disposals	Adjustments	Period	Allocations	Balance	Balar		Additions	Disposals	Adjustments	Period	Allocations	Balance	Value
ECE	1608	Franchises & Consents	\$ 156,053	\$ -	\$	s -	\$ 156,053	\$ -	\$ 156,053	-\$:	50,717	-\$ 3,901	\$ -	\$ -	-\$ 54,619	\$ -	-\$ 54,619	\$ 101,434
1	1610	Misc. Intangible Plant	\$ 40,576	\$ -	\$ -	S -	\$ 40,576	\$ -	\$ 40,576	-\$	7,738	-\$ 1,014	\$ -	\$ -	-\$ 8,753	\$ -	-\$ 8,753	\$ 31,823
12	1611	Computer Software (Formally known as							_									
		Account 1925) Computer Software (Formally known as	\$ 1,643,976	\$ 300,531	\$ -	S -	\$ 1,944,507	\$ -	\$ 1,944,507	-\$ 6	43,712	-\$ 320,823	\$ -	\$ -	-\$ 964,535	\$ -	-\$ 964,535	\$ 979,972
12	1611A	Account 1925)	\$ 11.648.916	\$ 973,496	s -	s -	\$ 12.622.412	s -	\$ 12,622,412	-\$ 7.8	64.339	-\$ 719.153	s -	s -	-\$ 8.583.492	s -	-\$ 8.583.492	\$ 4.038.921
CEC	1612	Land Rights (Formally known as Account																
N/A	1805	1906) Land	\$ 346,296 \$ 211,516	\$ 20,517 \$ 123,387	\$ -	S -	\$ 366,814 \$ 334,903	\$ -	\$ 366,814 \$ 334,903	-\$ 1	12,730	-\$ 7,657	\$ -	\$ -	-\$ 120,387	\$ -	-\$ 120,387	\$ 246,427 \$ 334,903
47		Buildings	\$ 211,516	\$ 123,387	\$ -	\$ -	\$ 3,742,297	\$ -	\$ 334,903	\$	41,485	-\$ 74,521	\$ -	\$ -	\$ 1,216,006	\$ -	-\$ 1,216,006	\$ 2,526,291
13	1808 1810	Leasehold Improvements	\$ 3,709,625	\$ 32,472	3 -	3 -	\$ 3,142,291	\$ -	\$ 3,142,291 e	-\$ 1,1	41,465	-5 /4,521	\$ -	3 -	e 1,210,000	3 -	e 1,216,006	\$ 2,520,291
47	1815	Transformer Station Equipment >50 kV					\$ -		s -						s -		š -	\$ -
47	1820	Distribution Station Equipment <50 kV	\$ 12,020,736	\$ 118,700	\$ -	s -	\$ 12,139,436	\$ -	\$ 12,139,436	-\$ 3,5	56,228	-\$ 233,158	\$ -	\$ -	-\$ 3,789,386	\$ -	-\$ 3,789,386	\$ 8,350,051
47	1820A	Distribution Station Equipment <50 kV	\$ 3,918,811	\$ 1,350,963	\$ -	S -	\$ 5,269,774	\$ -	\$ 5,269,774	-\$ 4	07,403	-\$ 114,267	\$ -	\$ -	-\$ 521,669	\$ -	-\$ 521,669	\$ 4,748,105
47	1825	Storage Battery Equipment					\$ -		\$ -						\$ -		\$ -	\$ -
47	1830	Poles, Towers & Fixtures	\$ 28,012,225	\$ 2,367,461	\$ -	\$ -	\$ 30,379,686	\$ -	\$ 30,379,686		38,872	-\$ 677,934	\$ -	\$ -	-\$ 11,716,806	\$ -	-\$ 11,716,806	\$ 18,662,880
47	1835	Overhead Conductors & Devices	\$ 33,828,771 \$ 1,382,253	\$ 1,347,941	\$ - \$ -	s -	\$ 35,176,712	\$ -	\$ 35,176,712		26,791	-\$ 783,127	\$ -	\$ -	-\$ 11,409,918	\$ -	-\$ 11,409,918	\$ 23,766,795
47	1840 1845	Underground Conduit Underground Conductors & Devices	\$ 1,382,253 \$ 9,675,545	\$ 239,209 \$ 226,194	\$ -	\$ -	\$ 1,621,462 \$ 9,901,740	\$ -	\$ 1,621,462 \$ 9,901,740		22.435	-\$ 26,179 -\$ 237,144	\$ -	\$ -	-\$ 526,993 -\$ 2,759,578	\$.	-\$ 526,993 -\$ 2,759,578	\$ 1,094,469 \$ 7,142,161
47	1850	Line Transformers	\$ 16.947.704	\$ 1,636,697	¢ .	9 .	\$ 18.584.401	9 .	\$ 18.584.401		90.404	-\$ 237,144 -\$ 494,631	\$.	¢ .	-\$ 2,759,576 -\$ 7.085.035	¢ .	-\$ 2,759,578 -\$ 7.085.035	\$ 11.499.366
47	1855	Services (Overhead & Underground)	\$ 11.604.602	\$ 512,630	¢ .	s -	\$ 12,117,232	s -	\$ 12,117,232		45.670	-\$ 273,594	\$ -	\$.	-\$ 3.819.265	¢ .	-\$ 3.819.265	\$ 8,297,968
47	1860	Meters	\$ 624,091	\$ -	\$ -	š -	\$ 624,091	\$ -	\$ 624,091		20,805	-\$ 19,061	\$ -	\$ -	-\$ 239,865	\$ -	-\$ 239,865	\$ 384,226
47	1860A	Meters (Smart Meters)	\$ 5,661,288	\$ 196,252	\$ -	s -	\$ 5,857,540	\$ -	\$ 5,857,540	-\$ 2,5	87,944	-\$ 457,504	\$ -	\$ -	-\$ 3,045,448	\$ -	-\$ 3,045,448	\$ 2,812,092
47	1860B	Meters	\$ 672,210	\$ 81,202	\$ -	\$ -	\$ 753,412	\$ -	\$ 753,412		48,991	-\$ 21,123	\$ -	\$ -	-\$ 370,114	\$ -	-\$ 370,114	\$ 383,297
1	1865	D Other Install on Cust Prem	\$ 133,938	\$ -	\$ -	\$ -	\$ 133,938	\$ -	\$ 133,938	-\$:	84,341	-\$ 13,394	\$ -	\$ -	-\$ 97,735	\$ -	-\$ 97,735	\$ 36,203
	1875	D St Lites & Signal Systems	\$ -	\$ -	\$ -	S -	\$ -	\$ -	\$ -	\$	-	S -	\$ -	\$ -	s -	\$ -	\$ -	\$ -
N/A	1905	Land	\$ 932.520	\$ 20,000			\$ 952,520		\$ 952.520				_		\$ - \$ 255.754		\$ -	\$ 696,766
47 13	1908 1910	Buildings & Fixtures	\$ 932,520	\$ 20,000	\$ -	\$ -	\$ 952,520	\$ - \$ -	\$ 952,520 \$ 1,020,277		77,631	-\$ 18,850 -\$ 114,298	s -	\$ -	-\$ 255,754 -\$ 791,929	\$ -	-\$ 255,754 -\$ 791,929	\$ 696,766
8	1910	Leasehold Improvements Office Furniture & Equipment (10 years)	\$ 1.523.666	\$ 23,500	s -	s .	\$ 1,020,277	s -	\$ 1,020,277		62.016	-\$ 114,296 -\$ 24,964	\$ -	\$.	-\$ 791,929 -\$ 1.386.980	s .	-\$ 791,929 -\$ 1.386.980	\$ 160.187
8	1915	Office Furniture & Equipment (5 years)	9 1,020,000	20,000	-		\$ -	*	\$ -	Ψ 1,0	02,010	24,004	*		\$ -		\$ -	\$ -
10	1920	Computer Equipment - Hardware	\$ 4,268,108	\$ 354,153	s -	s -	\$ 4.622,261	s -	\$ 4,622,261	-\$ 3.4	86.568	-\$ 311.498	s -	s -	-\$ 3.798.065	s -	-\$ 3.798.065	\$ 824,195
45	1920	Computer EquipHardware(Post Mar. 22/04)																
45.1	1920	Computer EquipHardware(Post Mar. 19/07)					\$ -		5 -						5		5 -	3 -
							\$ 684,529		\$ -			-S 64.417	_		\$ -		\$ 573,433	\$ - \$ 111.096
10	1930 1930A	Transportation Equipment (5 years) Transportation Equipment (10 years)	\$ 667,029 \$ 3,759,215	\$ 17,500 \$ 157,500	\$ -	s -	\$ 584,529	\$ - \$ -	\$ 684,529 \$ 3,916,715		93.451	-\$ 64,417 -\$ 301,571	\$ -	\$ -	-\$ 573,433 -\$ 2,595,022	\$ -	-\$ 5/3,433 -\$ 2,595,022	\$ 1,321,693
8	1935	Stores Equipment	\$ 166.638	\$ 107,000	¢ .	9 .	\$ 166.638	s .	\$ 166,638		66.638	\$ 301,371	ę .	\$.	-\$ 166,638	¢ .	-\$ 166,638	\$ 1,321,053
8	1940	Tools, Shop & Garage Equipment	\$ 919,792	\$ 60,000	\$ -	s -	\$ 979,792	s -	\$ 979,792		36,211	-\$ 30,700	s -	s -	-\$ 766.911	\$ -	-\$ 766,911	\$ 212,882
8	1945	Measurement & Testing Equipment	\$ 515,191	\$ -	\$ -	\$ -	\$ 515,191	\$ -	\$ 515,191		83,792	-\$ 5,282	\$ -	\$ -	\$ 489,074	\$ -	-\$ 489,074	\$ 26,117
8	1950	Power Operated Equipment	\$ 127,339	\$ 18,000	\$ -	S -	\$ 145,339	\$ -	\$ 145,339		03,462	-\$ 5,114	\$ -	\$ -	-\$ 108,575	\$ -	-\$ 108,575	\$ 36,764
- 8	1955	Communications Equipment	\$ 1,148,487	\$ 43,463	\$ -	\$ -	\$ 1,191,950	\$ -	\$ 1,191,950	-\$ 8	54,574	-\$ 82,203	\$ -	\$ -	-\$ 936,777	\$ -	-\$ 936,777	\$ 255,172
8	1955	Communication Equipment (Smart Meters)					\$ -		\$ -						\$ -		\$ -	\$ -
8 8	1960 1960A	Miscellaneous Equipment (10 years)	\$ 85,031 \$ 91,387	5 -	\$ -	5 -	\$ 85,031 \$ 91,387	5 -	\$ 85,031 \$ 91,387		71,841	-\$ 3,088 -\$ 4,797	2 -	2 -	-\$ 74,929 -\$ 81,577	\$ -	-\$ 74,929 -\$ 81,577	\$ 10,102 \$ 9,810
		Miscellaneous Equipment (5 years)	\$ 91,387	3 -	\$.	s -	\$ 91,387	3	\$ 91,387	-2	10,780	-\$ 4,797	\$.	\$.	-\$ 81,5//	3 ·	-\$ 81,5//	a 9,810
47	1975	Load Management Controls Utility Premises					s -		s -						s -		s -	s -
47	1980	System Supervisor Equipment	\$ 1,046,816	\$ -	\$ -	S -	\$ 1,046,816	\$ -	\$ 1,046,816	-\$ 7	41,014	-\$ 21,401	\$ -	\$ -	\$ 762,415	\$ -	\$ 762,415	\$ 284,401
47	1985	Miscellaneous Fixed Assets					\$ -		\$ -						\$		\$ -	\$ -
47	1990 1995	Other Tangible Property	-\$ 15.177.990	-\$ 550.000			\$ 15,727,990		\$ 15,727,990	£ 0.0	10,041	\$ 332.872			\$ 3.242.913		\$ 3.242.913	\$ 12,485,078
47	1995 2440	Contributions & Grants	-\$ 15,177,990	-\$ 550,000	\$.	s -	-\$ 15,727,990	3	-\$ 15,727,990	\$ 2,9	10,041	\$ 332,872	\$.	\$ -	\$ 3,242,913	3 -	a 3,242,913	-\$ 12,485,078
4/	2440	Deferred Revenue ⁵					.		3 -								s -	š -
		Sub-Total	\$ 143,247,451	\$ 9,757,158	s -	s -	\$ 153,004,610	s -	\$ 153,004,610	-\$ 60.7·	41.275	-\$ 5.133.494	s -	s -	-\$ 65.874.769	s -	-\$ 65.874.769	\$ 87,129,840
	2055	Asset Under Construction	\$ 2.101.630	e	e	e	\$ 2.101.630	e	\$ 2.101.630			e	e	e			· ·	\$ 2.101.630
-	2000		φ 2, IU1,630	φ .	9 -	a .	g 2,101,630		ø 2,101,630	\$	-		9	9 -			-	ø 2,101,630
		Less Socialized Renewable Energy Generation Investments (input as negative)																
	 	Less Other Non Rate-Regulated Utility																• -
\vdash		Assets (input as negative)			_				\$ -								\$ -	s -
-	-	Total PP&E	\$ 145,349,082				\$ 155,106,240	.	\$ 155,106,240	j-\$ 60,7	41,2/5	-> 5,133,494	.		-\$ 65,874,769	.	-\$ 65,874,769	\$ 89,231,471
	-	Depreciation Expense adj. from gain or lo Total	oss on the retire	nent of assets	(pool of like	assets), if appli	cable-					-\$ 5.133.494						

10 Transportation

 Less: Fully Allocated Depreciation

 Transportation
 \$ 365,987

 Stores Equipment

 Net Depreciation
 \$ 4,767,507



CANADIAN NIAGARA POWER INC.

Curriculum Vitae of

Glen King, CPA, CA

EDUCATION

•	1990	Chartered Professional Accountant, Chartered Accountant

 1988 Bachelor of Commerce (Co-operative) - Memorial University of Newfoundland

BUSINESS EXPERIENCE

• 2005 to Present FortisOntario Inc.	
--------------------------------------	--

Vice President, Finance & Chief Financial Officer

• 2003 to 2005 Canadian Niagara Power Inc.

Director, Finance

Treasurer

• 2001 to 2003 Newfoundland Power

Director, Finance

1995 to 2001 Fortis Trust Corporation

Vice President, Finance

• 1988 to 1995 Deloitte & Touche Chartered Accountants

Senior Manager

Manager Auditor Student

CANADIAN NIAGARA POWER INC.

Curriculum Vitae of

Jie Han, P.Eng., MBA

EDUCATION

2012 Executive Master of Business Administration
 University at Buffalo (SUNY), Buffalo, New York

1983 Bachelor of Electrical Engineering
 Tsing Hua University, Beijing, China

BUSINESS EXPERIENCE

2014 to Present FortisOntario Inc.

Vice President, Operations

2004 to 2014 FortisOntario Inc.

Director Technical Services

1990 to 2004 Maritime Electric Company, Limited

Supervisor, Planning and System Performance

Supervisor, Operations Planning

Electrical Engineer, Supervisor – System Operations

1983 to 1989 Electric Power Planning and Engineering Institute, Bejing, China

CANADIAN NIAGARA POWER INC.

Curriculum Vitae of

Gregory Beharriell, P.Eng.

EDUCATION

- 2006 Bachelor of Engineering (Electrical) Lakehead University
- 2003 Electronics Engineering Technology Diploma RCC Institute of Technology

BUSINESS EXPERIENCE

•	2016 to Present	Canadian Niagara Power Inc. Manager, Regulatory Affairs
•	2014 to 2016	Algoma Power Inc. Supervisor, Technical Services
•	2010 to 2014	Algoma Power Inc. Distribution Engineer
•	2009 to 2010	Algoma Power Inc. Distribution System Planner
•	2006 to 2009	Great Lakes Power Limited Distribution System Planner

CANADIAN NIAGARA POWER INC.

Curriculum Vitae of

Brian Vander Vloet, CPA, CA

EDUCATION

•	2010	Chartered Professional Accountant	. Chartered Accountant

 2007 Bachelor of Business Administration Program, Honours with Co-operative Option -Wilfrid Laurier University

BUSINESS EXPERIENCE

•	2013 to Present	Canadian Niagara Power Inc. Manager, Regulatory Accounting
•	2010 to 2013	Canadian Niagara Power Inc. Regulatory Accountant
•	2008 to 2010	PricewaterhouseCoopers LLP Senior Associate
•	2005 to 2006	PricewaterhouseCoopers LLP Associate (Co-op terms)

CANADIAN NIAGARA POWER INC.

Curriculum Vitae of

Scott Cushing, FSA, FCIA

EDUCATION / PROFESSIONAL QUALIFICATIONS

- 2001 Fellow of the Canadian Institute of Actuaries
- 2001 Fellow of the Society of Actuaries
- 1988 Honours Bachelor of Mathematics (Actuarial Science) University of Waterloo

BUSINESS EXPERIENCE

•	2005 to Present	Mercer (Canada) Limited Principal
•	2000 to 2005	Mercer (Canada) Limited Consulting Actuary
•	1994 to 2000	Mercer (Canada) Limited Actuarial Analyst
•	1988 to 1992	Towers Perrin Actuarial Analyst



FORM A

Proceeding: EB-2016-0061

ACKNOWLEDGMENT OF EXPERT'S DUTY

- 1. My name is Scott Cushing (name). I live at Oakville (city), in the Diavince (province/state) of Ontonio.

 Canadian Miagara Power Inc.

 2. I have been engaged by or on behalf of (name of party/parties) to provide evidence in relation to the above-noted proceeding before the Ontario Energy Board.
- 3. I acknowledge that it is my duty to provide evidence in relation to this proceeding as follows:
 - (a) to provide opinion evidence that is fair, objective and non-partisan;
 - (b) to provide opinion evidence that is related only to matters that are within my area of expertise; and
 - (c) to provide such additional assistance as the Board may reasonably require, to determine a matter in issue.
- 4. I acknowledge that the duty referred to above prevails over any obligation which I may owe to any party by whom or on whose behalf I am engaged.

Date December 21, 2016

Signature



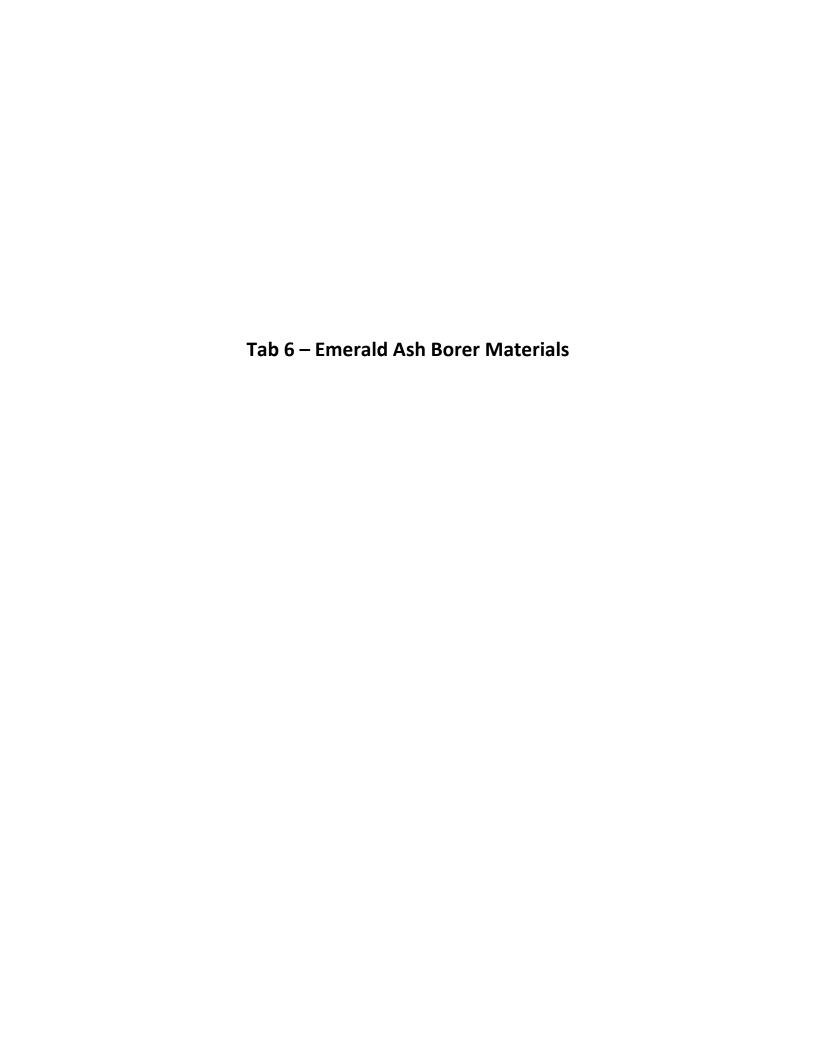
OM&A Annual Comparison	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Actual/Forecast OM&A Per Application	8,864,063	9,434,813	9,518,933	10,160,816	10,574,723
CDM Staffing	85,000	29,000	29,000	3,000	3,000
Vehicle Depreciation Credit	351,000				
Approved IFRS Cost	85,000				
Port Colborne Service Centre Closure	35,000	55,000	55,000	55,000	55,000
Regulatory Staffing	100,000	100,000	100,000	100,000	100,000
Customer Service Staffing and Charge-Outs	92,000	162,000	192,000	162,000	162,000
Collections and Bad Debts	8,000	107,000	78,000	29,000	(9,000)
Shared Service Allocation		(63,000)	(63,000)	(108,000)	(97,000)
ON1Call Initiative		(40,000)	(40,000)	(40,000)	(40,000)
Vacant IT Position			40,000		
IT Billable Costs			28,000		
Pole Testing Program				(150,000)	(150,000)
MIST O&M				(44,000)	(44,000)
EAB Program					(100,000)
Load Dispatching					(65,000)
Asset Management					(30,000)
Adjusted OM&A	9,620,063	9,784,813	9,937,933	10,167,816	10,359,723
Variance vs Prior Year (Adjusted - \$)		164,750	153,120	229,883	191,907
Variance vs Prior Year (Adjusted - %)		1.7%	1.6%	2.3%	1.9%
OEB Determined Inflation Rate		1.7%	1.6%	2.1%	1.9%
Difference - Adjusted % Variance vs OEB Inflation Rate		0.0%	0.0%	0.2%	0.0%



Cost Driver	Cost Included in 2-JB	References to Evidence	Drivers, RRFE Outcomes and Value to Customer
ON1Call Initiative	40,000	E4/T2/S2/p5	- Legislated requirement - Public safety
Pole Testing Program	150,000	E4/T2/S2/p7 DSP/DAMP	 - Asset management - trend toward requirement for more formal asset condition assessments - Optimization of lifecycle costs - Public and worker safety - Maintain reliability
MIST O&M	44,000	E4/T2/S2/p7	 Regulatory requirement Increased fairness in cost allocation and settlement Customer opportunity and ability to manage costs through load shifting Customer opportunity to manage overall consumption through improved data analytics
EAB Program	100,000	E4/T2/S2/p8 DSP/DAMP	- Public safety - Maintain reliability - Collaboration with customers and municipal stakeholders
Load Dispatching	65,000	E4/T2/S2/p8	 Worker safety Improved outage response Enables improved customer communication during outages in conjunction with after-hours call centre
Improved Asset Management (GIS)	30,000	E4/T2/S2/p9	 Enables OMS implementation to improve outage response and customer communications Enables improved asset management processes Avoid cost impact of additional staff to meet Significant Natural Area Procedures

Cost Driver	Cost Included in 2-JB	References to Evidence	Drivers, RRFE Outcomes and Value to Customer
Public Awareness Surveys and Safety Campaigns	N/A	E1/T1/S2/p8-9	Regulatory requirementPublic safety
Arc Hazard Identification, Quantification, Procedures	N/A	E1/T1/S2/AppA/p19	Worker safetyAvoid damage to equipment
Environmental - Significant Natural Area Procedures	N/A	E1/T1/S2/AppA/p20 IRR 2-Staff-25	- Legislative Requirements - Environmental stewardship
Increased Customer Engagement	N/A	E1/T3/S1 E1/T3/S2	 Regulatory requirement Improved customer communication and incorporation of feedback into planning process
Improved After-Hours Call Service	N/A	E1/T3/S1/p6	 Improved customer communication during outages Reduced outage duration resulting from improved information to workers Eliminate CNPI response to customer issues (e.g. main breaker tripped)
Increased Regulatory Requirements (Chapter 5 Filing Requirements, Scorecard, LEAP/OCEB/OESP/OREC, etc.)	N/A	E1/T3/S2/p1 E1/T10/S1 E4/T9/S1	 Overall alignment with RRFE and other regulatory requirements Increased transparency and accountability to customers Bill reduction (OCEB, OREC) Low-income assistance (LEAP, OESP)
Non-Linear Design Requirements	N/A	IRR 2-Staff-25	- Change in standards





Connecting Niagara





HOME MEET US NEWS THE STORY PLACE EVENTS SHOP LOCAL

FUN & GAMES E-NEWS SIGNUP CONTACT

Program in Full-effect

Posted Jul 13th, 2016 in Municipal, Home and Garden, fort erie





"In 2016, the Town will be spending \$468,000 for the trimming and removal of trees on Town property. This is a significant increase over last year's budget."

Emerald Ash Borer (EAB) has killed millions of trees in

INCMO

Keep busy. Where to go, what to do in Niagara!

SIGN UP TODAY!

Get Creative Niagara



Events

Keep busy. Where to go, what to do in Niagara!

FIND OUT MORE!

Where to Buy in Niagara



North America since 2002. It was identified in the Niagara Region in 2009. By 2016, Town staff estimate that approximately 16,500 ash trees in Fort Erie are infested; with about 80 per cent of them located on private property.

EAB is an introduced insect pest from Asia that attacks and kills all species of true ash trees (genus: Fraxinus) by feeding beneath the bark and disrupting the flow of water and nutrients within the tree. Trees infested with EAB, which do not receive proper treatment within a specific period of time, will die. Unlike other tree species, ash trees killed by EAB have full tree failures significantly sooner after they are dead. The mortality rate of EAB infested trees can happen as fast as one year; however, it typically occurs within 2-3 years.

"As a result of this infestation, the Town is taking proactive measures to protect our community by removing dying and infected trees from our parks and roadways," said Mayor Wayne Redekop. "In 2016, the Town will be spending \$468,000 for the trimming and removal of trees on Town property. This is a significant increase over last year's budget."

In addition to the work done in 2015, the Town has recently completed a tree removal program in South Fort Erie. Staff has now moved to the Crescent Park area and will continue assessing the EAB impact in that area for the remainder of the year. As part of the EAB program, trees marked by with a white "X" or "X & H" will be removed in an effort to address the potential public safety hazards. Due to this year's drastic increase in tree removals, approximately \$65,000 will be allocated to a re-planting program scheduled to

From the Blog

You Can Now Text 911 in an Emergency

Dec 20th, 2016

To be eligible to use this service the cell phone must be; Registered for T9-1-1 with the DHHSI subscriber's cell phone company in advance - Capable of sending and receiving text (SMS) messages and activated with a service package that includes text messaging - Connected to a cellular network.

RECIPE: Innovative Baked Cheese Appetizer

Dec 19th, 2016

Including cheese in holiday entertaining is a must, but why not shake up the traditional with something a little different?

Shop Local in Niagara



Business Events

Stay connected, meet new people. Find out where:

LEARN MORE!

Support Local Business

begin in Fall 2016.

While the Town will be removing the selected trees from its property, Fort Erie residents and businesses are reminded that it is their responsibility to manage or remove trees on their own properties.

For more information on the Emerald Ash Borer program in Fort Erie, please call 905-871-1600 or visit www.forterie.ca .

0 comments

Post a Comment

Name:

Email:

Website: (Optional)

Comment:



Enter to Win!

Don't miss out on your chance to win on our contest page

LEARN MORE!

Your chance to win a \$50 Gift Card.







The Municipal Corporation of the Town of Fort Erie

Council-in-Budget Committee Meeting #5 Agenda

Wednesday, February 3, 2016 - 6:00 PM

Council Chambers

- 1. Call to Order
- 2. Roll Call
- 3. Announcements/Addenda
- 4. Disclosure of Pecuniary Interest and General Nature Thereof
- 5. Departmental Operating Budgets

CBC-07-2016 2016 General Levy Operating Budget (Continued

from the January 27, 2016 Council-in-Budget

Committee Meeting #4)

Recommendation:

PART 1

That: Council approves the following Supplementary Base Budget funding for 2016, subject of previous reports/resolutions:

- 1.1 Capital Reserves strategic investment increase for \$600,000
- 1.2 Road Refurbishing Reserves strategic investment increase for \$200,000
- 1.3 Downtown Core Area Community Improvement Plan (CIP) grant program increase for \$30,000
- 1.4 Emerald Ash Borer tree removal increase for \$200,000
- 1.5 Tree planting increase for \$40,000
- 1.6 Volunteer firefighter training rate increase for \$50,000
- 1.7 Canada Day fireworks contribution of \$10,000, and further

PART 2

That: Council approves the following Supplementary One-Time funding for 2016, subject of previous reports/resolutions:

- 2.1 Habitat for Humanity grant for \$26,962
- 2.2 Roads Refurbishing Reserves allocation of OMPF funding of \$403,100, and further

PART 3

That: Council approves the following Supplementary Base Budget new funding for 2016:

- 3.1 Roads crews wages and benefits for \$62,000
- 3.2 Parks winter casual wages and benefits for \$25,698, and further

PART 4

That: Council approves the following Supplementary One-Time new funding for 2016:

- 4.1 Physician recruitment Operating Reserve increase of \$35,000
- 4.2 Fire Department operational review for \$15,000
- 4.3 Niagara Blvd Cycle Route expansion contribution for \$100,000
- 4.4 Battle of Ridgeway 150th anniversary event of \$55,958
- 4.5 Women's Place of South Niagara Inc. grant of \$5,000
- 4.6 Ridgeway BIA tree pit irrigation of \$1,557, and further

PART 5

That: Council approves the following grants for 2016:

- 5.1 Fort Erie Lions Senior Citizens complex in the amount of \$22,750
- 5.2 BIA watering in the amount of \$28,000
- 5.3 Beachcombers Seniors Complex in the amount of \$10,500
- 5.4 Fort Erie Horticultural Society in the amount of \$1,000
- 5.5 Community Events Grants in the amount of \$24,350
- 5.6 EDTC in the amount of \$648,852
- 5.7 Fort Erie Public Library in the amount of \$1,478,087, and further

PART 6

That: Council approves the following Business Improvement Area (BIA) levies for 2016:

- 6.1 Bridgeburg Station BIA Levy of \$41,000
- 6.2 Ridgeway BIA Levy of \$35,000
- 6.3 Crystal Beach BIA Levy of \$9,931, and further

PART 7

That: Council approves the Town's General Levy of \$							
comprised of base budget of \$23,110,534 and supplementary budget of							
S and directs staff to submit the related By-law for approval							
on February 22, 2016, and further							

PART 8

That: Council excludes capital asset amortization of \$5,922,200 from the 2016 General Levy Operating Budget.

CBC-07-2016 - 2016 Operating Budget - combined

6. Adjournment





PORT BEGINS BUDGET TALKS

Posted by Jamie Lee□ on Wednesday, December 18th, 2013

Maryanne Firth / Welland Tribune

PORT COLBORNE - 'Tis the season for budget deliberations.

Lakeside city councillors began chipping away at Port Colborne's 2014 budget Monday night, beginning the process with a staff-recommended 3.92% tax increase.

By the end of the meeting, with both additions and subtractions made, the increase sat at 4.45%.

But talks surrounding the city's budget have only just begun, stressed Mayor Vance Badawey, who would like to see an increase closer to the rate of inflation, which is generally under 2%.

The budget moved upward as councillors added \$61,000 for transit, including Saturday service and extended hours, and \$98,000 for tree programs, including removal of dying trees and those impacted by the emerald ash borer, tree replacement and a partnership with residents to see dying trees on private property removed.

The tree issue has always been important, Badawey said, but the November fatality, in which a woman was struck by a falling tree while driving her car down Fielden Ave., has left it on everyone's minds.

"It impresses the importance of continuing our due diligence with the tree program," he said.

One of the biggest budget savings came from the city's economic development and tourism department. After the departure of economic development officer Stephen Thompson several months ago, the position has remained vacant. The role has since been split, with certain responsibilities being taken on by the mayor's office, existing planning and development staff and contracted staff.

"It has a positive impact on the budget because we're using existing resources,"

Badawey said. The changes mean a \$147,000 savings, he added.

The city intends to hire a new economic development officer in the spring to fill the altered role.

"Economic development works through my office on a daily basis," Badawey said, adding the transition with the vacant position has been "seamless" due to the hard work of staff.

The city is also hoping to find about \$100,000 in savings by creating a selfsustaining business model for Sugarloaf Harbour Marina, which staff is expected to present some time in the new year, Badawey said.

Budget deliberations will continue on Jan. 6 at 5:30 p.m. in council chambers.

□ NEWS ARCHIVE

Bridge 21 (Clarence Street) Closed

The St. Lawrence Seaway Management Corporation

J. Lee Wed Dec 14th, 2016

<u>Leading Women - Leading Girls Building Commun...</u>

2017 Call for Nominations

Michelle Cuthbert Wed Nov 30th, 2016

Sale of Blackberry Cell Phones

City of Port Colborne

J. Lee Mon Nov 21st, 2016

Province invests in Allied Marine expansion

Laura Barton / Tribune Staff

J. Lee Wed Nov 9th, 2016

Remembrance Day

Friday, November 11, 2016

J. Lee Tue Nov 8th, 2016

Bridge 21 (Clarence Street) Closure

The St. Lawrence Seaway Management Corporation

J. Lee Tue Nov 8th, 2016

Bridge 21 (Clarence Street) Closure
The St. Lawrence Seaway Management Corporation

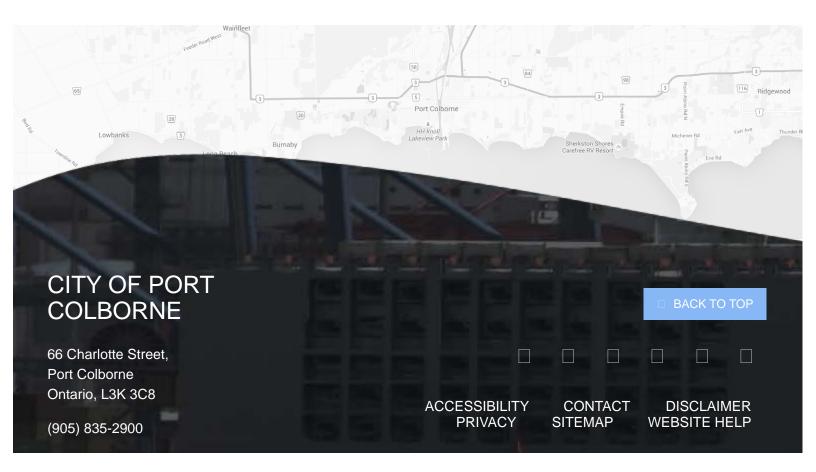
J. Lee Mon Oct 24th, 2016

Bridge 21 (Clarence Street) Closure

The St. Lawrence Seaway Management Corporation

J. Lee Mon Oct 17th, 2016

1 2 3 Next »





Cost Savings / Productivity Improvements	Savings Included in 2-JB	References to Evidence	Value to Customer
Port Colborne Service Centre Closure	55,000	E4/T2/S2/p3	- Cost Reduction
Regulatory Staffing	100,000	E4/T2/S2/p3	- Cost Reduction
Customer Service Staffing and Charge-Outs	162,000	E4/T2/S2/p4	- Cost Reduction
Field Engineering / Mobile Computing /	N/A	E1/T1/S1/p22-23	- Improved efficiency
Electronic Mapping		E1/T1/S2/AppA/p16	
		E2/T2/S1/AppA/p29	
		E2/T2/S1/AppA/p56	
Line Loss Reduction	N/A	E1/T1/S2/p23-24	- Considered in evaluation of alternatives for
		E2/T2/S1/AppA/p29	capital projects
		2-Staff-25	- Reduced cost of power pass-through
Standardized Designs	N/A	E1/T1/S2/p23	- Improved efficiency
		E2/T2/S1/AppA/p29	
Distribution Automation	N/A	E1/T1/S2/p23	- Long-term reduction in outage response
		E1/T3/S1/p13	costs
		E2/T2/S1/AppA(multiple)	
Asset Management	N/A	E2/T2/S1/AppA/p39-46	- Optimized asset lifecycle costs
		E2/T2/S1/AppA/AppM	- Improved alternative evaluation for capital
			projects



Summary

The most recent version of the OEB's Benchmarking Forecast Model (the "Model") filed by CNPI is dated November 7, 2016, and was filed in conjunction with CNPI's Technical Conference Undertakings. In that version of the Model CNPI updated the input for WACC as a result of the OEB's recently published cost of capital parameters, and the accompanying narrative discussed an issue associated with the mismatch between costs and revenues associated with Other Revenue accounts (i.e. accounts 4325, 4330, and 4375).

In conjunction with these Hearing Materials, CNPI has filed a further update to the Model (the "Adjusted Model") with further updates to the WACC input and an analysis that provides further detail on the Other Revenue issue, as detailed below. In addition, CNPI has populated the Adjusted Model to include forecasts for the 2018-2021 IRM years.

Update to WACC

All prior versions of the Model filed by CNPI have included values for the WACC input specific to CNPI, or a CNPI-specific placeholder for forecasted WACC, pending updates to the OEB's cost of capital parameters. The Adjusted Model corrects this oversight, using a value the WACC input reflecting OEB-deemed rates, which is consistent with historical PEG benchmarking models.

Adjustments for Other Revenue

In conjunction with the November 7, 2016 update to the Model, CNPI filed additional notes describing the impact of the model including certain costs associated with the generation of Other Revenue (i.e. accounts 4325, 4330, and 4375), without including the offsetting revenue, or any other variables to account for these costs. CNPI later agreed to an increase of \$100,000 to Other Revenue in its Partial Settlement Agreement (to the direct benefit of CNPI's ratepayers), however CNPI's benchmarking results did not change and no updates to the Model were required as a result of Other Revenue accounts being excluded. In the event that these costs affected all LDC's in similar proportions, or were addressed through input variables, then no further adjustment would be required. As outlined in Tab 9 of these Hearing Materials however, CNPI is an outlier with respect to other LDC's in terms of Other Revenue generated through services to its affiliates and associated companies. Historically, the PEG model used amounts for gross asset additions for CNPI based on RRR filings that failed to account for CNPI's historical practice of removing the costs of certain shared assets for rate-making purposes. As described at Exhibit 2, Tab 1, Schedule 1 of the Application (and further documented in 2-Staff-18), in accordance with Board Staff's

preference in API's previous Cost of Service Application (EB-2014-0055), a different approach was taken such that the amounts are no longer removed. In lieu of removing the costs associated with shared assets for ratemaking purposes, CNPI has included shared IT and equipment charges as revenue offsets, as reflected in Other Revenue accounts.

In order to illustrate the impact of this issue on CNPI's benchmarking results, the Adjusted Model includes an analysis of the impact of the Other Revenue offset. CNPI has included an adjustment that considers the net total of accounts 4325, 4330, and 4375 (i.e. the accounts associated with IT services provided to affiliates and associates) as an offset to the total actual cost calculated by the Model. The Adjusted Model retains the results of the OEB's original model, but also presents a set of results as adjusted for the Other Revenue proxy described above.

The results shown in the Adjusted Model would place CNPI in the average/expected cost range of -10% to +10% (i.e. Group III). CNPI is not suggesting to be assigned the cohort 3 stretch factor for the upcoming IRM, however the analysis reveals a significant issue with trying to apply the PEG model to a cost of service application.

Summary of Cost Benchmarking Results (Adjusted)

Canadian Niagara Power Inc.

Ó	Cost Benchmarking Summary	2015 (History)	2016 (Bridge)	2017 (Test Year)	2018	2019	2020	2021
Α	Actual Total Cost	22,334,375	23,534,557	23,992,198	24,800,661	25,575,451	26,390,794	27,280,821
В	Other Revenue Offset (Accts 4325/4330/4375)			1,456,194	1,456,194	1,456,194	1,456,194	1,456,194
C = A - B	Revised Actual Cost			22,536,004	23,344,467	24,119,257	24,934,600	25,824,627
D	Predicted Total Cost	19,620,562	20,204,249	20,444,658	21,207,353	22,026,055	22,857,913	23,725,499
E = A - D	Difference	2,713,813	3,330,308	3,547,540	3,593,307	3,549,396	3,532,881	3,555,321
F=C-D	Difference with Other Revenue Offset			2,091,346	2,137,113	2,093,202	2,076,687	2,099,127
G = LN(A/D)	Percentage Difference (Cost Performance)	13.0%	15.3%	16.0%	15.65%	14.94%	14.37%	13.96%
H = LN(C/D)	Percentage Difference (Cost Performance - With Other Revenue Offset)			9.7%	9.6%	9.1%	8.7%	8.5%
	Three-Year Average Performance Three-Year Avg (With Other Revenue Offset)			14.7%	15.64%	15.53% 9.47%	14.99% 9.13%	14.43% 8.75%
	Stretch Factor Cohort							
	Annual Result	4	4	4	4	4	4	4
	Annual Result (with Other Revenue Offset)			3	3	3	3	3
	Three Year Average Three Year Average (with Other Revenue Offset)			4	4	4 3	4	4 3



2015 OEB Yearbook - Other Income Analysis

	Davis visita fira vis		
	Revenues from	O411	
LDC	Service -	Other Income	C = D / (A + D)
	Distribution (A)	(B)	C = B / (A + B)
E.L.K. Energy Inc.	3,437,525	613,774	15.2%
Canadian Niagara Power Inc.	18,555,741	1,857,805	9.1%
Innpower Corporation	9,513,573	583,728	5.8%
Fort Frances Power Corporation	1,929,536	109,107	5.4%
EnWin Utilities Ltd.	50,363,775	2,663,278	5.0%
Kenora Hydro Electric Corporation Ltd.	2,957,765	152,719	4.9%
Cooperative Hydro Embrun Inc.	808,657	40,276	4.7%
PowerStream Inc.	176,741,188	8,553,825	4.6%
Atikokan Hydro Inc.	1,441,417	66,952	4.4%
Centre Wellington Hydro Ltd.	3,429,077	158,668	4.4%
Welland Hydro-Electric System Corp.	9,310,929	387,883	4.0%
Enersource Hydro Mississauga Inc.	128,985,693	5,216,195	3.9%
Hydro Ottawa Limited	164,726,438	6,541,125	3.8%
Cambridge and North Dumfries Hydro Inc.	28,132,986	1,111,864	3.8%
West Coast Huron Energy Inc.	2,422,418	89,029	3.5%
Haldimand County Hydro Inc.	12,718,238	463,382	3.5%
Hearst Power Distribution Company Limited	1,412,227	49,305	3.4%
Midland Power Utility Corporation	3,928,049	135,393	3.3%
Guelph Hydro Electric Systems Inc.	30,112,381	1,031,146	3.3%
Ottawa River Power Corporation	4,413,906	144,830	3.2%
Halton Hills Hydro Inc.	10,321,449	336,164	3.2%
Burlington Hydro Inc.	30,461,885	923,261	2.9%
Sioux Lookout Hydro Inc.	1,946,621	57,510	2.9%
Bluewater Power Distribution Corporation	22,152,629	653,487	2.9%
Oakville Hydro Electricity Distribution Inc.	38,292,999	1,006,322	2.6%
Milton Hydro Distribution Inc.	16,790,419	437,589	2.5%
Lakeland Power Distribution Ltd.	8,416,579	191,160	2.2%
Horizon Utilities Corporation	113,280,688	2,434,343	2.1%
St. Thomas Energy Inc.	7,360,974	153,437	2.0%
PUC Distribution Inc.	18,606,892	382,803	2.0%
Niagara Peninsula Energy Inc.	31,390,515	592,125	1.9%
Oshawa PUC Networks Inc.	20,877,077	391,929	1.8%
Hydro One Networks Inc.	1,358,955,905	24,872,713	1.8%
Hydro 2000 Inc.	548,480	10,016	1.8%
Espanola Regional Hydro Distribution Corporation	1,850,875	32,545	1.7%
Tillsonburg Hydro Inc.	3,625,998	58,684	1.6%
Northern Ontario Wires Inc.	3,140,942	49,606	1.6%
Rideau St. Lawrence Distribution Inc.	2,727,826	39,209	1.4%
Brantford Power Inc.	17,522,818	214,719	1.2%
Lakefront Utilities Inc.	4,645,221	56,259	1.2%
	, , , , , , , , , , , , , , , , , , , ,		

12,959,553

20,847,752

148,603

226,320

1.1%

1.1%

Festival Hydro Inc.

Thunder Bay Hydro Electricity Distribution Inc.

2015 OEB Yearbook - Other Income Analysis

	Revenues from		
	Service -	Other Income	
LDC	Distribution (A)	(B)	C = B / (A + B)
Westario Power Inc.	10,035,675	108,868	1.1%
Veridian Connections Inc.	53,436,485	555,367	1.0%
COLLUS PowerStream Corp.	7,013,970	70,642	1.0%
Greater Sudbury Hydro Inc.	23,966,012	231,307	1.0%
Essex Powerlines Corporation	14,327,450	127,215	0.9%
Toronto Hydro-Electric System Limited	646,664,428	5,607,211	0.9%
Wasaga Distribution Inc.	4,167,061	27,848	0.7%
Hydro Hawkesbury Inc.	1,678,022	10,906	0.6%
Grimsby Power Incorporated	4,593,355	20,078	0.4%
Niagara-on-the-Lake Hydro Inc.	4,903,115	19,043	0.4%
Wellington North Power Inc.	2,473,576	- 1,663	-0.1%
Hydro One Brampton Networks Inc.	71,816,392	359,882	-0.5%
Peterborough Distribution Incorporated	15,396,137	- 116,937	-0.8%
Orangeville Hydro Limited	5,077,192	94,799	-1.9%
Algoma Power Inc.	23,134,438	532,613	-2.4%
London Hydro Inc.	68,353,973	- 1,983,774	-3.0%
Woodstock Hydro Services Inc.	8,518,884	- 267,268	-3.2%
Chapleau Public Utilities Corporation	858,049	- 29,681	-3.6%
Erie Thames Powerlines Corporation	10,209,821	431,231	-4.4%
Entegrus Powerlines Inc.	20,212,690	- 865,344	-4.5%
Whitby Hydro Electric Corporation	23,030,983	- 1,151,853	-5.3%
North Bay Hydro Distribution Limited	12,792,738	690,243	-5.7%
Kingston Hydro Corporation	12,346,347	771,727	-6.7%
Newmarket-Tay Power Distribution Ltd.	17,454,205	1,179,092	-7.2%
Renfrew Hydro Inc.	1,932,872	134,659	-7.5%
Orillia Power Distribution Corporation	8,574,569	621,871	-7.8%
Kitchener-Wilmot Hydro Inc.	39,624,846	3,547,234	-9.8%
Brant County Power Inc.	6,125,519	577,011	-10.4%
Waterloo North Hydro Inc.	34,531,174	3,325,043	-10.7%

2015-2017 Test Year Other Revenue Analysis

	Test Year	Distribution Revenue	Other Revenue	Total Revenue	% Other Revenue
Hearst	2015	1,058,101	229,503	1,287,603	17.8%
Canadian Niagara Power	2017	19,401,592	2,548,193	21,949,785	11.6%
Wasaga	2016	3,988,244	474,377	4,462,621	10.6%
Milton	2016	16,306,076	1,930,835	18,236,911	10.6%
InnPower	2017	11,178,412	1,207,121	12,385,532	9.7%
North Bay	2015	11,793,143	1,173,934	12,967,077	9.1%
Halton Hills	2016	9,953,991	959,144	10,913,135	8.8%
Lakefront	2017	4,368,508	419,585	4,788,092	8.8%
Guelph	2016	29,528,324	2,307,201	31,835,525	7.2%
Brantford	2017	17,098,955	1,315,000	18,413,955	7.1%
Northern Ontario Wires	2017	3,563,567	268,918	3,832,485	7.0%
London	2017	67,853,776	4,964,164	72,817,940	6.8%
Atikokan	2017	1,415,718	102,770	1,518,488	6.8%
Festival	2015	10,455,129	755,699	11,210,828	6.7%
Hydro Ottawa	2016	163,347,677	11,696,988	175,044,665	6.7%
Entegrus	2016	17,859,875	1,261,521	19,121,396	6.6%
St. Thomas	2015	7,450,543	512,644	7,963,187	6.4%
Ottawa River	2016	4,347,469	284,010	4,631,479	6.1%
Powerstream	2017	199,501,459	12,718,312	212,219,771	6.0%
Oshawa	2015	20,975,186	1,319,113	22,294,299	5.9%
Hydro One Brampton	2015	68,017,986	4,126,589	72,144,575	5.7%
Grimsby	2016	5,252,850	301,588	5,554,439	5.4%
Niagara Peninsula	2015	28,665,191	1,602,522	30,267,713	5.3%
Welland	2017	10,106,284	530,050	10,636,334	5.0%
Horizon	2015	108,649,524	5,677,916	114,327,440	5.0%
Thunder Bay	2017	23,996,075	1,247,451	25,243,526	4.9%
Renfrew	2017	2,094,391	107,550	2,201,941	4.9%
Chapleau	2016	847,617	43,505	891,122	4.9%
Wellington North	2016	2,539,073	130,105	2,669,178	4.9%
Kingston	2016	11,523,232	576,998	12,100,230	4.8%
Waterloo	2016	33,756,728	1,223,596	34,980,324	3.5%
Algoma	2015	22,816,181	466,758	23,282,939	2.0%

Average 7.0% Weighted Average 6.2%

Tab 10 – Board Staff Report on Community Meetings	

Ontario Energy Board P.O. Box 2319 27th Floor

27th. Floor 2300 Yonge Street Toronto ON M4P 1E4 Telephone: 416- 481-1967 Facsimile: 416- 440-7656 Toll free: 1-888-632-6273 Commission de l'Énergie de l'Ontario

C.P. 2319 27e étage 2300, rue Yonge Toronto ON M4P 1E4 Téléphone; 416- 481-1967 Télécopieur: 416- 440-7656 Numéro sans frais: 1-888-632-6273



BY E-MAIL

November 11, 2016

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: Canadian Niagara Power Inc.

Application for Rates

Board File Number EB-2016-0061

Please find attached the Summary of Community Engagement by OEB Staff for this application.

Original Signed By

Martin Davies Project Advisor, Rates Major Applications

Attachment

cc: Parties to EB-2016-0061

SUMMARY OF COMMUNITY ENGAGEMENT BY OEB STAFF

EB-2016-0061

CANADIAN NIAGARA POWER INC.

Application for 2017 Rates: Community Meetings

November 9, 2016

TABLE OF CONTENTS

1	INTRODUCTION AND SUMMARY	1
1.1	PORT COLBORNE ONTARIO	1
1.2	GANANOQUE ONTARIO	2
2	THE PROCESS	3
3	SUMMARY OF THE MEETINGS	4
3.1	PORT COLBORNE	4
3.2	GANANOQUE	5
SCHE	DULE A	
SCHE	DULE B	
SCHE	DULE C	
SCHE	DULE D	
SCHE	DULE E	

1 INTRODUCTION AND SUMMARY

This is an OEB staff report on the community meetings held in conjunction with Canadian Niagara Power Inc.'s (CNPI) 2017 cost of service rate application. It will be placed on the public record of the OEB hearing of this application along with copies of written presentations made at the meetings and all letters of comment for consideration by the OEB in determining whether or not to grant the application by CNPI.

Further to the Notice of Application, the OEB hosted two community meetings regarding CNPI's application on September 13, 2016 in Port Colborne, Ontario and September 14, 2016 in Gananoque, Ontario. This report provides a summary of the events.

1.1 Port Colborne Ontario

The Port Colborne meeting was held at the Vale Health and Wellness Centre from 6:30 p.m. to 8:30 p.m.. Approximately 110 customers attended the meeting to hear presentations from OEB staff and CNPI. Prior to the presentations, OEB and CNPI staff were available to informally talk to attendees and answer questions. Councillor Marina Butler and Mr. John Robinson presented prepared remarks. OEB and CNPI representatives responded to questions from attendees during and following the presentations.

The following OEB staff and CNPI representatives attended the meeting:

OEB Staff

Ljuba Djurdjevic Ceiran Bishop Sylvia Kovesfalvi Andrew Bodrug Martin Davies

CNPI

Jie Han, VP Operations
Glen King, VP Finance and CFO
Kristine Carmichael, Director of Corporate and Customer Services
Greg Beharriel, Manager, Regulatory Affairs
Rodney Barber, Regulatory Analyst
Taylor Wilson, Energy Advisor
Courtney Bonito, Customer Service Supervisor
Jennifer Fretz-Joseph, Supervisor, IT Business Support

1.2 Gananoque Ontario

The Gananoque Meeting took place at the Royal Canadian Legion Branch 92 from 5:30pm to 8:30pm and was attended by approximately 100 customers. Prior to the presentations, OEB and CNPI staff were available to answer informal questions from attendees. OEB staff and CNPI representatives gave formal presentations and prepared comments were provided by customers Barbara Jones and Bill Webster. OEB and CNPI representatives responded to questions from attendees during and following the presentations.

The following OEB staff and CNPI representatives attended the meeting:

OEB Staff

Kristi Sebalj Ceiran Bishop Sylvia Kovesfalvi Andrew Bodrug Martha McOuat

CNPI:

Jie Han, VP, Operations
Kristine Carmichael, Director of Corporate and Customer Services
Greg Beharriel, Manager, Regulatory Affairs
Rodney Barber, Regulatory Analyst
Jennifer Fretz-Joseph, Supervisor, IT Business Support
Michael O'Reilly, General Manager, Eastern Ontario Power

2 THE PROCESS

The OEB convenes community meetings in the service territories of local distribution companies that have applied to the OEB to change their rates through a cost of service proceeding.

Community meetings are part of the OEB's process of reviewing a rate application . The OEB has established a Customer Engagement Framework to ensure that the perspectives of customers served by rate-regulated entities are considered in the OEB's decision making process. .

The meetings are hosted by OEB staff in order to inform customers about the role of the OEB in rate-setting and the processes involved. OEB representatives explain the various ways that customers can become involved in the adjudicative process. Customers attending the meetings are given the opportunity to express their concerns directly to the OEB through online comments on the computers provided or by filling in a comment form.

To assist customers in better understanding the application, the utility is invited to make a presentation explaining its proposals for capital, operations and other spending that result in the requested rate change. Customers and municipal officials are also invited to make presentations outlining their thoughts on the utility's proposals.

Following the presentations, customers have the opportunity to ask questions of the OEB and the utility about the application and the regulatory process. The issues raised by customers in the community meetings are documented and used by OEB staff in reviewing the application, asking interrogatories and making submissions to the OEB panel hearing and deciding the application.

3 SUMMARY OF THE MEETINGS

3.1 Port Colborne

In addition to the OEB and CNPI presentations (attached as schedules A and B, respectively), two customers also provided comments.

Councillor Marina Butler asked CNPI to explain the extent to which it had taken steps to find efficiencies in its operations and consider asset optimization strategies such as deeming some of its transmission infrastructure as distribution facilities. She expressed concerns regarding the movement of CNPI from the lowest rates in the Niagara peninsula to the highest in the last 15 years. She ended her presentation by questioning if CNPI has the ability to reduce rates for the people they serve.

Mr. John Robinson's presentation encouraged CNPI to consider ways to improve customer service by making its customer-facing activities friendlier to seniors, who represent a large portion of CNPI's customer base. Mr. Robinson submitted that seniors likely prefer in-person customer service rather than by electronic means. Accordingly, Mr. Robinson encouraged CNPI to re-open a customer service office in Port Colborne in order to better serve customers in that area.

Significant portions of the audience expressed dissatisfaction with many aspects of provincial energy policy and CNPI's application. Many attendees reported that they could not afford to pay for any further rate increases.

Specific Issues Raised

- CNPI's application questions regarding current and future capital expenditures, OM&A, especially wages and salaries, customer service and particularly the associated bill impacts
- Electricity prices general concerns regarding affordability, as well as provincial energy policy, including the partial sale of Hydro One
- The potential effectiveness of the government's rate relief program 8% off the HST, rural rate rebates and additional support for business
- Renewable generation exports of below-cost power to New York, the status of development of energy storage, the cost of renewable energy programs
- OPG salary levels and nuclear cost overruns
- Electricity sector compensation
- Consideration of compensation in OEB's review of CNPI's application

• Extent of OEB oversight of increases in the cost of power, the regulated price plan, time of use rates, and the global adjustment.

3.2 Gananoque

Following the presentations by OEB staff and CNPI (Schedule C), there were two brief presentations from customers.

Barbara Jones stated that people were doing all they could to reduce their electricity costs and requested that the OEB more closely monitor service providers to ensure increased reliability and improved efficiency. Ms. Jones' comments have been attached to this document as Schedule D.

Bill Webster requested that the OEB should deny any increase in rates until CNPI addressed reliability issues.

Bruce Davis provided a handout with five suggestions for actions that could be taken to improve the energy situation by the Town of Gananoque and CNPI. These included funding for the promotion of generation and green energy solutions, developing a database of vulnerable citizens needing aid during power outages and securing access to the local power plant and dams. The handout has been attached to this document as Schedule E.

The primary focus of attendees' questions was the recent and ongoing power outages experienced in the area and the perception that CNPI and Hydro One had not undertaken sufficient action to resolve the problems.

Specific Issues Raised

- CNPI's application questions regarding the inclusion of spending to address reliability issues; lack of segregation of Gananoque reliability data within the application; administration spending levels.
- CNPI efforts to engage Hydro One to address reliability issues
- Mutual aid agreements with neighbouring utilities to reduce response time during outages
- Overall efficiency levels of CNPI as compared with other utilities in the province, and how the OEB monitors and enforces efficiency and performance.



Tab 11 – Summary of Port Colborne Customer Sessions
Tab II Sammary of Fore Colbottie Customer Sessions

Summary of Participation in Port Colborne "Your Kilowatt Hour" Events

Background:

Recent Community Day sessions revealed that customers in locations where CNPI does not have a local office, would like the opportunity to meet with a CNPI representative to speak face to face. As a result of this feedback, CNPI has launched a pilot program called 'Your Kilowatt Hour' where a CNPI representative and a Conservation Specialist spend one day a month meeting face to face with customers.

Marketing:

These sessions were promoted the following channels:

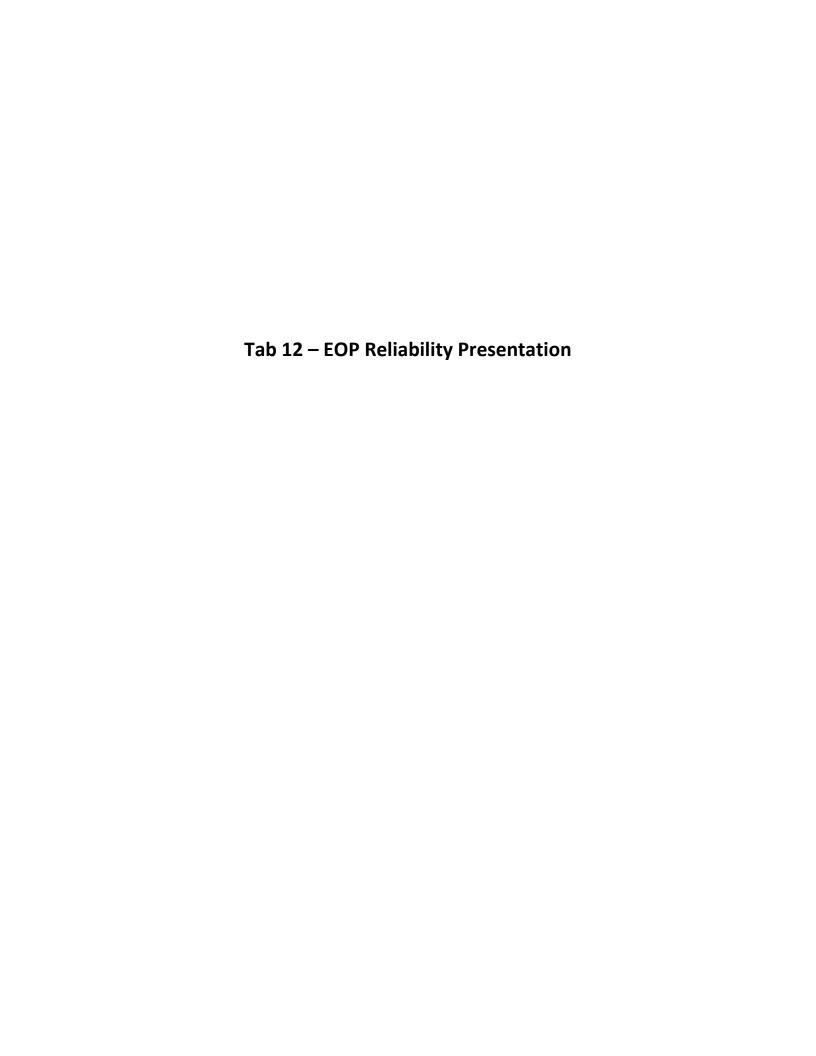
- Newspaper ads
- Call blasts to each home in the service territory
- Website
- Social media, Twitter and Facebook
- Posted session information and agencies throughout Port Colborne

Customers were asked to call in and schedule appointments. Appointments were scheduled every half hour from 10:00 a.m. to 3:00 p.m. on each day.

October 7, 2016	3 customers attended
November 18, 2016	10 customers attended
December 9, 2016	6 customers attended, 3 did not show up for
	appointment

Results:

Overall results and feedback from customers was very positive. Sessions will continue on a bi-monthly basis in 2017 with a roll out to Eastern Ontario Power service territory on a quarterly basis.





Recent EOP Reliability

Eastern Ontario Power System Reliability Index								
VEAD	EOP Interr	nal System	EOP Loss of Supply					
YEAR	SAIDI	SAIFI	SAIDI	SAIFI				
2011	1.99	1.52	0.00	0.00				
2012	4.79	4.39	0.00	0.00				
2013	4.00	3.45	0.00	0.00				
2014	1.64	2.09	0.01	0.00				
2015	1.01	0.59	23.02	2.29				
2016 YTD	1.23	1.08	16.91	4.81				

SAIDI = total hours of outages (<u>D</u>uration) in each year, for average customer

SAIFI = number of outages (<u>F</u>requency) in each year, for average customer

Recent EOP Loss-of-Supply Outages

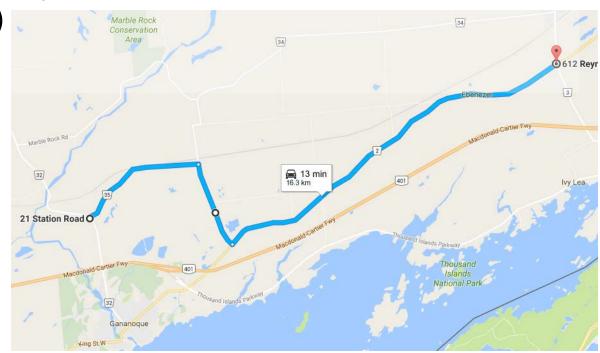
Description	Date	Time	Duration (hours)
Pole fire on HONI 3M8 44kV feeder	2015-Feb-04	1:00 PM	9.20
Fire @ HONI Frontenac TS (Source of 44kV)	2015-Oct-27	9:22 AM	11.17
HONI 44kV line down during very high winds	2016-Jan-10	6:30 PM	3.08
Vehicle struck HONI/EOP Joint Use pole, John F Scott Rd	2016-Mar-27	10:15 AM	3.25
Vehicle struck HONI 44kV pole, Joyceville Rd @ Middle Rd	2016-May-26	6:30 PM	1.58
Forced outage to isolate HONI 44kV pole after car accident	2016-Jun-20	12:30 PM	0.33
Pole fire on HONI / EOP Joint Use pole, John F Scott Rd	2016-Aug-10	7:17 AM	9.47
Total for 7 Events	38.08		

Recent steps...

- <u>Sept 7</u>: "Lets talk Power" meeting by Town of Gananaque (TOG)
- <u>Sept 14</u>: OEB organized Customer Engagement meeting
- Sept 15: HONI and CNPI met to identify potential technical solutions
- Sept 16: TOG, Provincial MPP, Federal MP, Hydro One Networks (HONI) and CNPI met to discuss possible solutions.
 - HONI committed to complete feasibility study by November 15. This was completed on-time.
 - CNPI committed to make recommendation to TOG based on HONI study and CNPI internal discussion (This session!).

Option 1: Construct Redundant 44kV Supply from Brockville

- Hydro One Networks (HONI) would construct 16.3km of 44kV line from end of legacy HONI M2 feeder (from Brockville) to connect to EOP Main Substation on Hwy 32, plus a voltage regulator station.
- Project would be done in 2019 at earliest
- Estimated cost:
 - HONI \$10.75M (\pm 50%)
 - EOP \$750k (\pm 50%)



Option 1: Construct Redundant 44kV Supply from Brockville

Pros

- Completely independent source using different geographic route
 - Minimal chance of both sources being unavailable at the same time

Cons

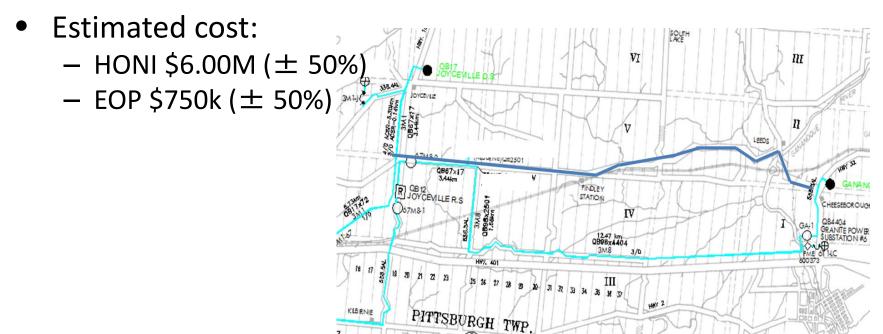
- Very Expensive:
 - Hydro One estimates project costs at \$10.75M (± 50%)
 - Hydro One expects EOP to make a full contribution
 - EOP integration cost
 estimated at \$750k (± 50%)
- Will not be built before 2019 at earliest
 - HONI requires 24 months after our commitment

Option 1: Impact on Recent Outages

Description	Date	Time	Actual Duration (hours)	Option Impact?	Likely 'New' Duration (hours)
Pole fire on HONI 3M8 44kV feeder	2015-Feb-04	1:00 PM	9.20	Yes	1.00
Fire @ HONI Frontenac TS (Source of 44kV)	2015-Oct-27	9:22 AM	11.17	Yes	1.00
HONI 44kV line down during very high winds	2016-Jan-10	6:30 PM	3.08	Yes	1.00
Vehicle struck HONI/EOP Joint Use pole, John F Scott Rd	2016-Mar-27	10:15 AM	3.25	Yes	1.00
Vehicle struck HONI 44kV pole, Joyceville Rd @ Middle Rd	2016-May-26	6:30 PM	1.58	Yes	1.00
Forced outage to isolate HONI 44kV pole after car accident	2016-Jun-20	12:30 PM	0.33	No	0.33
Pole fire on HONI / EOP Joint Use pole, John F Scott Rd	2016-Aug-10	7:17 AM	9.47	Yes	1.00
Total for 7 Events	38.08		6.33		

Option 2: Extend second 44kV Supply from Frontenac TS (Kingston)

- This would require Hydro One Networks (HONI) to extend an existing 44kV line from Joyceville Rd 14km to EOP main substation on Hwy 32, plus a voltage regular station.
- Project would likely be done in 2018 at earliest
 - 18 months after our commitment



Option 2: Extend second 44kV Supply from Frontenac TS (Kingston)

Pros

- Second supply line using same route and same structures over much of its length
- Less expensive than Option 1
- Quicker to construct (by six months) than Option 1

Cons

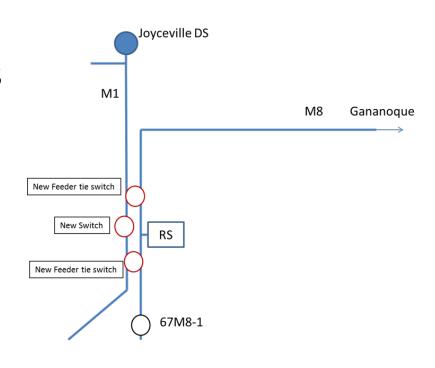
- Expensive:
 - Hydro One estimates project costs at \$6.00M (± 50%)
 - Hydro One expects EOP to make a full contribution
 - EOP integration cost estimated at \$750k(±50%)
- All of EOP would still be supplied by Frontenac TS
 - Common Source
- Approximately 14 km of 35 km for this route is on common poles (40%)
 - Loss of one of these poles means loss of supply
- Will not be built before 2018 at earliest
 - HONI requires 18 months from our commitment

Option 2: Impact on Recent Outages

Description	Date	Time	Actual Duration (hours)	Option Impact?	Likely 'New' Duration (hours)
Pole fire on HONI 3M8 44kV feeder	2015-Feb-04	1:00 PM	9.20	No	9.20
Fire @ HONI Frontenac TS (Source of 44kV)	2015-Oct-27	9:22 AM	11.17	No	11.17
HONI 44kV line down during very high winds	2016-Jan-10	6:30 PM	3.08	Yes	1.00
Vehicle struck HONI/EOP Joint Use pole, John F Scott Rd	2016-Mar-27	10:15 AM	3.25	Yes	1.00
Vehicle struck HONI 44kV pole, Joyceville Rd @ Middle Rd	2016-May-26	6:30 PM	1.58	Yes	1.00
Forced outage to isolate HONI 44kV pole after car accident	2016-Jun-20	12:30 PM	0.33	No	0.33
Pole fire on HONI / EOP Joint Use pole, John F Scott Rd	2016-Aug-10	7:17 AM	9.47	Yes	1.00
Total for 7 Events	38.08		24.70		

Option 3: Install 44kV 'Tie' switches on Joyceville Rd

- This would require Hydro One Networks (HONI) to install new switchgear on Joyceville Rd to allow transfer from 3M8 to 3M1
- Conditional on available capacity on 3M1 at time of outage
 - EOP would be able to supply most load, even at peak
- Project would likely be done in 2017 at earliest
- Estimated cost: \$106k (± 50%)



Option 3: Install 44kV 'Tie' switches on Joyceville Rd

Pros

- Inexpensive Compared to Option 1 and Option 2
 - Hydro One estimates project costs at \$106k* (± 50%)
 - Hydro One expects EOP to make a full contribution
- Provides some feeder redundancy on supply line for approx. 60% of length of existing 44kV line
- Can be completed in 2017
 - HONI requires 6 months after our commitment

Cons

- Does not address any issues on 'last 16km' of 44kV supply line
- Still only one source
 - Frontenac TS (Kingston)
- Still using common poles for 11km (30%) of supply length

Option 3: Impact on Recent Outages

Description	Date	Time	Actual Duration (hours)	Option Impact?	Likely 'New' Duration (hours)
Pole fire on HONI 3M8 44kV feeder	2015-Feb-04	1:00 PM	9.20	No	9.20
Fire @ HONI Frontenac TS (Source of 44kV)	2015-Oct-27	9:22 AM	11.17	No	11.17
HONI 44kV line down during very high winds	2016-Jan-10	6:30 PM	3.08	No	3.08
Vehicle struck HONI/EOP Joint Use pole, John F Scott Rd	2016-Mar-27	10:15 AM	3.25	Yes	2.00
Vehicle struck HONI 44kV pole, Joyceville Rd @ Middle Rd	2016-May-26	6:30 PM	1.58	No	1.58
Forced outage to isolate HONI 44kV pole after car accident	2016-Jun-20	12:30 PM	0.33	No	0.33
Pole fire on HONI / EOP Joint Use pole, John F Scott Rd	2016-Aug-10	7:17 AM	9.47	Yes	2.00
Total for 7 Events	38.08		29.37		

Option 4: Rebuild 7.5 km of 44/26kV Joint Use (shared) Line on John F Scott Rd

- EOP and HONI work together to replace 7.5km of older pole line on John F Scott Rd.
 - This line is nearing end of useful service life
- EOP will use this opportunity to perform voltage conversions
 - Improved efficiency
- Project would likely be done in late early 2018
- HONI will transfer their line at their own cost (~\$400k)
- Estimated cost to EOP:
 - Contribution to HONI \$269k (\pm 50%)
 - EOP \$433k (\pm 50%)
 - TOTAL = \$702k (\pm 50%)



Option 4: Rebuild 7.5 km of 44/26kV Joint Use (shared) Line on John F Scott Rd

Pros

- Replaces 7.5km of pole line that is nearing the end of useful life
- Eliminates asset conditionbased outages on this section
- New stronger poles MAY withstand minor vehicular contacts
- Allows for some long-term system efficiencies (voltage conversion)

Cons

- Moderate Cost:
 - Hydro One estimates project costs at \$669k (± 50%)
 - Hydro One will absorb \$400k
 - EOP estimated project cost is \$433k (± 50%)
 - Total cost estimate = \$702k*
- Will not be built before late
 2018 at earliest
 - HONI requires 9 months from our commitment

^{*}can be absorbed into CNPI rate base

Option 4: Impact on Recent Outages

Description	Date	Time	Actual Duration (hours)	Option Impact?	Likely 'New' Duration (hours)
Pole fire on HONI 3M8 44kV feeder	2015-Feb-04	1:00 PM	9.20	Yes	0.00
Fire @ HONI Frontenac TS (Source of 44kV)	2015-Oct-27	9:22 AM	11.17	No	11.17
HONI 44kV line down during very high winds	2016-Jan-10	6:30 PM	3.08	No	3.08
Vehicle struck HONI/EOP Joint Use pole, John F Scott Rd	2016-Mar-27	10:15 AM	3.25	Not Likely	3.25
Vehicle struck HONI 44kV pole, Joyceville Rd @ Middle Rd	2016-May-26	6:30 PM	1.58	Not Likely	1.58
Forced outage to isolate HONI 44kV pole after car accident	2016-Jun-20	12:30 PM	0.33	No	0.33
Pole fire on HONI / EOP Joint Use pole, John F Scott Rd	2016-Aug-10	7:17 AM	9.47	Yes	0.00
Total for 7 Events	38.08		19.42		

Comparison of all four Options

	Description	Cost (±50%)	Reliability Improvements	Estimated SAIFI*	Estimated SAIDI*
-	Status Quo - Do nothing	\$0	Worst	7.0	38.1hr
1	Build new 44kV line from Brockville	\$11,250,000	Good	7.0	6.3hr
2	Extend second 44kV line from Frontenac TS (Kingston)	\$6,500,000	Fair	7.0	24.7hr
3	Install new tie switches between two HONI 44kV Lines	\$106,000	Fair	7.0	29.4hr
4	Rebuild 7.5km Joint-Use (shared) line – John F Scott Rd	\$702,000	Fair	5.0	19.4hr

^{*} Assumes recent loss-of-supply events were to occur again exactly the same way as in the past

Comparison of all four Options

	Description	Cost (±50%)	Reliability Improvements	Estimated SAIFI*	Estimated SAIDI*
-	Status Quo - Do nothing	\$0	Worst	7.0	38.1hr
1	Build new 44kV line from Brockville	\$11,250,000	Good	7.0	6.3hr
2	Extend second 44kV line from Frontenac TS (Kingston)	\$6,500,000	Fair	7.0	24.7hr
3	Install new tie switches between two HONI 44kV Lines	\$106,000	Fair	7.0	29.4hr
4	Rebuild 7.5km Joint-Use (shared) line – John F Scott Rd	\$702,000	Fair	5.0	19.4hr

- Options 1 and 2 are very expensive for a customer base of 3600 customers. All investments would need to be fully recovered through contributions from the Town of Gananoque
- Option 3 is affordable, but only addresses a few of the recent loss-of-supply incidents
- Option 4 is affordable, and investment will have to be made in near future anyways

What if EOP implemented Options 3 AND 4?

Description	Date	Time	Actual Duration (hours)	Option Impact?	Likely 'New' Duration (hours)
Pole fire on HONI 3M8 44kV feeder	2015-Feb-04	1:00 PM	9.20	Yes	0.00
Fire @ HONI Frontenac TS (Source of 44kV)	2015-Oct-27	9:22 AM	11.17	No	11.17
HONI 44kV line down during very high winds	2016-Jan-10	6:30 PM	3.08	No	3.08
Vehicle struck HONI/EOP Joint Use pole, John F Scott Rd	2016-Mar-27	10:15 AM	3.25	Yes	2.00
Vehicle struck HONI 44kV pole, Joyceville Rd @ Middle Rd	2016-May-26	6:30 PM	1.58	Not Likely	1.58
Forced outage to isolate HONI 44kV pole after car accident	2016-Jun-20	12:30 PM	0.33	No	0.33
Pole fire on HONI / EOP Joint Use pole, John F Scott Rd	2016-Aug-10	7:17 AM	9.47	Yes	0.00
Total for 7 Events	38.08		18.17		

Comparison of all Options:

	Description	Cost (±50%)	Reliability Improvements	Estimated SAIFI*	Estimated SAIDI*
-	Status Quo - Do nothing	\$0	Worst	7.0	38.1hr
1	Build new 44kV line from Brockville	\$11,250,000	Good	7.0	6.3hr
2	Extend second 44kV line from Frontenac TS (Kingston)	\$6,500,000	Fair	7.0	24.7hr
3	Install new tie switches between two HONI 44kV Lines	\$106,000	Fair	7.0	29.4hr
4	Rebuild 7.5km Joint-Use (shared) line – John F Scott Rd	\$702,000	Fair	5.0	19.4hr
→	Do options 3 and 4	\$808,000	Better	5.0	18.1hr

RECOMMEND:

- Do Options 3 and 4.
- CNPI (including Niagara rate base) existing budget can accommodate these projects without additional application to OEB.

What will happen if the Town requires Option 1 or 2

- CNPI will make a special application to OEB
- OEB will very unlikely to allow CNPI customers as a group to pay the cost through rates
- Town of Gananoque will have to pay the cost.