

IN THE MATTER OF the *Ontario Energy Board Act*, 1998, S.O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF an Application by Guelph Hydro Electric Systems Inc. for an Order or Orders approving or fixing just and reasonable distribution rates and other charges, effective May 1, 2011.

**Guelph Hydro Electric Systems Inc.
Responses to Interrogatories**

Vulnerable Energy Consumers Coalition (VECC)

Filed: November 26, 2010

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**GUELPH HYDRO ELECTRIC SYSTEMS INC.
2011 IRM3 ELECTRICITY DISTRIBUTION RATE APPLICATION
EB-2010-0130**

VECC INTERROGATORIES

QUESTION #1

Reference: Manager's Summary, page 23
Appendix 5.1, page 2

- a) Please reconcile the 2011 distribution capital expenditures reported in the Manager's Summary with those shown in Table 1 of Appendix 5.1 – the totals for the two do not appear to be the same.

Guelph Hydro's response:

[App. 5.1, p. 2] Table 1- 2011 Capital Budget Summary- contains an error (i.e. the Contributed Capital was subtracted twice); the correct Guelph MTS#1 amount is \$11,256,993 and the Total (without Contributed Capital) is \$10,856,993 (rounded at \$10.9 M in Manager's Summary, Table1, page 23)

Guelph Hydro corrected Table 1:

Table 1 - 2011 CAPITAL BUDGET SUMMARY		
Non-Discretionary Investments		
	2011	
	BUDGET	TOTAL
Land		
Guelph MTS#1 Property	-	
		-
Substations		
Rockwood MS#2	-	
Guelph MTS#1	11,256,993	
Less Contributed Capital	-400,000	
		10,856,993
Other Rockwood Capital		
Substations, Rehab, etc.		
Less Contributed Capital		
Feeders		
CFDR	2,833,000	
CMOD	288,000	
CREL	487,000	
CSW	172,000	
CCB	81,900	
Less Contributed Capital	-330,000	
		3,531,900
Rehabilitation		
CRE	2,891,000	
		2,891,000
Subdivisions		
CSUB	2,853,000	
Less Contributed Capital	-1,880,000	
		973,000
Commercial / Industrial		
CACI	836,000	
Less Contributed Capital	-437,000	
		399,000
Other		
Metering	400,000	
SCADA	250,000	
IT CAPITAL	420,000	
BUILDING/FIXTURES	85,000	
OFFICE EQUIP / GRAPHICS	50,000	
ROLLING STOCK	450,000	
MAJOR TOOLS	60,000	
		1,715,000
Total		20,366,893

- b) Please provide a schedule that breaks down the approved 2008 capital spending (per EB-2007-0742) into the same categories as used in Table 1 of Appendix 5.1 and compares the values with the proposed spending for 2011 by category. Please provide explanations for any variances that are greater than 10%

Guelph Hydro's response:

Table 1 - 2011 CAPITAL BUDGET SUMMARY
Non-Discretionary Investments

11/26/2010

	2011 Budget	2008 Approved EDR	Change increase (decrease)	% change	Explanation
Building and Fixtures					
Southgate Drive - Phase 2	-	100,000	(100,000)		Building improvements budgeted for 2008 not required in 2011.
	-	100,000	(100,000)	-100%	
Substations					
Guelph MTS#1	10,856,993	-	10,856,993		Guelph MTS construction planned for 2011. No such project in 2008.
Less Contributed Capital	(400,000)	-	(400,000)		
	10,456,993	-	10,456,993	100%	
Feeders					
CFDR	2,833,000	1,961,276	871,724	44%	2011 increase result of construction cost inflation and a significant underground construction requirement.
CMOD	288,000	192,302	95,698	50%	2011 increase result of construction cost inflation and a significant underground construction requirement.
CREL	487,000	319,372	167,628	52%	Above normal level of municipal infrastructure projects in 2011 are causing the increase when compared to 2008.
CSW	172,000	164,735	7,265	4%	
CCB	81,900	81,208	692	1%	
Less Contributed Capital	(330,000)	(296,880)	(33,120)	11%	Increase consistent with the higher level of capital projects in 2011 compared to 2008.
	3,531,900	2,422,013	1,109,887		
Rehabilitation					
CRE	2,891,000	2,258,240	632,760	28%	Increase result of Guelph Hydro program to increase asset replacement to \$3.69M per year by 2018.
	2,891,000	2,258,240	632,760		

	2011 Budget	2008 Approved EDR	Change increase (decrease)	% change	Explanation
Subdivisions					
CSUB	2,853,000	2,387,665	465,335	19%	2011 increase expected based on anticipated development activity. Increase consistent with the higher level of capital projects in 2011 compared to 2008.
Less Contributed Capital	(1,880,000)	(1,728,131)	(151,869)	9%	
	973,000	659,534	313,466		
Commercial / Industrial					
CACI	836,000	729,651	106,349	15%	2011 increase expected based on anticipated development activity. Increase consistent with the higher level of capital projects in 2011 compared to 2008.
Less Contributed Capital	(437,000)	(382,825)	(54,175)	14%	
	399,000	346,826	52,174		
Other					
METERING	400,000	918,819	(518,819)	-56%	The 2008 distribution meter capital budget included funding for the upgrade of two legacy Wholesale Meter Points (WMP) at Guelph Cedar TS, as well as the installation of one new WMP at a new distribution substation Rockwood MS#2. These WMP upgrades were completed. In 2011 we have budgeted for the provision of two new WMPs at new municipal transformer station MTS#1 being installed in 2011.
SCADA	250,000	143,517	106,483	74%	
IT CAPITAL	420,000	130,000	290,000	223%	In 2011 Guelph Hydro's SCADA Master station requires a major upgrade of its hardware and software, necessary to address a deficiency in the capture of specific distribution system events. The 2011 budget also includes a small expansion of the video wall used by our System Control Operators.
BUILDING/FIXTURES	85,000	-	85,000	100%	Increase in 2011 is due to the creation of a secondary disaster recovery site. 2011 reflects typical capital expenditure amount as building gets older.
OFFICE EQUIP / GRAPHICS	50,000	40,000	10,000	25%	In 2008, GH deferred the replacement of a line truck to 2009. In 2011, rolling stock replacement includes a heavy work vehicle for the underground crews and a replacement pole trailer.
ROLLING STOCK	450,000	230,000	220,000	96%	
MAJOR TOOLS	60,000	50,000	10,000	20%	
	1,715,000	1,512,336	202,664	13%	
Total	19,966,893	7,298,949	12,667,944		

- c) Where in the Appendices is the claim that “capital expenditures amounts incremental to this threshold will have a significant impact on the operation of Guelph Hydro” specifically addressed?

Guelph Hydro's response:

The significant impact of the capital expenditures amount incremental to the threshold on the operation of Guelph Hydro should be viewed from two perspectives 1) the short term financial implications and 2) longer term considerations as it relates to the impact on the Company's credit rating and subsequent borrowing costs.

The short term financial implications are fairly straightforward. Without the cash flow provided by the proposed ICM rate rider, Guelph Hydro will have to fund the capital expenditures from existing working capital which may require temporary short term borrowing through its operating line of credit. The amounts required is difficult to predict as the Guelph Hydro's overall working capital requirements are affected by many items, including the cost of power and transmission charges billed and collected on behalf of other market participants. At this time, Guelph Hydro believes that it has sufficient short term borrowing capacity to carry out its capital plan in the event that the proposed ICM rate rider is not approved.

Guelph Hydro believes, however, that the longer term considerations of not having the ICM approved are much more significant than the short term implications. Guelph Hydro has recently obtain a credit rating from Standard and Poor's and has plans to issue long term debentures via a private placement to qualified third party investors. Stability and predictability of cash flow is a key consideration for the credit rating agency and the investors. Guelph Hydro believes that the ICM mechanism established by the Board is an important element in providing stability and predictability in cash flows when an LDC enters a period of "step function" growth as we are now with the requirement to construct a new transformer station. While Guelph Hydro will not speculate on how the specifics of this particular request would affect its longer term cost of borrowing, we believe that the ICM is an important ingredient in ensuring ongoing favorable borrowing costs for utilities.

- d) With respect to Table 1 in Appendix 5.1, please provide schedule which identifies the 2011 capital spending projects (and costs) that are in response to expected load growth and provide the reasons for each.

Guelph Hydro's response:

2011 Capital Spending Projects in Response to Expected Load Growth:

CFDR (Capital Feeders) - \$2,833,000 - Includes projects related to expansions and upgrades to main distribution feeder system to supply new development.

Major 2011 projects include:

- Southgate Drive, east leg from Hanlon TS – 127M14 feeder;
- Clair Road, MTS#1 to Laird Road and Laird Road, Clair Road to Southgate Drive - additional feeder;
- Hanlon West Business Park; and
- Maltby Road, Crawley Road to Gordon Street.

CMOD (Capital Modifications) - \$288,000 - Includes local upgrades and modifications to feeder system to accommodate new commercial and industrial development - a significant portion of this cost may be recovered through capital contributions.

CSUB (Capital Subdivisions) - \$2,853,000 (\$973,000 net of contributions) - Includes distribution facilities specifically installed to service new residential subdivisions and townhousing projects. The 2010 City of Guelph Development Priorities Plan (DPP) anticipates a 1.5% annual population increase with approximately 1000 to 1100 new dwelling units per year. Of these, approximately 800 could be in subdivisions with the balance in apartments. Budget is based on typical annual activity, but is dependent on developer priorities.

CACI - \$836,000 (\$399,000 net of contributions) - (Capital Apartments, Commercial, and Industrial) - Includes apartment, commercial and industrial projects where supply is at primary voltage, or through a utility transformer at secondary voltage to a single building or group of buildings, and the distribution system to individual customers within the building(s) is not part of utility's assets - typically about 50% of cost is recovered through capital contributions. Level of activity is highly variable and customer dependent. Budget is based on typical annual activity.

- e) Is any of the planned 2011 Capital Spending aimed at facilitating the connection of new renewable generation (e.g., microFIT projects)? If so, please identify the associated projects, the proposed 2011 spending and explain the basis for determining the amount of spending to be funded by Guelph Hydro rate payers as opposed to by all consumers in the province (per Ontario Regulation 330/09).

Guelph Hydro's response:

None of the 2011 Capital Spending is currently allocated to specific renewable generation connection projects (e.g. FIT or microFIT). Our Green Energy Act plan will be submitted as part of our 2012 Cost of Service filing in 2011.

QUESTION #2

Reference: Manager's Summary, page 24
EB-2007-0673, Supplemental Report of the Board

- a) What is the anticipated annual revenue from the new GS 1,000-4,999 kW customer based on the same rates as were used in the determination of the customer's capital contribution?

Guelph Hydro's response:

The anticipated annual revenue from the new GS 1,000-4,999 kW customer is:

	Year 1	Year 2	Year 3	Year 4	Year 5
Based on Customer load forecast	\$10,800	\$53,900	\$97,000	\$140,000	\$183,200

Please see details in Appendix 1_Guelph_IRR_SEC_Q2_Economic Evaluation of Guelph Hydro's response to SEC's interrogatories.

- b) Appendix B, Page VII of the Board's EB-2007-0673 Supplemental Report states that applications for an incremental capital module must include evidence that "incremental revenue will not be recovered through other means" and makes specific reference to new customers as an example. Where in the Application does Guelph Hydro address this issue, particularly as it pertains to the anticipated new GS 1,000-4,999 customer?

Guelph Hydro's response:

As presented above in Guelph Hydro's response to Question #2 a), the expected 2011 incremental revenue as it pertains to the new GS 1,000-4,999 kW customer is not material (i.e. < \$6,000); the customer is expected to be connected (at the earliest time) in October 2011.

Guelph Hydro compared the expected incremental revenue with its revenue growth of -0.34% (i.e. -\$169,468) from the approved 2008 revenue requirement, and noticed that the expected incremental revenue does not offset the growth.

QUESTION #3

Reference: Manager's Summary, page 25
Appendix 5.2, page 7

- a) Please recalculate the Capital Expenditure Threshold using growth rates of 1.1%, 1.7% and 2.6% as oppose to the -0.34% used in the Application.

Guelph Hydro's response:

Please note that the average growth rates mentioned in Appendix 5.2, page 7, refers exclusively to Guelph South service area's growth; regardless, Guelph Hydro has calculated the Capital Expenditures as requested in the following table:

Capital Expenditures Calculation				
	Growth Rate 1.1%	Growth Rate 1.7%	Growth Rate 2.6%	
Year	2008	2008	2008	
Status	Re-Basing	Re-Basing	Re-Basing	
Price Cap Index	0.18%	0.18%	0.18%	A
Growth	1.10%	1.70%	2.60%	B
Dead Band	20%	20%	20%	C
Average Net Fixed Assets				
Gross Fixed Assets Opening	\$ 123,637,713	\$ 123,637,713	\$ 123,637,713	
Add: CWIP Opening	\$ -	\$ -	\$ -	
Capital Additions	\$ 7,298,949	\$ 7,298,949	\$ 7,298,949	
Capital Disposals	-\$ 995,146	-\$ 995,146	-\$ 995,146	
Capital Retirements	\$ -	\$ -	\$ -	
Deduct: CWIP Closing	\$ -	\$ -	\$ -	
Gross Fixed Assets - Closing	\$ 129,941,516	\$ 129,941,516	\$ 129,941,516	
Average Gross Fixed Assets	\$ 126,789,615	\$ 126,789,615	\$ 126,789,615	
Accumulated Depreciation - Opening	\$ 37,841,267	\$ 37,841,267	\$ 37,841,267	
Depreciation Expense	\$ 5,984,160	\$ 5,984,160	\$ 5,984,160	D
Disposals	-\$ 552,335	-\$ 552,335	-\$ 552,335	
Retirements	\$ -	\$ -	\$ -	
Accumulated Depreciation - Closing	\$ 43,273,092	\$ 43,273,092	\$ 43,273,092	
Average Accumulated Depreciation	\$ 40,557,180	\$ 40,557,180	\$ 40,557,180	
Average Net Fixed Assets	\$ 86,232,435	\$ 86,232,435	\$ 86,232,435	E
Working Capital Allowance				
Working Capital Allowance Base	\$ 125,742,305	\$ 125,742,305	\$ 125,742,305	
Working Capital Allowance Rate	15%	15%	15%	
Working Capital Allowance	\$ 18,861,346	\$ 18,861,346	\$ 18,861,346	F
Rate Base	\$ 105,093,781	\$ 105,093,781	\$ 105,093,781	G = E + F
Depreciation	\$ 5,984,160	\$ 5,984,160	\$ 5,984,160	H
Threshold Test	142.51%	153.07%	168.90%	I = 1 + (G / H) * (B + A * (1 + B)) + C
Threshold CAPEX	\$ 8,528,273	\$ 9,159,971	\$ 10,107,517	J = H * I

QUESTION #4

Reference: Appendix 5.2, page 1

- a) What is the basis for the quoted 42 MV.A capacity for the existing Hanlon TS? Is this its maximum short-term rating or a longer term rating? Also, please reconcile this value with Figure A.1 which where the line for “existing capacity” is less than 40 MV.A.

Guelph Hydro’s response:

The quoted 42 MV.A capacity for Hanlon TS is the 10-day summer LTR (Limited Time Rating) that we have most recently used for operations planning. This number has been recalculated a number of times by Hydro One with somewhat different results. The 40 MV.A for existing capacity is a practical number used for planning purposes that does not push the station’s operational limit.

- b) Please confirm that the construction of the new transformer station will reduce Guelph Hydro’s charges from the IESO (and/or Hydro One) for Transformer Connection service.

Guelph Hydro’s response:

Construction of the New MTS will reduce Guelph Hydro’s IESO charges for transformer connection service compared to those for a Hydro One TS.

- c) If yes, when does Guelph Hydro foresee adjusting its RTSRs to account for this?

Guelph Hydro’s response:

According the OEB’s Guideline “Electricity Distribution Retail Transmission Service Rates” G-2008-0001, Guelph Hydro proposed adjustments to its 2011 RTSRs rates based on a comparison of historical transmission costs adjusted for new UTR levels and revenues generated from existing RTSRs.

Guelph Hydro foresee adjustments to account for reductions (if any) of the IESO and /or Hydro One’s Transformer Connection Service charges in the next rate application for 2012 rates.

QUESTION #5

Reference: Appendix 5.2, pages 10 and 21

- a) Has provision been made in the estimated capital cost (\$14.5 M) for the installation of any capacitors (per the discussion in the last paragraph)? If so, what is their associated cost? If not, are there costs elsewhere in the 2011 Capital Budget (Appendix 5.1, Table 1) for capacitors and, if so, where and how much?

Guelph Hydro's response:

The \$14.5M does not include installation of capacitor banks as part of the current TS project, though provision will be made for future installation if necessary. Capacitor banks will be installed on the distribution feeders and are included in the 2011 Capital Budget under the category CCB. The budget for the category is \$81,900.

- b) Please confirm that the \$14.5 M does not include the cost of any new feeders required to connect loads to the new station but rather the costs of such feeders are included in 2011 Capital Budget under Feeders.

Guelph Hydro's response:

The \$14.5M does not include the cost of any new feeders except for egress facilities from the TS switchgear to adjacent facilities on road allowance. Feeder costs are included in the 2011 Capital budget under the category CFDR.

- c) What is the 2011 Capital Spending on Feeders associated with the new station?

Guelph Hydro's response:

The budgeted 2011 Capital Spending on Feeders associated with the new station is \$300,000.

QUESTION #6

Reference: Appendix 5.2, pages 16-18

- a) Please explain the difference (in terms of facilities involved) between the express feeders associated with the costs referenced in Table 6 vs. the express feeders for the costs referenced in Table 7.

Guelph Hydro's response:

The express feeder costs identified in Table 6 are those associated with ultimate buildout load additions of 108 MV.A. The express feeder costs identified in Table 7 are in proportion to the proposed 50 MV.A capacity of the new TS.

QUESTION #7

Reference: Appendix 5.2, pages 3 and 25
EB-2007-0673, Supplemental Report of the Board

- a) What is the aggregate load forecast over the next 3-5 years for the zoning areas not included in the "Study Area"?

Guelph Hydro's response:

At the present time, Guelph Hydro does not have a load forecast over the next 3-5 years for the zoning areas not included in the "Study Area". Guelph Hydro has been developing its Load Forecast for 2011 and 2012 and intends to finalize it in the first quarter of 2011 in preparation for 2012 Cost of Service application.

- b) Based on the response to part (a) and the forecast load growth in the Study Area please explain why the incremental revenue requirement request will not be recovered (at least in part) through "other load growth" as required by the Board's Report (Appendix B, page VII).

Guelph Hydro's response:

Any load growth involves Capital and OM&A costs; any incremental cost incurred for connecting and serving new loads is not part of the approved 2008 rate base. In majority of instances, the cost-revenue break-even point (the point in time when revenues equal costs) for new capital investments is more than 5 years. When analyzing the new MTS incremental revenue request, it is Guelph Hydro's view that only the incremental revenue attributable to the new investment should be considered.

QUESTION #8

Reference: Manager's Summary, page 23
 Appendix 5.2, page 27
 Incremental Capital Work Form, Sheet E3.1

- a) Please reconcile the \$10,857 k in capital spending for 2011 noted in Appendix 5.2 with the \$10,520 k value used the Incremental Capital Work Form.

Guelph Hydro's response:

According to the Board staff's "Incremental Capital Project Workform" model presented by Guelph Hydro in the Appendix 5.5, the amount of \$10,519,668 is the Closing Net Fixed Asset amount (excluding 2011 calculated amortization of \$337,333) of the asset components (capital cost) of the New MTS project in amount of \$10,857,000.

That is:

Asset Component 1- Closing Net Fixed Assets:	\$2,233,420
Asset Component 2- Closing Net Fixed Assets:	\$1,216,133
Asset Component 3- Closing Net Fixed Assets:	\$720,000
Asset Component 4- Closing Net Fixed Assets:	\$3,198,914
Asset Component 5- Closing Net Fixed Assets:	<u>\$3,151,200</u>
TOTAL (A):	\$10,519,667

Asset Component 1: Amortization 2011 forecast	\$45,580
Asset Component 2: Amortization 2011 forecast	\$86,867
Asset Component 3: Amortization 2011 forecast	\$30,000
Asset Component 4: Amortization 2011 forecast	\$94,086
Asset Component 2: Amortization 2011 forecast	<u>\$80,800</u>
TOTAL (B):	<u>\$337,333</u>
TOTAL Capital Cost (A+B)	\$10,857,000

Guelph Hydro has corrected the input from cell F24 from Sheet "E3.1 Threshold Test" of the 2011 IRM 3 Incremental Capital Workform" to reflect the correct amount of \$10, 857,000; the requested 2011 incremental revenue requirement is of \$1,068,072.

Guelph Hydro has re-submitted the 2011 IRM3 Incremental Capital Workform with the Board (please see Appendix 2

Guelph_IRR_BoardStaff_Q4.a_Correction to 2011 IRM Incremental Capital Workform_Sheet E3.1)

QUESTION #9

Reference: Manager's Summary, page 26
Incremental Capital Work Form, Sheet E4.1

- a) Please explain why a capital structure of 46.7% Equity/4.0% Short-Term Debt/49.3% Long Term Debt is used in the determination of the revenue requirement impact when Guelph Hydro's transition to a 40/4/56 structure was completed in 2010.

Guelph Hydro's response:

It is Guelph Hydro's understanding that Sheet "B1.4 Re-Based Rev Req" of the "2011 Incremental Capital Workform" model requires last COS re-based year according to the 2008 COS OEB application number EB-2007-0742. In our view, the purpose of Sheet B1.4 input is to provide the 2008 ICM billing determinants- the Denominator- which is compared with the 2008 Audited RRR revenue requirement – the Numerator- for calculating the growth in Sheet "E1.1 Threshold Parameters".

With other words, the actual revenue is calculated by multiplying 2009 consumption with the actual 2010 rates and it is compared with 2008 approved revenue (which should be mathematically equal with the 2008 forecast consumption multiply by 2008 approved rates). The difference (calculated in percentage) represents the incremental revenue increase or decrease from the 2008 approved revenue. The incremental revenue is gained either from a variance in 2009 consumption when compared with 2008 forecast, or/and from an increase/decrease of the actual 2010 rates. The actual rates structure captures the 40/4/56 capital structure effect.

- b) Please re-do the revenue requirement calculation assuming the 40/4/56 capital structure.

Guelph Hydro's response:

Guelph Hydro has re-done the revenue requirement calculation with the assumption of the 2010 capital structure, and the correction mentioned in the responses to the Board Staff's interrogatories – Question 4.a. The results are detailed in Appendix 1 Guelph_IRR_VECC_Q9.b_ Rev Req 2010 Capital Structure.

**Appendix 1 Guelph_IRR_VECC_Q9.b_
Rev Req 2010 Capital Structure**



Name of LDC: Guelph Hydro Electric Systems Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

LDC Information

Applicant Name	Guelph Hydro Electric Systems Inc.
OEB Application Number	IRM3
LDC Licence Number	ED-2002-0565
Applied for Effective Date	May 1, 2011
Stretch Factor Group	II
Stretch Factor Value	0.4%
Last COS Re-based Year	2008
Last COS OEB Application Number	EB-2007-0742
ICM Billing Determinants for Growth - Numerator	2009 Audited RRR
ICM Billing Determinants for Growth - Denominator	2008 Re-Based Forecast



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B1.2 Removal of Rate Adders	Removal of Rate Adders
B1.3 Re-Based Rev From Rates	Calculated Re-Based Revenue From Rates
B1.4 Re-Based Rev Req	Detailed Re-Based Revenue From Rates
C1.1 Ld Act-Mst Rcent Yr	Enter Billing Determinants for most recent actual year
D1.1 Current Revenue from Rates	Enter Current Rates to calculate current rate allocation
E1.1 Threshold Parameters	Shows calculation of Price Cap and Growth used for incremental capital threshold calculation
E2.1 Threshold Test	Input sheet to calculate Threshold and Incremental Capital
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Rate Class and Re-Based Billing Determinants & Rates

Last COS Re-based Year

2008

Last COS OEB Application Number

EB-2007-0742

Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Tariff Service Charge D	Re-based Tariff Distribution Volumetric Rate kWh E	Re-based Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	44,220	357,871,626		14.27	0.0164	
GSLT50	General Service Less Than 50 kW	Customer	kWh	3,612	146,156,347		13.26	0.0158	
GSGT50	General Service 50 to 999 kW	Customer	kW	515	0	1,023,682	231.36		2.7994
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	37	0	864,467	614.29		1.9595
LU	Large Use	Customer	kW	4	0	471,742	898.69		2.1526
USL	Unmetered Scattered Load	Connection	kWh	591	2,336,603		5.42	0.0249	
Sen	Sentinel Lighting	Connection	kW	30	0	352	6.46		7.1686
SL	Street Lighting	Connection	kW	13,670	0	25,194	0.14		3.3423
NA	Rate Class 9	NA	NA						
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Name of LDC: Guelph Hydro Electric Systems Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Removal of Rate Adders

Last COS Re-based Year	2008
Last COS OEB Application Number	EB-2007-0742

Rate Class	Charge A	kWh B	kW C	Adders D	Adders E	Adders F	Re-based Base Service Charge H = A - D	kWh I = B - E	kW J = C - F
Residential	14.27	0.0164	0.0000	1.00	0.0001	0.0000	13.27	0.0163	0.0000
General Service Less Than 50 kW	13.26	0.0158	0.0000	1.00	0.0001	0.0000	12.26	0.0157	0.0000
General Service 50 to 999 kW	231.36	0.0000	2.7994	1.00	0.0000	0.0374	230.36	0.0000	2.7620
General Service 1,000 to 4,999 kW	614.29	0.0000	1.9956	1.00	0.0000	0.0000	613.29	0.0000	1.9956
Large Use	698.69	0.0000	2.1536	1.00	0.0000	0.0000	697.69	0.0000	2.1536
Unmetered Scattered Load	5.42	0.0249	0.0000	0.00	0.0001	0.0000	5.42	0.0248	0.0000
Sentinel Lighting	6.46	0.0000	7.1686	0.00	0.0000	0.0286	6.46	0.0000	7.1400
Street Lighting	0.14	0.0000	3.3423	0.00	0.0000	0.0345	0.14	0.0000	3.3078



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Calculated Re-Based Revenue From Rates

Last COS Re-based Year: 2008
Last COS OEB Application Number: EB-2007-0742

Rate Class	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Base Service Charge D	Re-based Base Distribution Volumetric Rate kWh E	Re-based Base Distribution Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Revenue Requiremen t from Rates J = G + H + I	Service Charge % Revenue K = G / J	Distribution Volumetric Rate % Revenue kWh L = H / J	Distribution Volumetric Rate % Revenue kW M = I / J	Total % Revenue N = J / R
Residential	44,220	357,871,626	0	13.27	0.0163	0.0000	7,041,593	5,833,308	0	12,874,900	54.7%	45.3%	0.0%	55.5%
General Service Less Than 50 kW	3,612	146,156,347	0	12.26	0.0157	0.0000	531,397	2,294,655	0	2,826,052	18.8%	81.2%	0.0%	12.2%
General Service 50 to 999 kW	515	0	1,023,682	230.36	0.0000	2.7620	1,423,625	0	2,827,410	4,251,034	33.5%	0.0%	66.5%	18.3%
General Service 1,000 to 4,999 kW	37	0	864,467	613.29	0.0000	1.9595	272,301	0	1,693,923	1,966,224	13.8%	0.0%	86.2%	8.5%
Large Use	4	0	471,742	897.69	0.0000	2.1526	43,089	0	1,015,472	1,058,561	4.1%	0.0%	95.9%	4.6%
Unmetered Scattered Load	591	2,336,603	0	5.42	0.0248	0.0000	38,439	57,948	0	96,386	39.9%	60.1%	0.0%	0.4%
Sentinel Lighting	30	0	352	6.46	0.0000	7.1400	2,326	0	2,513	4,839	48.1%	0.0%	51.9%	0.0%
Street Lighting	13,670	0	25,194	0.14	0.0000	3.3078	22,966	0	83,337	106,302	21.6%	0.0%	78.4%	0.5%
							9,375,735	8,185,910	5,622,655	23,184,299				100.0%
							O	P	Q	R				



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Detailed Re-Based Revenue From Rates

Last COS Re-based Year

2008

Last COS OEB Application Number

EB-2007-0742

Applicants Rate Base		Last Rate Re-based Amount	
Average Net Fixed Assets			
Gross Fixed Assets - Re-based Opening	\$ 123,637,713	A	
Add: CWIP Re-based Opening	\$ -	B	
Re-based Capital Additions	\$ 7,298,949	C	
Re-based Capital Disposals	-\$ 995,146	D	
Re-based Capital Retirements	\$ -	E	
Deduct: CWIP Re-based Closing	\$ -	F	
Gross Fixed Assets - Re-based Closing	\$ 129,941,516	G	
Average Gross Fixed Assets			\$ 126,789,615 $H = (A + G) / 2$
Accumulated Depreciation - Re-based Opening	\$ 37,841,267	I	
Re-based Depreciation Expense	\$ 5,984,160	J	
Re-based Disposals	-\$ 552,335	K	
Re-based Retirements	\$ -	L	
Accumulated Depreciation - Re-based Closing	\$ 43,273,092	M	
Average Accumulated Depreciation			\$ 40,557,180 $N = (I + M) / 2$
Average Net Fixed Assets			\$ 86,232,435 $O = H - N$
Working Capital Allowance			
Working Capital Allowance Base	\$ 125,742,305	P	
Working Capital Allowance Rate	15.0%	Q	
Working Capital Allowance			\$ 18,861,346 $R = P * Q$
Rate Base			\$ 105,093,781 $S = O + R$
Return on Rate Base			
Deemed ShortTerm Debt %	4.00%	T	\$ 4,203,751 $W = S * T$
Deemed Long Term Debt %	56.00%	U	\$ 58,852,517 $X = S * U$
Deemed Equity %	40.00%	V	\$ 42,037,512 $Y = S * V$
Short Term Interest	4.47%	Z	\$ 187,908 $AC = W * Z$
Long Term Interest	6.10%	AA	\$ 3,590,004 $AD = X * AA$
Return on Equity	8.57%	AB	\$ 3,602,615 $AE = Y * AB$
Return on Rate Base			\$ 7,380,526 $AF = AC + AD + AE$
Distribution Expenses			
OM&A Expenses	\$ 9,325,109	AG	
Amortization	\$ 5,637,037	AH	
Ontario Capital Tax (F1.1 Z-Factor Tax Changes)	\$ 239,079	AI	
Grossed Up PILs (F1.1 Z-Factor Tax Changes)	\$ 1,971,258	AJ	
Low Voltage	\$ 92,876	AK	
Transformer Allowance	\$ 319,608	AL	
	\$ -	AM	
	\$ -	AN	
	\$ -	AO	
			\$ 17,584,967 $AP = \text{SUM} (AG : AO)$
Revenue Offsets			
Specific Service Charges	-\$ 248,600	AQ	
Late Payment Charges	-\$ 100,000	AR	
Other Distribution Income	-\$ 125,213	AS	
Other Income and Deductions	-\$ 1,391,500	AT	-\$ 1,865,313 $AU = \text{SUM} (AQ : AT)$
Revenue Requirement from Distribution Rates			\$ 23,100,180 $AV = AF + AP + AU$
Rate Classes Revenue			
Rate Classes Revenue - Total (B1.1 Re-based Revenue - Gen)			\$ 23,184,299 AW
Difference	-\$ 84,119		$AZ = AV - AW$
Difference (Percentage - should be less than 1%)	-0.36%		$BA = AZ / AW$



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Load Actual - Most Recent Year

Please enter 2009 Audited RRR on this page

Rate Class	Fixed Metric	Vol Metric	Billed Customers or Connections A	Billed kWh B	Billed kW C	Base Service Charge D	Base Distribution Volumetric Rate kWh E	Base Distribution Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Total Revenue by Rate Class J = G + H + I
Residential	Customer	kWh	44,584	352,708,669	0	\$13.27	\$0.0163	\$0.0000	\$7,099,477	\$5,749,151	\$0	\$12,848,628
General Service Less Than 50 kW	Customer	kWh	3,624	141,492,398	0	\$12.26	\$0.0157	\$0.0000	\$533,126	\$2,221,431	\$0	\$2,754,557
General Service 50 to 999 kW	Customer	kW	538	368,795,357	1,000,754	\$230.36	\$0.0000	\$2.7620	\$1,485,822	\$0	\$2,764,083	\$4,249,905
General Service 1,000 to 4,999 kW	Customer	kW	41	373,502,975	893,555	\$613.29	\$0.0000	\$1.9595	\$301,739	\$0	\$1,750,921	\$2,052,660
Large Use	Customer	kW	4	237,183,984	439,421	\$897.69	\$0.0000	\$2.1526	\$43,089	\$0	\$945,897	\$988,986
Unmetered Scattered Load	Connection	kWh	582	2,424,418	0	\$5.42	\$0.0248	\$0.0000	\$37,853	\$60,126	\$0	\$97,979
Sentinel Lighting	Connection	kW	28	101,502	275	\$6.46	\$0.0000	\$7.1400	\$2,177	\$0	\$1,962	\$4,139
Street Lighting	Connection	kW	12,860	9,321,265	26,052	\$0.14	\$0.0000	\$3.3078	\$21,605	\$0	\$86,174	\$107,779
									\$9,524,888	\$8,030,708	\$5,549,037	\$23,104,632

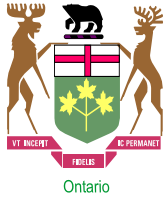


Name of LDC: Guelph Hydro Electric Systems Inc.
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Current Revenue from Rates

This sheet is used to determine the applicants most current allocation of revenues (after the most recent revenue cost ratio adjustment, if applicable) to be used to calculate the incremental capital rate riders.

Rate Class	Fixed Metric	Vol Metric	Current Base			Re-based			Current Base				Service			
			Current Base Service Charge A	Distribution Volumetric Rate kWh B	Distribution Volumetric Rate kW C	Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F	Current Base Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate kWh Revenue H = B * E	Distribution Volumetric Rate kW Revenue I = C * F	Total Current Base Revenue J = G + H + I	Service Charge % Total Revenue L = G / \$K	Distribution Volumetric Rate % Total Revenue M = H / \$K	Distribution Volumetric Rate % Total Revenue N = I / \$K	Total % Revenue \$K
Residential	Customer	kWh	13.39	0.0164		44,220	#####	0	7,105,270	5,869,095	0	12,974,364	30.4%	25.1%	0.0%	55.5%
General Service Less Than 50 kW	Customer	kWh	12.24	0.0156		3,612	#####	0	530,531	2,280,039	0	2,810,570	2.3%	9.8%	0.0%	12.0%
General Service 50 to 999 kW	Customer	kW	230.28		2.7615	515	0	#####	1,423,130	0	2,826,898	4,250,028	6.1%	0.0%	12.1%	18.2%
General Service 1,000 to 4,999 kW	Customer	kW	618.96		1.9777	37	0	864,467	274,818	0	1,709,656	1,984,475	1.2%	0.0%	7.3%	8.5%
Large Use	Customer	kW	905.99		2.1725	4	0	471,742	43,488	0	1,024,859	1,068,347	0.2%	0.0%	4.4%	4.6%
Unmetered Scattered Load	Connection	kWh	5.47	0.0250		591	2,336,603	0	38,793	58,415	0	97,208	0.2%	0.2%	0.0%	0.4%
Sentinel Lighting	Connection	kW	6.52		7.2063	30	0	352	2,347	0	2,537	4,884	0.0%	0.0%	0.0%	0.0%
Street Lighting	Connection	kW	0.23		5.5465	13,670	0	25,194	37,729	0	139,739	177,468	0.2%	0.0%	0.6%	0.8%
									9,456,106	8,207,549	5,703,689	23,367,344	40.5%	35.1%	24.4%	100.0%



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Threshold Parameters

Price Cap Index

Price Escalator (GDP-IPI)	1.30%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.40%

Price Cap Index **0.18%**

Growth

ICM Billing Determinants for Growth - Numerator : 2009 Audited RRR	<u>\$23,104,632</u>	A
ICM Billing Determinants for Growth - Denominator : 2008 Re-Based Forecast	<u>\$23,184,299</u>	B

Growth **-0.34%** C = A / B



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Threshold Test

Year	2008	
Status	Re-Basing	
Price Cap Index	0.18%	A
Growth	-0.34%	B
Dead Band	20%	C
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 123,637,713	
Add: CWIP Opening	\$ -	
Capital Additions	\$ 7,298,949	
Capital Disposals	-\$ 995,146	
Capital Retirements	\$ -	
Deduct: CWIP Closing	\$ -	
Gross Fixed Assets - Closing	\$ 129,941,516	
Average Gross Fixed Assets	<u>\$ 126,789,615</u>	
Accumulated Depreciation - Opening	\$ 37,841,267	
Depreciation Expense	\$ 5,984,160	D
Disposals	-\$ 552,335	
Retirements	\$ -	
Accumulated Depreciation - Closing	\$ 43,273,092	
Average Accumulated Depreciation	<u>\$ 40,557,180</u>	
Average Net Fixed Assets	<u>\$ 86,232,435</u>	E
Working Capital Allowance		
Working Capital Allowance Base	\$ 125,742,305	
Working Capital Allowance Rate	15%	
Working Capital Allowance	<u>\$ 18,861,346</u>	F
Rate Base	<u>\$ 105,093,781</u>	G = E + F
Depreciation	D \$ 5,984,160	H
Threshold Test	117.12%	I = 1 + (G / H) * (B + A * (1 + B)) + C
Threshold CAPEX	\$ 7,008,381	J = H * I



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Summary of Incremental Capital Projects

Number of ICP's

1

Project ID #	Incremental Capital Non-Discretionary Project Description	Incremental Capital CAPEX	Amortization Expense	CCA
ICP 1	Municipal Transformer Station 115 kV to 13.8 kV	10,857,000	337,332	822,980
		<u>10,857,000</u>	<u>337,332</u>	<u>822,980</u>



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Incremental Capital Adjustment

Current Revenue Requirement

Current Revenue Requirement - Total	\$	23,100,180	A
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Return on Rate Base

Incremental Capital CAPEX		\$	10,857,000	B	
Depreciation Expense		\$	337,332	C	
Incremental Capital CAPEX to be included in Rate Base		\$	10,519,668	D = B - C	
Deemed ShortTerm Debt %	4.0%	E	\$	420,787	G = D * E
Deemed Long Term Debt %	56.0%	F	\$	5,891,014	H = D * F
Short Term Interest	4.47%	I	\$	18,809	K = G * I
Long Term Interest	6.10%	J	\$	359,352	L = H * J
Return on Rate Base - Interest		\$	378,161	M = K + L	
Deemed Equity %	40.0%	N	\$	4,207,867	P = D * N
Return on Rate Base -Equity	8.57%	O	\$	360,614	Q = P * O
Return on Rate Base - Total		\$	738,775	R = M + Q	

Amortization Expense

Amortization Expense - Incremental	C	\$	337,332	S
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Grossed up PIL's

Regulatory Taxable Income	O	\$	360,614	T
Add Back Amortization Expense	S	\$	337,332	U
Deduct CCA		\$	822,980	V
Incremental Taxable Income		\$	125,033	W = T + U - V
Current Tax Rate (F1.1 Z-Factor Tax Changes)	28.2%	X		Y = W * X
PIL's Before Gross Up		\$	35,319	Z = Y / (1 - X)
Incremental Grossed Up PIL's		\$	49,224	

Ontario Capital Tax

Incremental Capital CAPEX		\$	10,857,000	AA
Less : Available Capital Exemption (if any)		\$	11,000,000	AB
Incremental Capital CAPEX subject to OCT		\$	143,000	AC = AA - AB
Ontario Capital Tax Rate (F1.1 Z-Factor Tax Changes)	0.000%	AD		AE = AC * AD
Incremental Ontario Capital Tax		\$	-	

Incremental Revenue Requirement

Return on Rate Base - Total	Q	\$	738,775	AF
Amortization Expense - Total	S	\$	337,332	AG
Incremental Grossed Up PIL's	Z	\$	49,224	AH
Incremental Ontario Capital Tax	AE	\$	-	AI
Incremental Revenue Requirement		\$	1,026,883	AJ = AF + AG + AH + AI



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Calculation of Incremental Capital Rate Rider - Option A Fixed and Variable

Rate Class	Distribution			Distribution			Total Revenue by Rate Class G = D + E + F	Billed Customers or Connections			Distribution		
	Service Charge %	Volumetric Rate % Revenue	Volumetric Rate % Revenue	Service Charge Revenue	Volumetric Rate Revenue	Volumetric Rate Revenue		H	Billed kWh I	Billed kW J	Service Charge Rider	Volumetric Rate kWh Rate Rider	Volumetric Rate kW Rate Rider
	A	B	C	D = \$N * A	E = \$N * B	F = \$N * C					K = D / H / 12	L = E / I	M = F / J
Residential	30.4%	25.1%	0.0%	#####	\$ 257,918.71	\$ -	\$ 570,161.41	44,220	#####	0	\$0.588427	\$0.000721	
General Service Less Than 50 kW	2.3%	9.8%	0.0%	\$ 23,314.29	\$ 100,196.84	\$ -	\$ 123,511.12	3,612	#####	0	\$0.537890	\$0.000686	
General Service 50 to 999 kW	6.1%	0.0%	12.1%	\$ 62,539.79	\$ -	\$ 124,228.67	\$ 186,768.47	515	0	#####	\$10.119707		\$0.121355
General Service 1,000 to 4,999 kW	1.2%	0.0%	7.3%	\$ 12,076.95	\$ -	\$ 75,131.24	\$ 87,208.19	37	0	864,467	\$27.200339		\$0.086910
Large Use	0.2%	0.0%	4.4%	\$ 1,911.07	\$ -	\$ 45,037.69	\$ 46,948.75	4	0	471,742	\$39.813938		\$0.095471
Unmetered Scattered Load	0.2%	0.2%	0.0%	\$ 1,704.78	\$ 2,567.06	\$ -	\$ 4,271.84	591	2,336,603	0	\$0.240380	\$0.001099	
Sentinel Lighting	0.0%	0.0%	0.0%	\$ 103.15	\$ -	\$ 111.47	\$ 214.62	30	0	352	\$0.286523		\$0.316683
Street Lighting	0.2%	0.0%	0.6%	\$ 1,658.02	\$ -	\$ 6,140.84	\$ 7,798.86	13,670	0	25,194	\$0.010107		\$0.243742
				#####	\$ 360,682.61	\$ 250,649.92	\$ 1,026,883.27						



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Calculation of Incremental Capital Rate Rider - Option B Variable

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Incremental Capital \$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distributio n Volumetric Rate kWh Rate Rider F = C / D	Distributio n Volumetric Rate kW Rate Rider G = C / E
Residential	\$12,974,364	55.52%	\$570,161	#####	0	\$0.0016	
General Service Less Than 50 kW	\$2,810,570	12.03%	\$123,511	#####	0	\$0.0008	
General Service 50 to 999 kW	\$4,250,028	18.19%	\$186,768	0	#####		\$0.1824
General Service 1,000 to 4,999 kW	\$1,984,475	8.49%	\$87,208	0	864,467		\$0.1009
Large Use	\$1,068,347	4.57%	\$46,949	0	471,742		\$0.0995
Unmetered Scattered Load	\$97,208	0.42%	\$4,272	2,336,603	0	\$0.0018	
Sentinel Lighting	\$4,884	0.02%	\$215	0	352		\$0.6097
Street Lighting	\$177,468	0.76%	\$7,799	0	25,194		\$0.3096
	<u>\$23,367,344</u>	<u>100.00%</u>	<u>\$1,026,883</u>				