

May 15, 2013

**BY COURIER (2 COPIES) AND EMAIL**

**Ms. Kirsten Walli**

Board Secretary

Ontario Energy Board

P.O. Box 2319

2300 Yonge Street, Suite 2700

Toronto, Ontario M4P 1E4

Fax: (416) 440-7656

Email: boardsec@oeb.gov.on.ca

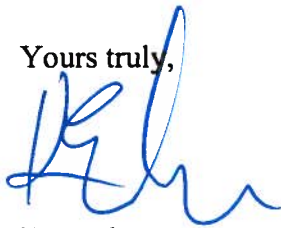
Dear Ms. Walli:

**Re: Environmental Defence – Cost Claim  
EB-2012-0064 – Toronto Hydro 2012-2014 Rates**

Enclosed please find Environmental Defence's cost claim in the above matter. We ask that any payment be made payable to "Klippensteins (In Trust)" and forwarded to the above address.

Please do not hesitate to contact me if anything further is required.

Yours truly,


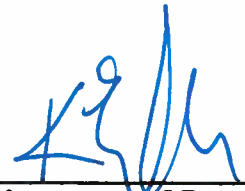


Kent Elson

cc: Applicant

**FORM 3**

**AFFIDAVIT IN SUPPORT OF COST CLAIM**

<b>EB-2012-0064</b>	<b>Environmental Defence</b>	
Board File Number	Party Name	
<b>Items Claimed Net of HST</b>		
Legal/Consultant Fees	+	Disbursements
\$ 46,827.50		\$ 564.51
	=	Net Sub-Total
		\$ 47,392.01
<b>Goods and Services Tax</b>		
<input type="checkbox"/> Full Registrant		<input checked="" type="checkbox"/> Qualifying Non-Profit (HST at 6.5%)
<input type="checkbox"/> Unregistered (HST at 13%)		<input type="checkbox"/> Tax Exempt (no HST)
<input type="checkbox"/> Other	HST at	%
<b>Total Cost Claim</b>		
Net Sub-Total	+	Total HST Claimed *
\$ 47,392.01		\$ 3,080.48
	=	Total Cost Claim
		\$ 50,472.49
<p>I, (name) Kent Elson of the City of Toronto  in the Province of Ontario <b>MAKE OATH AND SAY (or AFFIRM):</b></p> <p>1. I am a representative of the above noted intervenor (the "intervenor") and as such have knowledge of the matters attested to herein.</p> <p>2. I have examined the above Cost Claim and all of the documentation in support of it.</p> <p>3. The above Cost Claim represents only costs incurred directly and necessarily by the intervenor for the purpose of the intervention in the Ontario Energy Board process (the file number of which is set out above).</p> <p><b>SWORN (or AFFIRMED) BEFORE ME</b> at  the City of Toronto in the Province of Ontario on  (date) <u>May 16, 2013</u></p>		
 <b>COMMISSIONER</b> for taking Affidavits, etc.	 <b>Signature of Deponent</b>	

\* - includes only 1/2 of HST from all Forms 1 and 2

*Silas Polkinghorne*  
 LSUC No. 59920J

**FORM 2**

**SUMMARY OF DISBURSEMENTS**

<b>EB-2012-0064</b>		<b>Environmental Defence</b>	
Board File Number		Party Name	
<b>Environmental Defence</b>			
Party or Group that made the disbursement			
	<b>Net Cost</b>	<b>HST *</b>	
Photocopies	114.00	14.82	
Printing	385.45	50.11	
Fax	1.75	0.23	
Courier	63.31	8.23	
Telephone	0.00	0.00	
Postage	0.00	0.00	
Transcripts	0.00	0.00	
Travel: Air	0.00	0.00	
Travel: Car	0.00	0.00	
Travel: Rail	0.00	0.00	
Travel: Other ( Parking & Mileage )	0.00	0.00	
Taxi or Airport Limo	0.00	0.00	
Accommodation	0.00	0.00	
<b>Note:</b> All claims must be in Canadian dollars. If app	0.00	0.00	
Other ( )	0.00	0.00	<b>Grand Total</b>
<b>Sub-totals</b>	<b>564.51</b>	<b>73.39</b>	<b>637.90</b>
<b>Notes</b>			
1. All claims for disbursements must include receipts where practicable.			
2. All claims must be in Canadian dollars. If applicable, state exchange rate _____, and country of initial currency _____.			

\* - only 1/2 of HST is claimed on Form 3

**FORM 1**

**SUMMARY STATEMENT OF HOURS - CONSULTANTS AND LEGAL COUNSEL**

A separate form is required for each consultant or legal counsel

<b>EB-2012-0064</b>	<b>Environmental Defence</b>	<b>Party Name</b>	
<b>Board File Number</b>		<b>Law Firm</b>	
<b>Legal Counsel Name</b>		<b>Ontario Clean Air Alliance</b>	
<b>Jack Gibbons</b>	<b>Year of Call</b>	<b>Consultant's Firm</b>	
<b>Consultant Name</b>	<b>Over 20</b>		
	<b>Years of Relevant Experience</b>		
	<small>(curriculum vitae must be attached)</small>		
	<b>Hours</b>	<b>Hourly Rate</b>	<b>Sub-total</b>
<b>Preparation</b>	49.53	225.00	11144.25
<b>Attendance - Technical Conference</b>	3.75	225.00	843.75
<b>Attendance - Settlement Conference</b>	0.00	225.00	0.00
<b>Attendance - Oral Hearing</b>	13.20	225.00	2970.00
<b>Argument</b>	0.00	225.00	0.00
<b>Case Management</b>	0.00	225.00	0.00
<b>TOTALS</b>	<b>66.48</b>	<b>225.00</b>	<b>14958.00</b>
			<b>1944.54</b>
			<b>16902.54</b>

**Note:** All claims must be in Canadian dollars. If applicable, state exchange rate \_\_\_\_\_, and country of initial currency \_\_\_\_\_.

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<b>EB-2012-0064</b>	<b>Board File Number</b>	<b>Environmental Defence Party Name</b>	
<b>Murray Klippenstein</b>	<b>1987</b>	<b>Klippensteins Law Firm</b>	
<b>Legal Counsel Name</b>	<b>Year of Call</b>		
<b>Consultant Name</b>	<b>Years of Relevant Experience</b> <small>(curriculum vitae must be attached)</small>	<b>Consultant's Firm</b>	
	<b>Hours</b>	<b>Hourly Rate</b>	<b>Sub-total</b>
<b>Preparation</b>	0.85	330.00	280.50
<b>Attendance - Technical Conference</b>	0.00	330.00	0.00
<b>Attendance - Settlement Conference</b>	0.00	330.00	0.00
<b>Attendance - Oral Hearing</b>	0.00	330.00	0.00
<b>Argument</b>	0.00	330.00	0.00
<b>Case Management</b>	0.00	330.00	0.00
<b>TOTALS</b>	<b>0.85</b>	<b>330.00</b>	<b>280.50</b>
			<b>36.47</b>
			<b>316.97</b>

**Note:** All claims must be in Canadian dollars. If applicable, state exchange rate \_\_\_\_\_, and country of initial currency \_\_\_\_\_.

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**FORM 1**

**SUMMARY STATEMENT OF HOURS - CONSULTANTS AND LEGAL COUNSEL**

A separate form is required for each consultant or legal counsel

<b>EB-2012-0064</b>	<b>Board File Number</b>	<b>Environmental Defence</b>	
		Party Name	
<b>Kent Elson</b>	<b>2009</b>	<b>Klippensteins</b>	
<b>Legal Counsel Name</b>	<b>Year of Call</b>	Law Firm	
<b>Consultant Name</b>	<b>Years of Relevant Experience</b> <small>(curriculum vitae must be attached)</small>	Consultant's Firm	
	<b>Hours</b>	<b>Hourly Rate</b>	<b>Sub-total</b>
<b>Preparation</b>	94.70	170.00	16099.00
<b>Attendance - Technical Conference</b>	0.00	170.00	0.00
<b>Attendance - Settlement Conference</b>	0.00	170.00	0.00
<b>Attendance - Oral Hearing</b>	14.00	170.00	2380.00
<b>Argument</b>	0.00	170.00	0.00
<b>Case Management</b>	0.00	170.00	0.00
<b>TOTALS</b>	<b>108.70</b>	<b>100.00</b>	<b>18479.00</b>
		<b>HST *</b>	<b>Total</b>
		2092.87	18191.87
		0.00	0.00
		0.00	0.00
		309.40	2689.40
		0.00	0.00
		0.00	0.00
		2402.27	<b>20881.27</b>

Note: All claims must be in Canadian dollars. If applicable, state exchange rate \_\_\_\_\_ and country of initial currency \_\_\_\_\_

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**FORM 1**

**SUMMARY STATEMENT OF HOURS - CONSULTANTS AND LEGAL COUNSEL**

A separate form is required for each consultant or legal counsel

<b>EB-2012-0064</b>	<b>Environmental Defence</b>		
Board File Number	Party Name		
Legal Counsel Name	Year of Call	Law Firm	
<b>Bob Bach</b>	<b>Over 20</b>		
Consultant Name	Years of Relevant Experience (curriculum vitae must be attached)	Consultant's Firm	
	<b>Hours</b>	<b>Hourly Rate</b>	<b>Sub-total</b>
<b>Preparation</b>	44.50	230.00	10235.00
<b>Attendance - Technical Conference</b>	0.00	230.00	0.00
<b>Attendance - Settlement Conference</b>	0.00	230.00	0.00
<b>Attendance - Oral Hearing</b>	12.50	230.00	2875.00
<b>Argument</b>	0.00	230.00	0.00
<b>Case Management</b>	0.00	230.00	0.00
<b>TOTALS</b>	<b>57.00</b>	<b>330.00</b>	<b>13,110.00</b>
		<b>HST</b>	<b>Total</b>
		1704.30	11565.55
		0.00	0.00
		0.00	0.00
		373.75	3248.75
		0.00	0.00
		0.00	0.00
		0.00	0.00

**Note:** All claims must be in Canadian dollars. If applicable, state exchange rate \_\_\_\_\_, and country of initial currency \_\_\_\_\_

\* - only 1/2 of HST is claimed on Form 3



ONTARIO  
CLEAN AIR  
ALLIANCE

## INVOICE: EB-2012-0064#1

To: Klippensteins; Attention: Kent Elson

From: Ontario Clean Air Alliance

Re: Fee for professional services of Jack Gibbons with respect to Environmental Defence's intervention at OEB Hearing No. EB-2012-0064 (Bremner TS) for the period November 14, 2012 to March 1, 2013 inclusive

Date: March 8, 2013

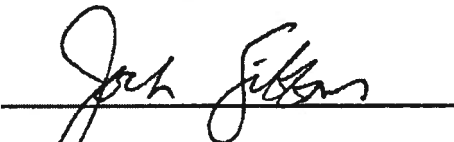
1. Reviewing pre-filed evidence		
1 hour x \$225/hour		\$225.00
2. Preparing for technical conference		
2.42 hours x \$225/hour		\$544.50
3. Attending technical conference		
3.75 hours x \$225/hour		\$843.75
4. Reviewing technical conference transcript		
1.08 hours x \$225/hour		\$243.00
5. Preparing cross-examination briefing notes		
27.6 hours x \$225/hour		\$6,210.00
6. Meeting with Kent Elson and Bob Bach to prepare for hearing		
2.75 hours x \$225/hour		\$618.75
7. Attending hearing		
13.2 hours x \$225/hour		\$2,970.00



160 John Street, Suite 300, Toronto, Ontario, M5V 2E5  
Telephone: (416) 260-2080 • Fax: (416) 598-9520  
contact@cleanairalliance.org • www.cleanairalliance.org



8.	Reviewing hearing transcript	
	3.58 hours x \$225/hour	\$805.50
9.	Assisting with preparation of argument	
	11.1 hours x \$225/hour	<u>\$2,497.50</u>
	Sub-Total	\$14,957.50
	HST Registration No. 85281 3997 RT0001	<u>\$1,944.48</u>
	TOTAL	\$16,901.98

  
\_\_\_\_\_  
Jack Gibbons

**KLIPPENSTEINS**  
Barristers & Solicitors  
160 John Street, Suite 300  
Toronto, Ontario M5V 2E5

Telephone: (416) 598-0288

Fax: (416) 598-9520

Environmental Defence Canada Inc.  
116 Spadina Ave  
Suite 300  
Toronto, ON M5V 2K6

May 15, 2013

File #: 1942

Invoice #: 3011

RE: Toronto Hydro 2012-2015 Rates - EB-2012-0064

Note: Unless otherwise indicated, hours are allocated to "preparation."

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DATE	DESCRIPTION	HOURS	LAWYER
Oct-24-12	Review materials from JG; Review issues list; Draft ED intervention request	1.45	KE
Oct-26-12	Confer JG re info needed from THESL	0.25	KE
Oct-29-12	Draft questions for THESL	0.55	KE
Oct-30-12	Correspondence to counsel for THESL requesting information	0.15	KE
Nov-05-12	Confer with KE	0.10	MK
	Review correspondence from THESL; Confer with JG & MK; Research criteria for late intervention applications; Reviewing OPA speech to Toronto Board of Trade; Drafting response to THESL submissions re intervention request	3.80	KE
Nov-08-12	Confer with KE	0.10	MK
	Review Procedural Order #3; Confer with JG & MK re timing and next steps	0.25	KE
Nov-12-12	Review updated application materials; Review materials for expert witness; Confer JG	2.55	KE
Nov-13-12	Draft comments/instructions to expert re report; Confer with MK & JG	2.05	KE
Nov-14-12	Confer with JG re technical conference questions and evidence	0.30	KE

Nov-15-12	Review materials from JG; Reviewing materials re Windsor upgrading project; Drafting correspondence re questions for technical conference	1.25	KE
Nov-16-12	Drafting correspondence re questions for technical conference; Confer with JG; Revision to questions	0.70	KE
Nov-19-12	Finalize and send questions for technical conference	0.30	KE
Nov-21-12	Confer with JG re technical conference; Draft correspondence to OPA requesting information	0.60	KE
Nov-22-12	Confer with JG re client instructions; Finalize and serve correspondence to OPA requesting information; Review JG correspondence re key issues in technical conference	0.55	KE
Nov-27-12	Review correspondence from applicant; Review code of conduct; Confer JG	0.55	KE
Nov-29-12	Confer with JG; Review data from THESL re transformer station loads; Assist with creation of charts from THESL excel data	2.35	KE
Nov-30-12	Confer with JG re transformer station load data and charts; Review draft expert report; Comments to expert	1.65	KE
Dec-06-12	Confer with JG re THESL information; Review correspondence; Review revised data from THESL and assist with graphing of THESL data; Review expert CV; Review OEB requirements re expert evidence; Confer with JG re same; Correspondence to Bob Bach	1.40	KE
Dec-07-12	Review expert report; Confer JG; Review various correspondence; File expert report; Confer JG re next steps	1.90	KE
Dec-21-12	Review interrogatories of THESL; Correspondence to JG	0.15	KE
Jan-02-13	Review THESL interrogatories to ED; Call with JG; Review B. Bach draft interrogatory responses and JG comments; Comments on B. Bach interrogatory responses; Correspondence to B. Bach; Correspondence to Martin Davies re exhibit numbers; Call with B Bach re interrogatory responses; Correspondence to JG re info from Enwave	3.90	KE
Jan-03-13	Confer with KE re interrogatories	0.20	MK
	Confer with MK re interrogatory questions	0.20	KE
Jan-04-13	Confer with JG re emails/instructions to BB; Review materials re BB evidence; Correspondence to Enwave re additional information; Correspondence to BB re next draft of interrogatory responses	0.65	KE
Jan-07-13	Review correspondence from Bob Bach; Confer with JG	0.55	KE

Jan-08-13	Drafting comments on Bob Bach interrogatory responses; Compiling Bob Bach interrogatory responses in accordance with OEB rules; Confer with JG; Confer with BB	2.35	KE
Jan-09-13	Review Bob Bach revisions to interrogatory responses; Call with BB re second interrogatory response and Con. Ed. reports; Correspondence to JG re same; Further review/revision of interrogatory responses; Correspondence with BB re final version of IRs; Various correspondence re info needed from Enwave; Drafting covering letter re interrogatory responses and scheduling issues; Finalize and file interrogatory responses; Review correspondence from Enwave re additional information; Draft amended interrogatory responses attaching updated Enwave information; Drafting covering letter to board; Filing materials	3.40	KE
Jan-14-13	Review correspondence from THESL re request for written hearing and scheduling issues; Review/draft correspondence to/from JG re same	0.40	KE
Jan-15-13	Confer with JG re request for oral hearing, scheduling issues, possible witnesses	0.40	KE
Jan-16-13	Message for Michael Millar; Review letter from OPA re deferring to THESL re rationale for project, etc.; Confer with JG	0.30	KE
Jan-17-13	Call with M. Millar re scheduling; Review RRFE report re regional planning; Review OPA submissions re RRFE report; Draft letter to OPA requesting witness for THESL hearing; Draft response to THESL letter of Jan 14 re oral hearing, scheduling, and OPA witnesses; Confer with JG re correspondence; Review correspondence from ED; File and serve correspondence	3.75	KE
Jan-22-13	Review THESL reports and studies re DG, incl. THESL 2012 GEA Plan, May 2011 DG capacity report, July 2009 DG report	1.00	KE
Jan-22-13	Researching precedents of the OPA staff as "third party" witnesses in OEB hearings; Message for Michael Millar	0.75	KE
Jan-24-13	Review Procedural Order 4	0.15	KE
Jan-25-13	Correspondence with BB and JG; Draft letter to the OPA re witness	1.05	KE
Jan-27-13	Correspondence to JG	0.10	KE
Jan-29-13	Finalize and send correspondence to OPA re potential witness	0.25	KE
Feb-07-13	Voice mail and correspondence to M. Lyle re OPA witness	0.30	KE

Feb-11-13	Review OPA correspondence; Draft correspondence to the Board re OPA evidence	1.40	KE
Feb-12-13	Review previous THESL proceedings and Board orders relating to DG etc.; Review application materials and prepare for cross-examinations	2.85	KE
Feb-13-13	Prepare for cross-examinations; Prepare cross-examination reference book; Correspondence to F. Cass re materials for cross-examinations; Confer with JG re same; Call and correspondence with M. Millar re scheduling for hearing	7.50	KE
Feb-14-13	Marking up cross-examination reference book and preparing for oral hearing	2.55	KE
Feb-15-13	Confer with KE	0.15	MK
	Confer with MK re hearing preparation; Meeting with BB and JG; Review OPA evidence; Confer with JG re cross-reference book and cross prep; Finalize reference book; Prep for cross	6.55	KE
Feb-18-13	Preparing for cross-examination and oral hearing	6.55	KE
Feb-19-13	Preparing for hearing (1 hour); Attending hearing (6 hours); Preparing for following day's hearing (1 hour)	8.00	KE
Feb-20-13	Preparing for hearing (1 hour); Attending hearing (6 hours)	7.00	KE
Feb-21-13	Confer with KE re hearing and next steps	0.30	MK
	Confer with MK & JG re next steps; Prepare and serve undertaking response	0.55	KE
Feb-26-13	Drafting submissions	5.05	KE
Feb-27-13	Drafting written submissions; Drafting/reviewing correspondence to/from Board staff and other parties re outstanding THESL undertaking response and the confidentiality issue	6.55	KE
Feb-28-13	Drafting written submissions; Confer with JG; Preparing for oral hearing tomorrow	8.05	KE
Mar-01-13	Preparing for oral hearing today (1.5 hr); Attending oral hearing (2 hrs); Reviewing transcript	3.85	KE

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Totals	109.55	\$18,759.50
HST on Fees		\$2,438.74

**FEE SUMMARY**

<b>Lawyer</b>	<b>Hours</b>	<b>Amount</b>
Murray Klippenstein	0.85	\$280.50
Kent Elson	108.70	\$18,479.00

**DISBURSEMENTS**

Courier expenses	63.31-See invoices
Outside photocopy expenses	385.45-See invoice
Photocopies	114.00-456 copies x \$0.25/page -Incl. copies of expert report, interrogatory responses, argument, etc
Faxes	1.75 7 pages at \$0.25/page
Totals	\$564.51
HST on Disbursements	\$73.39


**TOTAL FOR THIS INVOICE** **\$21,836.14**

Previous Balance	\$0.00
Previous Payments	\$0.00
Payment From Trust Towards This Invoice	\$0.00

**TOTAL DUE** **\$21,836.14**

Any disbursements not posted to your account on the date of this statement will be billed at a later date

THIS IS MY ACCOUNT HEREIN:

  
 MURRAY KLIPPENSTEIN  
 E. & O. E.

Total Tax: \$2,512.13  
 HST #: 87215 1923 RT0001

\* items are HST exempt

Accounts are due when rendered. Pursuant to the Solicitor's Act, interest at the rate of 5.00% per annum may be charged on amounts unpaid thirty days after the date of this account

For Cross Examination Reference Book



Invoice 04118444

Account: 601994  
Date: February 19, 2013

Bill To: Klippenstein, Barristers & Solicitors  
Attn: Kent  
160 John St 3rd Floor  
Toronto ON M5V 2E5

Ordered By: Kent  
Phone: (416) 906-7305  
Customer PO: 1942

Ship To: SAME

Job Name:

Item	1-Sided	2-Sided	Quantity	Description	HST	Job Price
A	182		9	Legal Copying	X	\$385.45
/ Other: insert tabs/Digital Colour Prints: / 8.5x11: / Analogue Copying: / FSC Mixed: / Bind: Cerlox// original + copies / white: f.b						

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Branch Contact: Chris Gennings  
Address: 181 University Ave  
Main Level - Suite 109  
Toronto, ON, M5H 3M7  
Phone: 416-867-1588

Net Sales	\$385.45
Shipping	\$0.00
Sub Total	\$385.45
HST	\$50.11
Total Price	\$435.56



Only the products identified as such on this invoice are FSC Certified.

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G.S.T. / H.S.T. 105242887 RT • Q.S.T. 1202417066



1% GST will be charged on all overdue accounts.

1642 KLIPPENSTEIN, MURRAY		Invoice: 158208
Contact ROSIE		Reference X769
Pickup KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT. M5V2E5	Destination KIRSTEN WALI.I BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use: 1942		
Additional Information: READY FOR PICK UP		
O/N METRO	\$7.09	Time Entered 11/6/2012 10:37:16 AM
Pieces 1	\$0.00	Time Received 11/6/2012 10:37:16 AM
Fuel	\$0.78	Time Dispatched 11/6/2012 11:46:16 AM
Subtotal	\$7.87	Time Picked Up 11/6/2012 11:50:27 AM
H.S.T.	\$1.02	Time Delivered 11/6/2012 2:36:26 PM
Total	\$8.89	Last Modified 11/6/2012 2:36:26 PM
Signature: FATIMA		Broker: 961



1642 KLIPPENSTEIN, MURRAY		Invoice 158422
Contact ROSIE		Reference: X778
Pickup KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT M5V2E5	Destination KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use 1942 -- ED		
Additional Information READY FOR PICK UP		
O/N METRO	\$7.09	Time Entered 11/19/2012 12:05:27 PM
Pieces 1	\$0.00	Time Received 11/19/2012 12:05:27 PM
Fuel	\$0.78	Time Dispatched 11/19/2012 12:19:31 PM
Subtotal	\$7.87	Time Picked Up 11/19/2012 1:18:53 PM
H.S.T.	\$1.02	Time Delivered 11/19/2012 2:50:49 PM
Total	\$8.89	Last Modified 11/19/2012 2:50:49 PM
Signature: FATIMA		Broker 239

1642 KLIPPENSTEIN, MURRAY		Invoice 158812
Contact: ROSIE		Reference X784
Pickup KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT. M5V2E5	Destination: KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use 1942		
	ON METRO \$7.09	Time Entered 12/7/2012 3:44:48 PM
	Pieces 1 \$0.00	Time Received 12/7/2012 3:44:48 PM
	Fuel \$0.78	Time Dispatched 12/10/2012 8:35:44 AM
	Subtotal \$7.87	Time Picked Up 12/10/2012 9:08:05 AM
	H.S.T. \$1.02	Time Delivered 12/10/2012 11:18:21 AM
	Total \$8.89	Last Modified 12/10/2012 11:18:21 AM
Signature: s long		Broker 239

1642 KLIPPENSTEIN, MURRAY		Invoice: 159129
Contact: ROSIE		Reference: X791
Pickup KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT. M5V2E5	Destination: KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use: 1942		
Additional Information: READY FOR PICK UP		
O/N METRO	\$7.09	Time Entered 1/9/2013 4:23:29 PM
Pieces 1	\$0.00	Time Received 1/9/2013 4:23:29 PM
Fuel	\$0.78	Time Dispatched 1/10/2013 9:02:25 AM
Subtotal	\$7.87	Time Picked Up 1/10/2013 10:02:17 AM
H.S.T.	\$1.02	Time Delivered 1/10/2013 12:24:26 PM
Total	\$8.89	Last Modified 1/10/2013 12:24:26 PM
Signature: fatima		Broker: 318

1642 KLIPPENSTEIN, MURRAY		Invoice: 159481
Contact: ROSIE		Reference X792
Pickup: KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT. M5V2E5	Destination: KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use: 1942		
Additional Information: READY FOR PICK-UP AFTER 9AM		
5 HOUR	\$8.11	Time Entered 1/17/2013 4:59:26 PM
Pieces 1	\$0.00	Time Received 1/18/2013 9:00:00 AM
Fuel	\$0.89	Time Dispatched 1/18/2013 9:00:57 AM
Subtotal	\$9.00	Time Picked Up 1/18/2013 9:05:52 AM
H.S.T.	\$1.17	Time Delivered 1/18/2013 11:14:20 AM
Total	\$10.17	Last Modified 1/18/2013 11:14:20 AM
Signature: stephanie		Broker 239

1642 KIPPENSTEIN, MURRAY		Invoice 159825
Contact ROSIE		Reference: X798
Pickup KIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT M5V2E5	Destination: KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1J4	
Client Use: 1942 -- ED		
Additional Information: READY FOR PICK UP		
O/N METRO	\$7.09	Time Entered 2/11/2013 4:20:06 PM
Pieces 1	\$0.00	Time Received 2/11/2013 4:20:06 PM
Fuel	\$0.78	Time Dispatched 2/12/2013 1:13:44 PM
Subtotal	\$7.87	Time Picked Up 2/12/2013 1:31:16 PM
H.S.T.	\$1.02	Time Delivered 2/12/2013 3:30:59 PM
Total	\$8.89	Last Modified 2/12/2013 3:30:59 PM
Signature S long		Broker: 535

1642 KLIPPENSTEIN, MURRAY		Invoice 160002
Contact ROSIE		Reference: X799
Pickup KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT. M5V2E5	Destination KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use: 1942		
Additional Information: READY FOR PICK-UP		
O/N METRO	\$7.09	Time Entered 2/21/2013 11:22:34 AM
Pieces 1	\$0.00	Time Received 2/21/2013 11:22:33 AM
Subtotal	\$7.09	Time Dispatched 2/21/2013 11:38:38 AM
H.S.T.	\$0.92	Time Picked Up 2/21/2013 12:52:22 PM
Total	\$8.01	Time Delivered 2/21/2013 3:54:17 PM
		Last Modified 2/21/2013 3:54:17 PM
Signature: NICOLE		Broker 102

1642 KLIPPENSTEIN, MURRAY		Invoice 160002
Contact ROSIE		Reference X802
Pickup KLIPPENSTEIN, MURRAY 160 JOHN ST., 3rd FLOOR TORONTO, ONT M5V2E5	Destination KIRSTEN WALLI BOARD SECRETARY 2700 - 2300 YONGE ST TORONTO M4P1E4	
Client Use: 1942		
Additional Information: READY FOR PICK-UP		
O/N METRO	\$7.09	Time Entered 2/26/2013 12:42:35 PM
Pieces I	\$0.00	Time Received 2/26/2013 12:42:35 PM
Fuel	\$0.78	Time Dispatched 2/26/2013 1:42:56 PM
Subtotal	\$7.87	Time Picked Up 2/26/2013 2:01:15 PM
H.S.T.	\$1.02	Time Delivered 2/26/2013 2:52:09 PM
Total	\$8.89	Last Modified 2/26/2013 2:52:09 PM
Signature: ALLSION		Broker:56



**ENERGY PROFILES LIMITED**

## INVOICE

March 19, 2013

Kent Elson  
 Klippensteins, Barristers & Solicitors  
 300 - 160 John St.  
 Toronto ON M5V 2E5

**RE: Toronto Hydro Intervention by Environmental Defence**

**Invoice No. 8634**

HST No. 101638559

Terms: Net 30 days

	Time, hours	Rate/hr	Amount this invoice
<b>Preparation of Report:</b>			
November 12, 2012	4.0	\$230.00	\$920.00
November 22, 2012	4.0	"	\$920.00
November 27, 2012	3.0	"	\$690.00
November 28, 2012	4.5	"	\$1,035.00
December 3, 2012	6.5	"	\$1,495.00
December 4, 2012	5.0	"	\$1,150.00
December 7, 2012	4.5	"	\$1,035.00
<b>Reponse to Interrogatories</b>			
December 23, 2012	3.0	"	\$690.00
January 2, 2013	3.5	"	\$805.00
January 4, 2013	3.0	"	\$690.00
January 7, 2013	2.0	"	\$460.00
January 9, 2013	1.5	"	\$345.00
<b>Attendance at the Hearing</b>			
February 19, 2013	6.0	"	\$1,380.00
February 20, 2013	6.5	"	\$1,495.00
<b>Total</b>			<b>\$13,110.00</b>
HST @ 13%			\$1,704.30
<b>TOTAL AMOUNT THIS INVOICE</b>			<b>\$14,814.30</b>



**H. R. (Bob) Bach, P.Eng, Energy Profiles Limited**



**ENERGY PROFILES LIMITED**

Independence.  
Impartiality.  
Accountability.

**I. Education and Work Experience**

BA Sc., Mechanical Engineering (Honours), University of Toronto. Graduate Thesis Title "Collecting Heat from the Sun"

Senior Associate, Energy Profiles Limited. Responsible for Sustainable Building programs, DSM and Municipal Energy and Water Efficiency programs, New Building Design Energy Codes and Standards, and Energy Efficiency Training program development and delivery.

Senior Consultant, Engineering Interface Ltd. Responsible for Sustainable Building programs, DSM and Municipal Energy and Water Efficiency programs, New Building Design Energy Codes and Standards, and Building Environmental Management Systems

Manager, Engineering, Tesco Energy Services Inc., Energy performance contractor specializing in commercial buildings

President and Owner, Service Canada Inc.

President, HRAI Technical Services Division Inc., subsidiary of the Heating, Refrigerating and Air Conditioning Institute of Canada, formed to managed the R2000 ventilation and Residential HVAC energy efficiency programs.

President and Owner, Atlas Air Conditioning Company, Toronto based HVAC design/build contractor.

Partner, Solatherm Solar Energy Systems Inc., solar energy installation contractor.

Construction Manager, Cluva S.A., Leysin, Switzerland, Year round hotel complex in the Swiss Alps.

Product Marketing Supervisor, Steam and Gas Turbines, Westinghouse Canada Ltd.

**II. Significant Projects**

**Demand-Side-Management & Energy Conservation Program Development & Evaluation**

Member of the Sustainable Buildings Canada project team responsible for the design and delivery of the Enbridge Savings By Design program. This program offers incentives for achieving an energy efficiency level of 25% better than the Building Code, and also brings the Integrated Design Process to both low-rise housing and high-rise building developers and constructors to assist them to meet this target and to improve the overall sustainability of their project. SBC for Enbridge Gas Distribution.

Member of the project team responsible for undertaking the determination of rates for free ridership and spillover for Enbridge Gas Distribution and Union Gas Limited DSM programs in the commercial and industrial sectors. Responsibilities included assisting in the development of a survey instrument, on-site surveys of 90 program participant organizations in the industrial, commercial, and multi-family sectors, and

a review of EGD energy savings calculation methodologies. Summit Blue Consulting for Enbridge Gas Distribution and Union Gas Limited.

Project manager and principal researcher for development of a Design Advisory Program to offer a skilled facilitator and building energy consultant to new building design teams to assist them in improving and optimising the energy performance of their new building design. EIL undertook a review of similar programs, developed a preliminary program design, piloted the program, finalized the design, and assisted in the selection and training of facilitators. Enbridge Gas Distribution.

Project manager and principal researcher for a project entitled "Development and Implementation of an Industry Sponsored Comparative Energy Rating/Labeling System for HVAC Products." Responsibilities included program design and obtaining industry participation, which reached over 90% of suppliers who adopted the "EnerGuide for HVAC" label. Heating, Refrigerating and Air Conditioning Institute of Canada (HRAI) and Natural Resources Canada.

### **Municipal Projects**

Member of the project team and energy code expert on the preparation of a report entitled the Waterfront Toronto Archetype Condo project. This was undertaken to determine the design challenges for new condominiums to achieve energy efficiency levels of 5%, 15% and 25% better than the 2012 Building Code, representing levels proposed for both Waterfront Toronto Minimum Green Building Standards and City of Toronto Planning Department updates to the Toronto Green Standard. Sustainable Buildings Canada for Waterfront Toronto, Enbridge Gas Distribution, and the Building and Land Development Institute.

Project manager and principal researcher for a project to establish recommendations for the Toronto Green Standard to adopt in order to maintain a higher energy efficiency standard than the Building Code. The recommendations will be considered by City Council early in 2013. This project was followed by a second research project to determine the cost-benefit of the recommendations. Sustainable Buildings Canada for City of Toronto Planning Department, with funding by the Toronto Atmospheric Fund.

Project manager for a Net Zero Electricity Plan for Exhibition Place. Project included an analysis of hourly loads on the campus and forecast of future loads and schedules, development of energy efficiency initiatives for all buildings owned and operated by ExPlace, review of potential options for on-site renewable generation, and recommendations for renewable and non-renewable generation and energy efficiency initiatives. ExPlace is in the implementation phase. Board of Governors of Exhibition Place and City of Toronto Energy Efficiency Office.

Member of the project team for the development of a Background Report on the Energy Plan for the City of Toronto. Plan included a review of current programs, determination of all fossil fuel and electricity loads by building type and floorspace for 23 categories, twenty-five year forecasts of all energy use by load category, and recommendations for action to be taken by City departments, agencies, boards and commissions. With Price Waterhouse Coopers for City of Toronto Energy Efficiency Office.

Consultant to Exhibition Place and the City of Toronto for the 100 kW solar PV installation located on the roof of the Horse Palace designed as a pilot and monitored for 1 year, and a 142 kW solar PV installation on the roof of the Coliseum.

The former was the largest solar PV installation in Canada when completed in the spring of 2006. Board of Governors of Exhibition Place.

### **Training**

Member of the project team for the development of thirteen initiatives to be undertaken by the Ontario Power Authority to build capability in delivery of energy conservation across a broad range of skilled occupations, including energy managers, building operators, HVAC installers, and energy evaluators. The project involved reviewing size of the existing workforce, skills gap, review of training options available and selection of the optimum training solution. With SeeLine Group Ltd, for the Ontario Power Authority.

Project manager responsible for the development and delivery of a training program for architects and engineers on designing new buildings to exceed ASHRAE/IES 90.1 energy efficiency levels. Program provided several examples of energy efficient measures that could be applied to offices and multi-unit residential buildings, with cost/benefits defined. Enbridge Gas Distribution and Union Gas.

Project manager responsible for development and delivery of training on ASHRAE/IES 90.1, "Energy Efficient Design of New Buildings except Low-rise Residential Buildings" and the O/H New Building Construction Program to over 800 architects, engineers, and building officials across Ontario. Developed a Compliance Review and Inspection Manual to assist municipalities in determining compliance with Standard 90.1. Ontario Hydro.

Project manager and principal researcher for the development and delivery of a training program for architects on ASHRAE/IES 90.1. Project included program design, and delivery of a train-the-trainer program for architect - trainers selected to deliver the program. Ontario Association of Architects.

Project manager responsible for the development and delivery of a one-day training program for electrical, mechanical and building envelope contractors, in the identification, development and delivery of energy efficiency as a business opportunity to be delivered to their small and medium enterprise customers. Energy Efficiency Contractors Network and the Ontario Power Authority.

### **Energy Technology Review and Evaluation**

Project Manager and principal researcher for a technology review and investment study on fuel cells for power generation and for transportation. Tasks included a literature review, interviews with industry players, evaluation of technology development needs, time to market, and environmental, social, and economic impacts. Results were presented to key industry stakeholders to gain their feedback and obtain their buy-in. The final deliverable was an investment overview report to assist the client to evaluate a variety of renewable energy technologies, including wind, solar P-V and biomass, on a comparative basis. Sustainable Development Technology Canada (SDTC).

Project Manager and principal researcher for a technology review and investment study on hydrogen production and purification. Tasks included a literature review, interviews with industry players, evaluation of technology development needs, time to market, and environmental social and economic impacts. Results were presented to key industry stakeholders to gain their feedback and obtain their buy-in. The final deliverable was an investment overview report to assist the client to evaluate a

variety of energy sources on a comparative basis. SDTC.

### **Green Building and Energy Code Programs and Projects**

Team Captain of the Canadian Team for Green Building Challenge 2005 (Tokyo), 2008 (Melbourne), and 2011 (Helsinki), and member of the Canadian Team for 2000 (Maastricht), 2002 (Oslo). The team selected recently designed and constructed Canadian advanced environmental performance buildings for evaluation of energy and environmental performance, assessed against a comprehensive set of criteria adjusted for local conditions.

Member of the project team that undertook the development of the C-2000 Commercial Building Program Technical Criteria. This defined the benchmarks for advanced technology Office and Multi-Unit Residential buildings under four overall categories, environmental performance, indoor environmental performance, longevity and adaptability, and functional performance. Directly responsible for energy and environmental performance criteria. Natural Resources Canada.

Member of the project team responsible for mechanical and electrical systems for a study entitled "Building Adaptability: A Survey of Systems and Components" which defined the factors affecting the adaptability of buildings for re-use, with the intent of influencing new building design. With Young & Wright Architects Inc., for Canada Mortgage and Housing and Natural Resources Canada.

Project manager and principal researcher for the development of documents entitled "Guide to the Implementation of an Environmental Management System based on ISO14001" for five commercial/institutional sectors: Offices, Hospitals, Municipalities, Schools, and Colleges and Universities. This required forming advisory committees from each sector who reviewed the draft document and provided valuable comments for their guide. Each sector association endorsed their guide and assisted in the distribution to their members and others. Ontario Ministry of the Environment.

Project Manager and Principal Researcher for a study entitled "Market Viability of Integrated Appliances For Multifamily Markets In Canada" which included a study of multifamily and related markets and market potential, load ranges, application issues, and a survey of stakeholders. Gas Technologies Canada.

### **Emissions Evaluation and Reduction Projects**

Project Manager and principal researcher for development of a greenhouse gas and criteria air contaminants calculator for commercial, institutional, and industrial organizations to use to evaluate their emissions from direct fuel use, electricity use, and transportation, within the province of Ontario. Ontario Ministry of the Environment.

Member of project team and chiller specialist for a project to examine all costs of owning and operating an electric centrifugal chiller in an office or multi-residential building operating in a deregulated electricity market. This required an evaluation of electricity consumption on an hour-by-hour basis, matched with electricity cost on the same basis. Emissions trading potential within the current Ontario regulation was also evaluated. Energy Profiles Ltd., for Enwave District Energy Ltd.

### **International Projects**

Project Member for a project to review energy efficiency activity in The Czech Republic and other economies in transition, and to develop a framework and model

which would use energy efficiency intermediaries (ESCOs and others) to assemble and report data which could be used to evaluate emissions reductions, particularly from a number of smaller projects, with a view to developing potential trades under the Kyoto mechanisms. Project included a site visit to interview participants in the energy conservation sector, and to review plans to be implemented by the state government. Final report was accepted, published and widely distributed by the client. With Cumming Coburn Ltd. for the World Bank.

Member of the project team responsible for the preparation and delivery of a series of lectures on Sustainable Building Design to the faculty of the School of Architecture, Design and Urbanism, University of Buenos Aires, Argentina (Universidad de Buenos Aires Facultad de Arquitectura, Diseño y Urbanismo). With Nils Larsson, International Initiative for a Sustainable Built Environment.

Project consultant on building HVAC systems and energy use for a study entitled "Russia's Housing Market: A Beginner's Guide." This manual was designed to acquaint Canadian companies interested in retrofitting multi-family buildings for energy efficiency with market potential and specific business practices and conditions. With the Titan Group, for Canada Mortgage and Housing Corporation.

### **III. Other Activities**

Founding Co-chair of the Building Code Energy Advisory Council formed in 2010, responsible for advising the Minister of Municipal Affairs and Housing on energy and water conservation in the Ontario Building Code. Council was recently renamed the Building Code Conservation Advisory Council, and the position changed to Vice-chair, Energy.

Founding Director and current Treasurer of Sustainable Buildings Canada (SBC), formed to assist in the transformation of new building design towards more environmentally sustainable practices.

Captain of the Canadian Team for the World Sustainable Building Conference 2005 (Tokyo) & 2008 (Melbourne); team member since 1999.

Chair of the Mechanical Services Advisory Committee, subcommittee of the Toronto Area Chief Building Officials Committee, 2003 to 2011.

Past President of the Toronto Chapter of the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE).

Member of Professional Engineers of Ontario (PEO), and Life Member of ASHRAE.

Consultant to the ASHRAE 90.1 Committee, HVAC Panel, responsible for the revision and upgrading of ASHRAE/IES 90.1.

Former Director and Contractor Division Chairman, Heating, Refrigerating and Air Conditioning Institute of Canada (HRAI). Winner of the Merit Award.

Former commercial pilot with accreditation on corporate jet aircraft.

Active participant in skiing, speed skating and squash.

#### IV. Contact

**Bob Bach**  
**Energy Profiles Limited**  
**295 The West Mall, Ste. 503**  
**Toronto, ON, M9C 4Z4**  
**416 440-1323 ext. 4**  
**Fax 416 440-0301**  
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