# EB-2022-0200 : 1 : Cathy Galler

COST CLAIM NUMBER 2065	SUBMISSION DEADLINE DATE April 30, 2024	CLAIM STATUS Approved by Finance
EB# EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	OTHER EB#S	PHASE #* 1
INTERVENOR Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	INTERVENOR COMPANY* Industrial Gas Users Association, Ottawa: Corporation	INTERVENOR TYPE Full Registrant
HST RATE ONTARIO 13.00	EXCHANGE RATE	COUNTRY Canada
HST NUMBER 89659 3323 RT0001	LATE SUBMISSION ALLOWED	EXTENSION DEADLINE DATE

## **PARTICIPANTS**

PART	<u>ICIPANTS</u>						Participant
New	Non-Filing Partici	pan	t First, Last Name	Filing Participant	Total (\$)	Total Hours	Claim Status
No		,		Mondrow, lan; +1 (416) 369-4670 ian.mondrow@gowlingwlg.c om	349,900.21	938.00	Submitted
No		,		Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.co m	779.70	6.90	Submitted
Yes	Sonia	,	Knowlton		339.00	3.00	Submitted
Yes	Chris	,	Hummel		883.66	4.60	Submitted
Yes	Robert	,	Knecht		44,748.00	120.00	Submitted
Yes	Dustin	,	Madsen		146,661.70	386.20	Submitted
Yes	Sean	,	Cleary		77,596.05	208.00	Submitted
Yes	Asa	,	Hopkins		50,731.14	149.25	Submitted
Yes	Sol	,	Deleon		19,800.00	60.00	Submitted
Yes	Tyler	,	Fitch		230.00	1.00	Submitted
Yes	Jenny	,	Marusiak		1,725.00	7.50	Submitted
Yes	Alice	,	Napoleon		1,237.50	3.75	Submitted
Yes	Paul	,	Rhodes		4,037.50	23.75	Submitted
Yes	Tim	,	Woolf		165.00	0.50	Submitted

#### **ATTACHMENTS**

Attachment	Document Type	Import Message
GUA EB-2022-0200 Cost Claim 042920241547.pdf		
IGUA EB-2022-0200 Cost Claim 042920241618.pdf		

Report Name: CC\_Cost\_Claim\_Header.rpt Last Update 20230214 -

TOTAL LEGAL/CONSULTANT/OTHER FEES 623,445.50

TOTAL CLAIM 698,834.46

TOTAL HOURS CLAIMED 1,912.45

REASON FOR DISALLOWANCE

MAKE CHEQUE PAYABLE TO Industrial Gas Users Association

SEND PAYMENT TO ADDRESS 851 Industrial Avenue, P.O. Box 30 Ottawa, ON K1G 4L3

SUBMIT SECTION

I am a representative of the Party. I have examined all of the documentation in support of this cost claim. The costs incurred and time spent are directly related to the Party's participation in the OEB Process referred to above.

This cost claim does not include any costs for work done, or time spent, by a person that is an employee or officer of the Party as described in section 6.05 and 6.09 of the OEB's Practice Direction on Cost Awards.

The information (fees and disbursements) filed in this cost claim is complete and accurate and in accordance with the OEB's Practice Direction for Cost Awards and Appendix A, the Cost Awards Tariff.

SUBMITTED BY lan Mondrow DATE SUBMITTED April 29, 2024

# TOTAL AMOUNT AWARDED

TOTAL DISBURSEMENTS

3,956.99

TOTAL HOURS DISALLOWED

REASON FOR DISALLOWANCE - 2 REASON FOR DISALLOWANCE - 3

Shahrzad Rahbar

ATTENTION

TOTAL HST 71,431.97

# Ian Mondrow

CASE	
EB-2022-0200 - Phase 1: Rates:	
Distribution: Enbridge Gas Inc.	

COST CLAIM EB-2022-0200:1:Cathy Galler

INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com

PARTICIPANT F. NAME

PARTICIPANT **CLAIM STATUS** Submitted

NON-FILING PARTICIPANT L. NAME

FILING PARTICIPANT Mondrow, Ian; +1 (416) 369-4670 ian.mondrow@gowlingwlg.com

NEW PARTICIPANT

No

**CV** Required

SERVICE PROVIDER TYPE\*

Legal Counsel

**HST RATE CHARGED\*** 13.00

1991 **CV STATUS (FOR** 

CONSULTANT/ANALYST)

YEAR CALLED TO BAR\*

COMPLETED YEARS PRACTICING/YEARS OF **RELEVANT EXPERIENCE\*** 32 LAST CV DATE

NON-FILING

HOURLY RATE 330

OVERRIDE HOURLY RATE No

HST NUMBER HEARINGS CONSULTATIONS DISBURSEMENTS 89659 3323 RT0001 Yes No Yes

# **HEARINGS**

Неа	arings Hours 938.00	Hearings Subtotal (\$) 309,540.00		Hearings Total 40,240.20	Tax (\$)		arings Total (\$) 49,780.20
	Name	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISC	OVERY						
	Read and Research Application a Evidence	nd 145.10	330	47,883.00	13.00	6,224.79	54,107.79
	Preparation of Interrogatories	21.70	330	7,161.00	13.00	930.93	8,091.93
	Review Interrogatory Responses	14.60	330	4,818.00	13.00	626.34	5,444.34
	Technical Conference Preparation	17.10	330	5,643.00	13.00	733.59	6,376.59
	Technical Conference Attendance	32.30	330	10,659.00	13.00	1,385.67	12,044.67
	Technical Conference Follow-up	0.50	330	165.00	13.00	21.45	186.45
	Subtotal of DISCOVERY	231.30		76,329.00		9,922.77	86,251.77
PROC	CEDURAL						
	Preparation of Issues List Submis	sion 2.40	330	792.00	13.00	102.96	894.96
	Attendance at Issues List Conference	nce 6.40	330	2,112.00	13.00	274.56	2,386.56
	Preparation for a Confidentiality R	equest	330		13.00		
	Prepare Submissions on Confider	ntiality 0.40	330	132.00	13.00	17.16	149.16
	Preparation of Motion(s) Materials	0.70	330	231.00	13.00	30.03	261.03
	Prepare Submissions on the Motion	on(s)	330		13.00		
	Attendance at Hearing on Motion(	s) 1.00	330	330.00	13.00	42.90	372.90
	Review Procedural Documents	3.00	330	990.00	13.00	128.70	1,118.70

CC Participant Combined.rpt - last Update 20230601

	<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
	Subtotal of PROCEDURAL	13.90		4,587.00		596.31	5,183.31
INTE	RVENOR EVIDENCE Preparation of Intervenor Evidence	109.20	330	36,036.00	13.00	4,684.68	40,720.68
	Interrogatory Responses	32.20	330	10,626.00	13.00	1,381.38	12,007.38
	Preparation of Witness(es) for Attendance at Hearing	15.70	330	5,181.00	13.00	673.53	5,854.53
	Subtotal of INTERVENOR EVIDENCE	157.10		51,843.00		6,739.59	58,582.59
SETT	LEMENT CONFERENCE Preparation for Settlement Conference	32.40	330	10,692.00	13.00	1,389.96	12,081.96
	Attendance at Settlement Conference	72.70	330	23,991.00	13.00	3,118.83	27,109.83
	Preparation of Settlement Proposal	19.10	330	6,303.00	13.00	819.39	7,122.39
	Attendance at Presentation to Panel		330		13.00		
WDIT	Subtotal of SETTLEMENT CONFERENCE TEN ARGUMENT	124.20		40,986.00		5,328.18	46,314.18
VVINI	Written Submissions	109.70	330	36,201.00	13.00	4,706.13	40,907.13
	Subtotal of WRITTEN ARGUMENT	109.70		36,201.00		4,706.13	40,907.13
ORAI		407.00	000	05 070 00	40.00	4 500 00	00.074.00
	Preparation for Oral Hearing	107.20	330	35,376.00	13.00	4,598.88	39,974.88
	Attendance at Oral Hearing	89.30	330	29,469.00	13.00	3,830.97	33,299.97
	Oral Submissions		330		13.00		
	Attendance at Oral Submissions	400 50	330	64 945 99	13.00	0 400 05	70 074 05
DECI	Subtotal of ORAL ARGUMENT	196.50		64,845.00		8,429.85	73,274.85
DECI	Review Decision	42.20	330	13,926.00	13.00	1,810.38	15,736.38
	Review Rate/Accounting Order	1.00	330	330.00	13.00	42.90	372.90
	Prepare Submission on Rate Order		330		13.00		
	Subtotal of DECISION	43.20		14,256.00		1,853.28	16,109.28
OTHE	ER Other Attendance (e.g., Intervenor Conferences)	62.10	330	20,493.00	13.00	2,664.09	23,157.09
	Subtotal of OTHER	62.10		20,493.00		2,664.09	23,157.09
ΤΟΤΑ	L SERVICE PROVIDER FEES Total Service Provider Fees	938.00		309,540.00		40,240.20	349,780.20

# Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Mondrow_TimeDockets_2024042	
9.pdf	
IGUA_EB-2022-0200_Final	Cover Letter
CostClaim_Mondrow_CvrLTR_20240429.pdf	

Import Message

DISBURSEMENTS	\$								
Disbursement Subtotal(\$) 106.20		Disbursem Total Tax 13.81			c	<b>Other Tax</b> Total 0.0	(\$)		Disbursement Total(\$) 120.01
<u>Name</u>	<u>ATT.</u> REQ'D	<u>ATT.</u> PROV	<u>Qty</u>	<u>\$/</u> Unit	<u>Net</u> Cost	<u>HST</u> Rate	<u>HST</u>	<u>Other</u> Taxes/Tip	<u>Rationale/</u> <u>Total</u> <u>Comment</u>
Scanning/Photocopy (Internal) Scanning/Photocopy						13.00 13.00			
(External) Printing (Internal)						13.00			
Printing (External)						13.00			
Courier						13.00			
Teleconference						13.00			
Travel: Air						13.00			
Travel: Car Rental						13.00			
Travel: Gas						13.00			
Travel: Car Mileage –				0.40					
Southern Ontario Travel: Car Mileage – Northern Ontario				0.41					
Travel: Rail						13.00			
Travel (Other)						13.00			
Parking	Yes	Yes	5.00	21.24	106.20	13.00	13.81		120.01
Taxi						13.00			
Accommodation						13.00			
Other						13.00			
Total Disbursements:					106.20		13.81	0.00	120.01

# Attachments

IGUA\_EB-2022-0200\_Final CostClaim\_Mondrow\_Costs\_20240429.pdf

Import Message

# Hearings, Consultations, Disbursements Attachments

<u>Attachment</u>	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final		Disbursements	
CostClaim_Mondrow_Costs_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Mondrow_TimeDockets_202404			
29.pdf			
IGUA_EB-2022-0200_Final	Cover Letter	Hearings	
CostClaim_Mondrow_CvrLTR_20240429.p			
df			

Attachment



July 11, 2022 INVOICE: 19867421

Industrial Gas Users Association Our Matter: T1029927 EGI Rebasing and IRM Application (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
OTH-ATT	2022-06-13	0.40	lan Mondrow	Briefing S. Knowlton regarding attendance at EGI rebasing application briefing;
OTH-ATT	2022-06-15	1.00	lan Mondrow	Review correspondence regarding Stakeholder Conference; briefing note to S. Knowlton regarding attendance and topics to listen for;
OTH-ATT	2022-06-16	2.00	Sonia Knowlton	Attended and took minutes for EGI Stakeholder Conference on Rebasing Application;
OTH-ATT	2022-06-16	1.00	Sonia Knowlton	Prepared summary e-mail from EGI Stakeholder Meeting;
OTH-ATT	2022-06-18	0.90	lan Mondrow	Review EGI materials from Stakeholder Conference and S. Knowlton notes and draft update for IGUA members;
OTH-ATT	2022-06-20	0.20	Ian Mondrow	Complete update note to IGUA;

#### **Total Fees for Professional Services**

TK Name		Hours
Knowlton, Sonia		3.00
Mondrow, Ian		2.50
	Total	5.50



August 18, 2022 INVOICE: 19889138

Industrial Gas Users Association Our Matter: T1029927 EGI Rebasing and IRM Application (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

Date	Hours	Timekeeper	Description
2022-07-29	1.30	Ian Mondrow	Review EGI Stakeholder Conference follow-up material; review IGUA's ROE evidence from the Régie proceeding;

#### **Total Fees for Professional Services**

#### SUMMARY OF FEES

RAE

TK Name		Hours
Mondrow, Ian		1.30
	Total	1.30



September 28, 2022 INVOICE: 19911756

Industrial Gas Users Association Our Matter: T1029927 EGI Rebasing and IRM Application (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
IEP	2022-08-09	0.60	lan Mondrow	Discussion with S. Rahbar regarding rebasing application cost expectations; expert retainer approaches and additional issues;
IEP	2022-08-11	0.90	lan Mondrow	Review IGUA expert (Synapse) evidence from Régie ROE regarding utility business risk.

#### **Total Fees for Professional Services**

TK Name		Hours
Mondrow, Ian		1.50
	Total	1.50



November 30, 2022 INVOICE: 19950299

#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
IEP	2022-09-21	0.70	Ian Mondrow	Review EGI e-mail regarding Stakeholder Day 2 and list of external experts retained; note to S. Rahbar; note to intervenor representatives with A. Hopkins Regie utility business risk evidence;
IEP	2022-09-22	0.90	lan Mondrow	Discussion with S. Rahbar regarding procedural expectations and potential external experts;
RAE	2022-09-27	0.20	Ian Mondrow	Correspondence with intervenor and IGUA regarding topic of abandonment provisions for consideration in upcoming proceeding;
RAE	2022-09-28	0.40	lan Mondrow	Correspondence regarding intervenor co-ordination meeting and inquiries of OEB Staff;
IEP	2022-09-28	2.10	lan Mondrow	Call with OEB Staff regarding potential experts and process approach; call with S. Rahbar and potential utility risk expert;
RAE	2022-10-13	0.30	Ian Mondrow	Commence review of EGI Net Zero Pathways report;
<u>RAE-0.3</u> <u>OTH-ATT-0.</u>	2022-10-14 <u>2</u>	0.50	Ian Mondrow	Continue review of Guidehouse Net Zero Pathways report; discussion with EGI regarding upcoming application and potential approaches to process;
RAE	2022-10-17	0.40	Ian Mondrow	Continue review of Guidehouse Pathways report;
OTH-ATT	2022-10-17	2.30	lan Mondrow	Attend intervenor co-ordination meeting and follow-up discussion with S. Rahbar;
RAE	2022-10-18	0.40	Ian Mondrow	Continue review of Guidehouse Pathways report;
	<del>2022-10-19</del>	<del>1.60</del>	lan Mondrow	Review Stakeholder Conference materials provided; briefing note on materials to and discussion with S. Rahbar;
	<del>2022-10-20</del>	4.80	lan Mondrow	Attend Stakeholder Conference;
OTH-ATT	2022-10-24	0.10	Ian Mondrow	Correspondence regarding further intervenor discussions;
RAE	2022-10-25	0.40	Ian Mondrow	Continue review of Guidehouse Pathways report;
RAE	2022-10-26	1.00	Ian Mondrow	Continue review of Guidehouse report;
RAE	2022-10-27	0.40	lan Mondrow	Continue review of Guidehouse Pathways report; review correspondence regarding Quebec ROE decision;
OTH-ATT	2022-10-31	0.80	lan Mondrow	Discussion with M. Rubenstein (SEC) regarding approach to issues and experts; review IGUA summaries of Régie ROE decision;

#### **Total Fees for Professional Services**



November 30, 2022 INVOICE: 19950299

## SUMMARY OF FEES

**TK Name** Mondrow, lan

Total

Hours 10.9 <del>17.30</del> <del>17.30</del>



December 21, 2022 INVOICE: 19967765

#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
<u>IEP-2.4</u> RAE-0.4	2022-11-01	2.80	lan Mondrow	Discussion with S. Rahbar regarding initial view on application issues and potential expert advisors; review EGI transmittal letter/hearing process and schedule proposal;
IEP	2022-11-02	1.00	lan Mondrow	Review OEB OPG ruling regarding intervenor experts and further consider approach to coordination on expert retainers in instant proceeding;
IEP	2022-11-03	0.70	Ian Mondrow	Conclude review of translated Quebec cost of capital (L. Booth) transcripts; note to K. Virany regarding expert retainer considerations;
OTH-ATT	2022-11-04	0.30	lan Mondrow	Intervenor correspondence regarding issues and set up issues tracking list;
IEP	2022-11-07	0.50	lan Mondrow	Discussion with S. Rahbar and e-mail to intervenor group regarding cost of capital expertise;
RAE	2022-11-08	0.40	Ian Mondrow	Commence review of application materials;
RAE	2022-11-09	1.90	Ian Mondrow	Continue review of pre-filed materials;
RAE	2022-11-09	0.40	Ian Mondrow	Continue review of pre-filed materials;
IEP	2022-11-10	3.00	lan Mondrow	Attend Staff/Intervenor discussion regarding process and potential experts; correspondence with ED/GED counsel relating to potential expert scoping;
RAE	2022-11-11	0.20	Ian Mondrow	Continue review of materials;
RAE	2022-11-14	1.40	Ian Mondrow	Continue review of materials;
RAE	2022-11-15	2.40	Ian Mondrow	Continue review of pre-filed materials;
IEP	2022-11-15	0.30	lan Mondrow	Discussion with S. Rahbar regarding outcomes of Staff/Intervenor meeting and her discussions with OEB personnel;
IEP	2022-11-16	0.30	lan Mondrow	Discussion with S. Rahbar regarding Regie comments on climate risk evidence and relating to ongoing discussions with ED/GEC to co-ordinate expert proposals;
IEP	2022-11-17	0.80	lan Mondrow	Continue review of pre-filed material; intervenor correspondence regarding co-ordination of potential experts;
IEP	2022-11-17	0.40	Ian Mondrow	Correspondence with S. Rahbar regarding discussions with OEB Staff on expert retainers;
IEP	2022-11-21	0.20	lan Mondrow	Intervenor correspondence regarding experts;
IEP	2022-11-24	0.60	lan Mondrow	Correspondence regarding intervenor issues/potential experts; work on issues tracking list;
IEP	2022-11-25	0.20	lan Mondrow	Intervenor correspondence regarding issues for



December 21, 2022 INVOICE: 19967765

				consideration;
RAE-0.2 SUB-0.2	2022-11-28	0.40	lan Mondrow	Continue review of pre-filed evidence; review and revise intervention letter;
SUB	2022-11-28	0.30	Ian Mondrow	Review and revise draft intervention letter;
IEP	2022-11-28	0.10	Ian Mondrow	Intervenor correspondence regarding issues and experts;
RAE	2022-11-29	0.50	Ian Mondrow	Continue review of pre-filed material;
OTH-ATT	2022-11-29	0.50	Ian Mondrow	Interim report on filing and major themes to Ontario Caucus; member correspondence regarding Enerline delivery reporting concerns and inquiry to determine extent of the issue;
RAE	2022-11-30	1.40	lan Mondrow	Retrieve Phase 2 filing and continue review of pre-filed evidence;
IEP	2022-11-30	0.50	lan Mondrow	Correspondence with potential expert and with other parties regarding issues;

## **Total Fees for Professional Services**

TK Name		Hours
Mondrow, Ian		21.50
	Total	21.50

O GOWLING WLG

December 31, 2022 INVOICE: 19990224

#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
IEP	2022-12-01	2.10	lan Mondrow	Intervenor meeting to continue discussion of issues and potential experts;
IEP	2022-12-01	0.60	Ian Mondrow	Discussion with S. Rahbar regarding IGUA issues/potential experts and work plan;
SUB	2022-12-02	0.10	Ian Mondrow	Review and finalize intervention letter;
SUB	2022-12-05	0.20	Cathy Galler	Formatting and filing intervention request letter;
OTH-ATT	2022-12-05	0.40	lan Mondrow	Review intervenor correspondence and consolidated working issues list incorporating additional topics;
RAE	2022-12-06	0.50	Ian Mondrow	Continue review of pre-filed material;
RAE	2022-12-08	2.80	Ian Mondrow	Continue review of pre-filed material;
OTH-ATT	2022-12-08	1.00	lan Mondrow	Interim note to IGUA on EGI evidence regarding energy transition business risk and potential impact on expert evidence under consideration' discussion with S. Rahbar regarding experts and other application issues;
IEP	2022-12-09	0.10	lan Mondrow	Correspondence with potential expert regarding materials to review;
RAE	2022-12-09	1.00	Ian Mondrow	Continue review of pre-filed materials;
RAE	2022-12-12	2.30	Ian Mondrow	Continue review of pre-filed materials;
RAE	2022-12-13	0.70	lan Mondrow	Continue review of pre-filed material;
IEP	2022-12-13	0.10	lan Mondrow	Correspondence with S. Rahbar regarding package from pre-filed material for expert input;
IEP-2.0 RAE-0.2	2022-12-14	2.20	lan Mondrow	Review correspondence from external advisors and assemble information packages for them; discussion with S. Rahbar regarding timing and next steps on application issues definition and summary report for planning; review reference materials regarding previous equity thickness consideration for EGI;
RAE	2022-12-15	2.40	Ian Mondrow	Continue review of pre-filed materials;
IEP	2022-12-15	1.10	Ian Mondrow	Discussion with potential external advisor;
OTH-ATT	2022-12-16	1.30	lan Mondrow	Call with intervenor representatives regarding various issues/expertise/co-ordination;
RAE	2022-12-16	1.50	lan Mondrow	Continue review of pre-filed materials; review Procedural Order No. 1;
OTH-ATT	2022-12-16	0.30	lan Mondrow	Interim update to IGUA regarding Procedural Order, dates for expert proposals and main drivers of revenue deficiency in 2024;



## December 31, 2022 INVOICE: 19990224

RAE	2022-12-17	1.50	Ian Mondrow	Continue review of pre-filed materials;
RAE	2022-12-19	3.60	lan Mondrow	Continue review of pre-filed materials;
RAE	2022-12-20	2.60	lan Mondrow	Continue review of pre-filed materials;
RAE	2022-12-21	3.70	Ian Mondrow	Continue review of pre-filed material;
OTH-ATT	2022-12-22	2.30	Ian Mondrow	Call with S. Rahbar and follow-up note summarizing revenue requirement impact of the application, over the term of the proposed rate plan; call with S. Rahbar and A. Hopkins (Synapse); discussion with intervenor regarding cost of capital issue and approach;
OTH-ATT	2022-12-26	1.20	Ian Mondrow	E-mail inquiries of SEC counsel and others on equity thickness topic; evaluation of EGI position and alternative approaches;
IEP	2022-12-27	2.10	Ian Mondrow	Background reading on cost of capital topic (OEB policy and evidence from recent Quebec inquiry) and notes for further discussion with potential expert;
OTH-ATT	2022-12-27	0.20	lan Mondrow	Correspondence with D. Quinn regarding concerns on storage vs. delivered supply and ICF report;
IEP	2022-12-28	0.20	Ian Mondrow	Further correspondence with SMEs regarding cost of capital issues/approach;
IEP	2022-12-29	2.50	lan Mondrow	Call with IGUA and potential expert to review issues; call with contact regarding additional potential experts;
IEP	2022-12-30	1.80	Ian Mondrow	Correspondence with other intervenors regarding various issues of interest and current thinking; correspondence with potential experts regarding possible scopes of work; note to K. Elson and D. Poch to share current thinking on energy transition work and co-ordinate;
IEP	2022-12-30	0.40	Ian Mondrow	Update note to IGUA regarding communications with respect to potential experts to date and follow-up considerations;

#### **Total Fees for Professional Services**

TK Name		Hours
Galler, Cathy		0.20
Mondrow, Ian		42.60
	Total	42.80



February 17, 2023 INVOICE: 20005427

#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
RAE	2023-01-08	2.10	Ian Mondrow	Continue review of pre-filed materials;
ILP	2023-01-08	0.50	lan Mondrow	Review draft Issues List comments circulated among intervenors in preparation for Issues Conference;
AIC	2023-01-09	6.40	Ian Mondrow	Attend Issues Conference;
IEP	2023-01-09	0.50	lan Mondrow	Review correspondence with IGUA and potential experts regarding issues and possible work scopes;
RAE	2023-01-10	0.50	lan Mondrow	Continue review of pre-filed materials;
ILP	2023-01-10	0.10	lan Mondrow	Correspondence among parties further to Issues List resolution;
IEP	2023-01-10	2.70	lan Mondrow	Conferences with S. Rahbar and potential experts regarding work scopes and workplan and follow-up correspondence;
ILP	2023-01-10	0.50	Ian Mondrow	Review and comment on revised draft Issues List;
<u>IEP-1.0</u> SUB-4.0	2023-01-11	5.00	Ian Mondrow	Call with IGUA and potential expert; follow-up discussion with IGUA regarding all potential experts and how to balance/determine proposal to advance to OEB for approval; consider and draft IGUA expert evidence sponsorship proposal and circulate to client and co-ordinating intervenors for review and comment; review OEB Staff letter regarding extension to procure expert proposals and consider and first draft of responding letter and transmission to client for review and consideration;
RAE	2023-01-11	0.60	Ian Mondrow	Continue review of pre-filed materials;
RAE	2023-01-12	0.70	Ian Mondrow	Continue review of pre-filed materials;
IEP	2023-01-12	6.70	lan Mondrow	Continue work on expert proposals, including detailed review with S. Rahbar regarding individual expert discussions and work scopes;
SUB	2023-01-13	5.10	Ian Mondrow	Continue work on expert proposal submission and conference with S. Rahbar and N. Sebaa to discuss and finalize; develop IGUA/expert work plan;
IEP	2023-01-13	0.50	lan Mondrow	Review revised draft Issues List and draft transmittal letter and comments from Issues Conference participants; review OEB response to OEB Staff letter regarding expert retainer status and dates and update note to IGUA;
IEP	2023-01-14	0.30	Ian Mondrow	Review J.C. Shepherd letter regarding support for proposed expert witnesses and provide note of clarification regarding scope for proposed IGUA evidence;
SUB	2023-01-16	0.40	Cathy Galler	Formatting and filing Proposal to File Expert Evidence and



# February 17, 2023 INVOICE: 20005427

				Comment on Issues List;
SUB-2.5 IEP-0.7	2023-01-16	3.20	lan Mondrow	Review and finalize work on expert evidence proposal, including workplan and budgets; review submissions of other parties; update to experts with workplan;
ILP	2023-01-16	1.20	lan Mondrow	Review OEB Staff submission on Issues List and draft comment for filing; review issues submissions from others;
IEP	2023-01-17	3.60	Ian Mondrow	Working with IGUA on final expert retainer arrangements;
ILP	2023-01-17	0.10	Ian Mondrow	Review balance of Issues submissions filed;
OTH-ATT	2023-01-17	1.50	lan Mondrow	Briefing IGUA Caucus regarding status and Issues identified;
RAE	2023-01-19	0.40	Ian Mondrow	Continue review of pre-filed materials;
IEP	2023-01-19	1.00	lan Mondrow	Further correspondence/discussions with experts to finalize detailed engagement terms;
IEP	2023-01-20	0.30	Ian Mondrow	Further correspondence to resolve terms of expert retainers;
IEP	2023-01-20	0.60	lan Mondrow	Review OEB Staff letter regarding progress on proposed expert retainers and update to client and IGUA's proposed experts;
RAE	2023-01-23	2.80	lan Mondrow	Continue review of pre-filed materials;
IEP	2023-01-24	1.30	Ian Mondrow	Work with IGUA on finalizing expert retainers;
RAE	2023-01-24	2.20	Ian Mondrow	Continue review of pre-filed materials;
IRP	2023-01-24	1.10	lan Mondrow	Consideration of, correspondence with other parties regarding PDO "double payment" issue and formulating interrogatory approach to the issue;
OTH-ATT	2023-01-24	0.40	Ian Mondrow	Client update for report to members;
RAE	2023-01-25	1.60	Ian Mondrow	Continue review of pre-filed materials;
OTH-ATT	2023-01-25	0.20	lan Mondrow	Intervenor group e-mail regarding rate harmonization proposals;
IEP	2023-01-25	0.10	lan Mondrow	Further communication internally regarding expert work plans;
OTH-ATT	2023-01-26	0.70	lan Mondrow	Further intervenor correspondence regarding rate harmonization proposal; notes to IGUA cost allocation advisor regarding rate harmonization discussion and further information on Panhandle/St. Clair allocation issue;
RAE	2023-01-26	1.00	Ian Mondrow	Continue review of pre-filed material;
RAE	2023-01-27	1.10	Ian Mondrow	Continue review of materials;
IEP	2023-01-27	0.60	lan Mondrow	Update client and experts regarding decision on evidence proposals and note interrogatory delivery date in workplan;
RAE	2023-01-27	0.50	lan Mondrow	Review P.O. No. 2 regarding issues and expert evidence proposal determinations;
RAE	2023-01-28	3.10	Ian Mondrow	Continue review of pre-filed material;
RAE	2023-01-30	3.40	Ian Mondrow	Continue review of pre-filed materials;



February 17, 2023 INVOICE: 20005427

OTH-ATT	2023-01-30	0.30	Ian Mondrow	Discussion with other parties regarding upcoming process;
IRP	2023-01-30	0.60	lan Mondrow	Communciations with experts regarding interrogatory formatting and with R. Knecht relating to rate design issues;
IEP	2023-01-31	0.90	lan Mondrow	Correspondence with experts regarding issues and interrogatories; review N. Sebaa revisions to schedule regarding expert and IGUA Caucus; discussions; review OEB Staff letter relating to scope of depreciation evidence and note to D. Madsen regarding degree of potential overlap;
RAE	2023-01-31	0.60	Ian Mondrow	Continue review of pre-filed material;

#### **Total Fees for Professional Services**

TK Name		Hours
Galler, Cathy		0.40
Mondrow, lan		66.60
	Total	67.00



March 20, 2023 INVOICE: 20021710

#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
RAE	2023-02-01	0.40	lan Mondrow	Continue review of materials; review EGI filing regarding Phase 2 evidence allocation against approved issues list;
OTH-ATT	2023-02-01	3.90	Ian Mondrow	Client member communications regarding EGI consultations and rate harmonization proposals; call with S. Rahbar and N. Sebaa relating to expert and IGUA Caucus co-ordination;
OTH-ATT	2023-02-01	0.10	lan Mondrow	Intervenor correspondence regarding issues phasing and IRs;
RAE	2023-02-02	0.30	lan Mondrow	Continue review of pre-filed materials;
IEP	2023-02-03	1.30	lan Mondrow	Review and finalize updated expert work plan and circulate with covering note to experts; review A. Hopkins note regarding approach to modelling and provide input in response; further correspondence with experts regarding work and IRs;
OTT-ATT	2023-02-03	2.30	lan Mondrow	Discussions with IGUA members regarding services (current and harmonized);
OTH-ATT	2023-02-03	0.40	lan Mondrow	Call with S. Rahbar regarding topics for further consideration;
OTH-ATT	2023-02-05	0.20	lan Mondrow	Review client communications regarding service harmonization details/feedback;
IEP	2023-02-05	1.10	Ian Mondrow	Communications with experts;
OTH-ATT	2023-02-05	0.30	lan Mondrow	Correspondence with intervenor representatives regarding common issues and interrogatory topics/further discussion;
IRP	2023-02-06	2.50	Ian Mondrow	Review and clean up draft IRs from experts;
IEP	2023-02-06	1.50	lan Mondrow	Call with A. Hopkins and IGUA to review scope of work and co-ordination with other experts;
OTH-ATT	2023-02-06	0.20	Ian Mondrow	Client update note for members;
RAE	2023-02-07	0.60	Ian Mondrow	Continue review of pre-filed materials;
OTH-ATT	2023-02-07	1.30	lan Mondrow	Call with D. Quinn and IGUA member regarding storage issues (and Phase 1 - Phase 2 division/overlap);
IEP	2023-02-07	0.20	lan Mondrow	Review correspondence between experts regarding approach to modelling in support of business risk analysis;
IRP	2023-02-08	3.90	lan Mondrow	Discussion with IGUA regarding IRs and review and clean- up draft IRs from experts;
IRP	2023-02-09	4.30	Ian Mondrow	Continue review and clean-up draft IRs;
IRP	2023-02-10	4.80	lan Mondrow	Continue work on reviewing, revising and consolidating expert IRs; drafting additional IRs based on previous notes;



March 20, 2023 INVOICE: 20021710

				drafting IR filing covering letter; correspondence with counsel for EGI to confirm approach to deferral to Phase 2 of cost allocator-related questions as applicable to proposed harmonized rates; initial review of incoming IR filings regarding areas of potential IGUA interest;
RAE	2023-02-13	0.30	lan Mondrow	Continue review of pre-filed materials;
RAE	2023-02-13	0.40	Ian Mondrow	Update call with N. Sebaa (IGUA); review and extract modified RNG proposal evidence for N. Sebaa;
RAE	2023-02-13	0.30	lan Mondrow	Review sample invoice from customer regarding components of monthly charges;
IRR	2023-02-13	0.60	lan Mondrow	Review OEB Staff IRs and share with IGUA experts regarding cost of capital and depreciation proposal topics;
RAE	2023-02-14	3.90	lan Mondrow	Continue review of pre-filed material;
OTH-ATT	2023-02-14	1.00	lan Mondrow	Briefing note to IGUA regarding EGI low-carbon proposals;
OTH-ATT	2023-02-14	0.60	lan Mondrow	Intervenor correspondence regarding hearing issues;
RAE	2023-02-15	0.70	Ian Mondrow	Continue review of materials;
IEP	2023-02-15	0.30	lan Mondrow	Intervenor correspondence regarding issues for expert consideration;
OTH-ATT	2023-02-15	1.80	Ian Mondrow	Discussion with IGUA member regarding rate harmonization concerns; call with IGUA team regarding positions on RNG and Hydrogen initiatives;
OTH-ATT	2023-02-16	0.40	Ian Mondrow	Review correspondence with M. Rubenstein and associated materials from 2020 ESM VA regarding disposition at rebasing of integration capital (and associated accelerated CCA);
RAE	2023-02-16	1.90	lan Mondrow	Continue review of pre-filed material;
IEP	2023-02-16	0.10	Ian Mondrow	Review correspondence among IGUA experts regarding Canadian vs. US utility tax treatment and EGI approach;
OTH-ATT	2023-02-16	0.30	lan Mondrow	Correspondence with IGUA regarding energy transition cost responsibility position;
OTH-ATT	2023-02-17	0.10	lan Mondrow	Review intervenor correspondence regarding various issues of interest;
RAE	2023-02-17	4.20	lan Mondrow	Continue review of pre-filed materials;
RAE	2023-02-21	6.10	lan Mondrow	Continue review of pre-filed evidence;
RAE	2023-02-22	4.60	lan Mondrow	Continue review of pre-filed material; note to B. Knecht regarding features/merits of rate harmonization/cost allocation proposal (for discussion);
OTH-ATT	2023-02-22	0.40	lan Mondrow	E-mail exchanges with other intervenors regarding transmission (and general rate) harmonization parameters;
RAE	2023-02-23	1.80	Ian Mondrow	Continue review of pre-filed material;
RAE	2023-02-24	1.20	Ian Mondrow	Continue review of pre-filed materials;
OTH-ATT	2023-02-24	0.50	Ian Mondrow	Call with B. Yauch (APPrO) regarding issues of interest;



# March 20, 2023 INVOICE: 20021710

RAE	2023-02-27	0.40	Ian Mondrow	Correspondence on issues with R.D. Knecht (cost allocation/rate design expert);
RAE	2023-02-27	1.70	Ian Mondrow	Continue review of pre-filed materials;
RAE	2023-02-28	1.90	Ian Mondrow	Continue review of pre-filed material;
OTH-ATT	2023-02-28	0.60	Ian Mondrow	Call with S. Rahbar regarding various issues and progress through the evidence and considering questions for expert input;

#### **Total Fees for Professional Services**

TK Name		Hours
Mondrow, Ian		65.70
	Total	65.70



#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
RAE	2023-03-01	5.30	Ian Mondrow	Continue review of pre-filed materials;
RAE	2023-03-01	1.30	Ian Mondrow	Draft mapping of current to proposed harmonized rates for provision to IGUA members along with harmonized rate proposal description for review and comment; supplemental note providing details on proposed 2024 current and harmonized rates and how to apply the details to calculate individual rate impacts;
RAE	2023-03-02	3.80	Ian Mondrow	Continue review of pre-filed material;
RAE	2023-03-03	3.70	Ian Mondrow	Continue review of pre-filed materials;
RAE	2023-03-03	1.70	Ian Mondrow	Correspondence with various IGUA members regarding rate harmonization proposal and extent to which their concerns are thereby addressed; complete briefing note to IGUA relating to derivation of customer specific 2024 and 2026 rate impacts based on rate evidence filed;
RAE	2023-03-06	2.70	Ian Mondrow	Continue review of pre-filed material; review and sort working issues list;
IEP	2023-03-06	0.40	Ian Mondrow	Draft note to experts regarding upcoming deliverables and discussions in preparation for Technical Conference and evidence outlines;
IEP	2023-03-06	0.40	Ian Mondrow	Review expert evidence outlines received;
OTH-ATT	2023-03-06	0.20	lan Mondrow	Supplemental note for circulation to IGUA members for feedback in EGI's proposal for interruptible rates;
RAE	2023-03-07	5.30	Ian Mondrow	Review and revision/consolidation of working issues list;
IEP	2023-03-08	2.60	lan Mondrow	Review expert evidence outlines and provide initial comments;
OTH-ATT	2023-03-08	0.20	lan Mondrow	Review and supplement IGUA member briefing note regarding 2024 and harmonized rate changes;
RAE	2023-03-08	0.40	Ian Mondrow	Review EGI covering letter with GSP Update; GSP Update introduction, and OEB Rebasing issues determination regarding GSP filing nexus with rebasing application;
RAE	2023-03-09	1.70	lan Mondrow	Gather and commence review of updated evidence filing and EGI IRRs;
TCP	2023-03-10	1.50	Ian Mondrow	Correspondence with experts regarding incomplete IRRs and next steps in preparation for Technical Conference; message for EGI counsel to inquire regarding excel models;
IEP	2023-03-10	3.00	lan Mondrow	Discussions with S. Rahbar regarding expert evidence outlines and various substantive issues as well as budget



				status; review S. Rahbar comments on Synapse evidence outline and comment;
IEP	2023-03-13	3.50	lan Mondrow	Call with IGUA experts to review evidence outlines, and discuss IRRs;
OTH-ATT	2023-03-13	1.50	lan Mondrow	Call with M. Rubenstein and T. Ladanyi to review O/H Capitalization and other issues;
IEP	2023-03-13	0.90	lan Mondrow	Review draft Declarations and Undertakings and OEB Staff undertakings and letter submitted; draft note to S. Cleary regarding review of relevant OEB procedural materials and execution of declaration and undertaking;
OTH-ATT	2023-03-13	0.20	lan Mondrow	Review intervenor correspondence regarding systems expansion projects and attendant risks;
IRR	2023-03-14	3.80	lan Mondrow	Review IRRs; transmit confidentiality undertakings to S. Cleary;
IRR	2023-03-15	1.30	Ian Mondrow	Continue review of IRRs;
TCP	2023-03-15	0.90	lan Mondrow	Technical Conference preparation including letter providing topic areas and time estimates and review of other letters filed for areas of focus by other parties;
ТСР	2023-03-16	0.40	lan Mondrow	Correspondence regarding Technical Conference time estimates and witnesses;
IRR	2023-03-17	1.50	Ian Mondrow	Continue review of IRRs;
RAE	2023-03-17	0.50	lan Mondrow	Review EGI evidence updates and forward relevant updates to experts;
TCP	2023-03-17	1.10	lan Mondrow	Review correspondence and Procedural Order regarding Technical Conference; call with D. O'Leary and correspondence with D. Madsen regarding obtaining cost allocation data;
OTH-ATT	2023-03-17	0.10	Ian Mondrow	Client update note;
RAE	2023-03-20	3.40	lan Mondrow	Review R. Knecht preliminary cost allocation and rate design report and conference to discuss;
IRR	2023-03-20	2.50	Ian Mondrow	Complete review of IRRs;
OTH-ATT	2023-03-20	0.20	lan Mondrow	Client communications regarding R. Knecht work update and member rate impact inquiries;
ТСР	2023-03-20	0.90	lan Mondrow	Technical Conference: review supplementary depreciation IRR information from EGI and forward to D. Madsen; review D. Madsen note regarding reconciliation of updated cost allocation evidence; review Technical Conference schedule and correspondence with EGI and OEB Staff regarding conflict and potential solution;
SUB-CONF	2023-03-21	0.40	lan Mondrow	Draft covering letter for filing confidentiality undertakings and requesting information from EGI; note to A. Hopkins to confirm that access to confidential filings not required at this time;
TCP	2023-03-21	3.80	lan Mondrow	Review Technical Conference preparation notes and refine



				questions;
ТСА	2023-03-22	6.60	Ian Mondrow	Attend Technical Conference;
RAE	2023-03-22	0.50	lan Mondrow	Review EGI and Guidehouse letters regarding confidentiality of pathways model and review OEB responding letter; review EGI letter regarding updated evidence and IRRs;
TCA	2023-03-23	6.40	Ian Mondrow	Attend Technical Conference;
TCP	2023-03-24	0.20	Ian Mondrow	Review intervenor correspondence regarding various issues;
TCP	2023-03-24	0.20	lan Mondrow	Review correspondence regarding Guidehouse disclosure discussions;
TCA	2023-03-24	2.00	Ian Mondrow	Attend Technical Conference;
TCP	2023-03-24	3.30	lan Mondrow	Review and revise Technical Conference questions and compile compendium contents for assembly; circulate compendium; correspondence with J.C. Sheppard and M. Rubenstein regarding asking IGUA questions;
TCP	2023-03-24	0.30	lan Mondrow	Update note to IGUA regarding Technical Conference status and approach;
IEP	2023-03-24	0.50	lan Mondrow	Review status of expert workplan and meeting schedule and communicate required adjustments to meeting schedule and proposed dates;
<u>RAE-3.1</u> IEP-2.0	2023-03-25	5.10	lan Mondrow	Review cost allocation/rate design notes from B. Knecht and note to B. Knecht regarding further work/next steps; commence review of D. Madsen draft evidence;
IEP	2023-03-26	0.20	lan Mondrow	Review recent correspondence from experts regarding work progress;
TCP	2023-03-26	1.00	Ian Mondrow	Review notes and prepare for Technical Conference;
TCA	2023-03-27	7.40	Ian Mondrow	Attend Technical Conference;
TCP	2023-03-27	1.20	lan Mondrow	Call with B. Knecht regarding Technical Conference clarification questions and updated retainer terms; correspondence with EGI and OEB Staff regarding arrangements for IGUA clarification questions for balance of proceeding; note to B Knecht to confirm updated retainer and arrangements for Technical Conference on cost allocation topic;
TCP	2023-03-27	0.50	lan Mondrow	Call with S. Rahbar to provide update and confirm instructions for B. Knecht and balance of Technical Conference participation;
TCP	2023-03-27	0.80	lan Mondrow	Review Technical Conference transcript and excerpt to D. Madsen to consider;
TCA	2023-03-28	1.80	Ian Mondrow	Attend Technical Conference;
TCP	2023-03-28	0.70	Ian Mondrow	Review and revise Technical Conference follow-up questions and correspondence with B. Knecht to arrange/guide Friday attendance;
IRR	2023-03-29	0.50	lan Mondrow	Review IRRs not yet read;



TCA	2023-03-31	3.80	Ian Mondrow	Technical Conference; review transcript in lieu of attendance;			
Total Fees for Professional Services							

TK Name		Hours
Mondrow, Ian		104.10
	Total	104.10



#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
IEP	2023-04-01	0.20	Ian Mondrow	Ensure experts workplan dates are current and fees update to IGUA;
OTH-ATT	2023-04-01	0.30	lan Mondrow	Review EGI letter responding to ED letter regarding additional evidence on carbon footprint of blue hydrogen; review intervenor correspondence regarding Panhandle/St. Clair system cost allocation;
TCA	2023-04-01	0.20	Ian Mondrow	Review B. Knecht reports on Friday's Technical Conference; review S. Cleary input on IRR follow-up;
TCA	2023-04-03	0.30	Ian Mondrow	Review Technical Conference transcripts in lieu of attendance;
IEP	2023-04-03	5.00	Ian Mondrow	Complete review of D. Madsen draft evidence and provide comments/questions for further consideration; review Synapse draft evidence and provide comments/considerations;
IEP	2023-04-04	2.40	Ian Mondrow	Review Synapse modelling description document; call with IGUA and experts to review draft evidence; review notes from experts regarding work updates and additional comments;
RAE	2023-04-04	0.40	Ian Mondrow	Review EGI letter regarding updated Guidehouse pathways study and impact on filing of ED/GEC pathways evidence, and note to A. Hopkins to consider and advise of any concerns;
OTH-ATT	2023-04-05	0.40	Ian Mondrow	Update to S. Rahbar and IGUA Ontario Caucus chair;
TCA	2023-04-05	0.60	Ian Mondrow	Review Technical Conference transcripts (in lieu of attendance);
RPD	2023-04-05	0.30	Ian Mondrow	Review Procedural Order 4; intervenor correspondence;
TCA	2023-04-06	0.40	lan Mondrow	Review Technical Conference transcripts (in lieu of attendance);
IEP	2023-04-06	0.60	Ian Mondrow	Discussion with C. Hummel regarding equity thidkness OEB policy questions for response and provide guidance note;
OTH-ATT	2023-04-06	0.30	Ian Mondrow	Correspondence with M. Rubenstein regarding EGI proposal on Guidehouse update and Neme evidence filing;
OTH-ATT	2023-04-07	0.30	lan Mondrow	Correspondence with D. Poch regarding motions and EGI proposal regarding pathways/C. Neme evidence;
IEP	2023-04-07	0.70	Ian Mondrow	Retrieve Technical Conference undertaking responses and forward to IGUA experts; review recent correspondence with IGUA experts;



RAE	2023-04-07	0.60	Ian Mondrow	Review EGI/Guidehouse update filing;
IEP	2023-04-08	2.90	Ian Mondrow	Review S. Cleary draft evidence and provide comments;
TCA	2023-04-10	0.30	lan Mondrow	Review Technical Conference transcripts in lieu of attendance;
IEP	2023-04-10	1.10	Ian Mondrow	Correspondence with experts to clarify cross-references in draft evidence and regarding evidence revision and finalization; correspondence with experts regarding potential revised schedule and response to OEB Staff;
OTH-ATT	2023-04-10	1.20	Ian Mondrow	Review e-mail inquiries from members regarding rate changes, provide preliminary responses, and inquiry of B. Knecht for assistance in validating rate impacts;
RPD	2023-04-10	1.00	lan Mondrow	Review ED and SEC motions day letters and share with IGUA business risk experts;
IEP	2023-04-11	4.60	Christopher Hummel	Prepared and circulated Expert Form A for A. Hopkins, S. Cleary, and D. Madsen; researched history of OEB's equity thickness test and drafted analysis on rationale for I. Mondrow;
TCA	2023-04-11	0.40	Ian Mondrow	Continue review of Technical Conference transcripts in lieu of attendance;
OTH-ATT	2023-04-11	1.70	Ian Mondrow	Correspondence/discussions with parties regarding proposed updated schedule;
IEP	2023-04-11	0.50	Ian Mondrow	Update notes to client and experts on evolving rescheduling discussions and revision of expert work plan timing to finalize evidence and prepare for IRs;
IEP	2023-04-12	0.70	Ian Mondrow	Reviewing C. Hummel reporting note on cost of capital policy research and interm note to A. Hopkins with relevant OEB materials;
IEP	2023-04-12	1.50	lan Mondrow	Correspondence with experts and discussion with S. Rahbar regarding status of work and finalizing evidence;
RPD	2023-04-12	0.40	lan Mondrow	Review EGI response to motions day submissions and consider;
IEP	2023-04-13	0.30	Ian Mondrow	Review recent IGUA expert correspondence;
RAE	2023-04-13	0.50	Ian Mondrow	Review EGI filing updates;
IEP	2023-04-13	1.20	Ian Mondrow	Review Procedural Order No. 5 and revised experts work plan accordingly; circulate revised work plan with covering note highlighting next steps;
AHM	2023-04-14	1.00	Ian Mondrow	Review Motions Day transcript in lieu of attendance;
OTH-ATT	2023-04-14	0.70	lan Mondrow	Discussion with D.R. Quinn regarding T2 cost allocation issue;
IEP	2023-04-16	3.00	lan Mondrow	Full review and additional comment on S. Cleary draft evidence;
IEP	2023-04-17	2.80	lan Mondrow	Final review of S. Cleary evidence changes and instructions for assembly; review D. Madsen revised draft evidence;



IEP	2023-04-18	4.80	lan Mondrow	Continued detailed review and comment on expert evidence;
TCF	2023-04-18	0.50	lan Mondrow	Review EGI updated Technical Conference responses for IGUA cost allocation matters; note to B. Knecht regarding status and next steps on cost allocation and rate design work;
OTH-ATT	2023-04-19	0.80	Ian Mondrow	Update to Ontario Caucus;
IEP	2023-04-19	0.20	Ian Mondrow	Review additional revisions to D. Madsen evidence;
IEP	2023-04-20	1.90	lan Mondrow	Final review of S. Cleary evidence as formatted for filing and filing directions provided; correspondence with other experts regarding work status/finalizing evidence;
OTH-ATT	2023-04-20	1.40	lan Mondrow	Review and consider note from intervenor regarding load balancing cost allocation, review associated evidence, and forward to B. Knecht for consideration; review IGUA approach to calculation of member rate impacts; call with A. Vachon (IGUA) to review approach to rate impact calculations;
IEP	2023-04-21	1.00	Cathy Galler	Formatting and filing expert evidence;
IEP	2023-04-21	1.90	Ian Mondrow	Review and final instructions for compilation and filing of IGUA sponsored evidence; drafting evidence transmittal letter;
RAE	2023-04-21	2.00	Ian Mondrow	Review EGI gas supply plan update regarding relevance to IGUA members and rebasing application topics; review EGI updates and parties' evidence filed;
OTH-ATT	2023-04-21	1.00	Ian Mondrow	Call with IGUA Ontario Caucus chairs (outgoing and incoming) regarding next update to Caucus and Board of Directors;
RAE	2023-04-21	0.60	Ian Mondrow	Review Guidehouse update and related EGI filing; note to A. Hopkins regarding next steps in finalizing Synapse evidence;
RAE	2023-04-22	2.80	lan Mondrow	Review LEI evidence filed by OEB Staff and note to IGUA cost of capital experts with observations and request for input;
RAE	2023-04-23	1.20	Ian Mondrow	Review AGA/CGA study report referred to in LEI evidence;
RAE	2023-04-23	0.60	Ian Mondrow	Reading OPI and FRPO evidence;
RAE-1.0 IRP-1.4	2023-04-24	2.40	Ian Mondrow	Continue review of intervenor evidence filed and related correspondence with IGUA experts; drafting proposed IRs on intervenor/Staff evidence;
OTH-ATT	2023-04-24	0.50	Ian Mondrow	Intervenor correspondence regarding various issues;
RAE	2023-04-25	0.80	Ian Mondrow	Review ED and GEC Technical Conference (P2NZ Update) filings and related materials and update note to A. Hopkins regarding energy transition discussions anticipated;
IEP	2023-04-25	1.20	Ian Mondrow	Review and revise experts work plan and update note to experts and client group regarding upcoming steps and schedule;



IRP	2023-04-25	0.80	Ian Mondrow	Review and revise IRs for LEI based on S. Cleary input; correspondence with D. Madsen regarding potential IRs for Intergroup;
IEP	2023-04-26	0.30	lan Mondrow	Correspondence with experts regarding work plan;
OTH-ATT	2023-04-26	0.20	lan Mondrow	Update note to IGUA;
RAE	2023-04-26	2.20	lan Mondrow	Review Intergroup depreciation evidence;
TCP	2023-04-26	0.30	Ian Mondrow	Review correspondence regarding scope of Technical Conference (and ED materials filed);
IRP	2023-04-26	0.60	Ian Mondrow	Review and supplement IRs for LEI based on input from IGUA experts;
RAE	2023-04-26	0.60	Ian Mondrow	Continue review of Intergroup depreciation evidence and question to D. Madsen; correspondence with K. Elson (ED) regarding implications of further Guidehouse report discovery;
IRP	2023-04-27	0.30	Cathy Galler	Formatting and filing IRs to LEI;
RAE	2023-04-27	3.10	lan Mondrow	Complete review of Intergroup evidence;
TCA	2023-04-27	1.30	Ian Mondrow	Attend Technical conference continuation;
IRP	2023-04-27	0.30	Ian Mondrow	Final review and revision to IRs for LEI;
TCA	2023-04-28	0.40	Ian Mondrow	Technical Conference: Review transcripts in lieu of attendance;
IE-IRR	2023-04-28	0.10	lan Mondrow	Review IRs received on IGUA evidence and distribute to experts for consideration and response;
IRP	2023-04-28	1.40	Ian Mondrow	Review comments from D. Madsen and draft IRs for Intergroup;
IE-IRR	2023-04-28	1.00	lan Mondrow	Continue review of IRs received and distribute to experts for response;
TCA	2023-04-28	0.40	lan Mondrow	Technical Conference: Continue review of transcript in lieu of attendance;
OTH-ATT	2023-04-28	0.20	Ian Mondrow	Correspondence with K. Elson regarding issues of common interest;
IE-IRR	2023-04-29	1.70	lan Mondrow	Review IRs received and dispatch to experts for drafting responses as appropriate;

#### **Total Fees for Professional Services**



TK Name	Hours
Galler, Cathy	1.30
Hummel, Christopher	4.60
Mondrow, lan	73.70
Total	79.60



#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
IE-IRR	2023-05-01	0.50	lan Mondrow	Correspondence with experts and intervenor regarding IRs received and parameters for expected response;
OTH-ATT	2023-05-01	0.80	lan Mondrow	Call with S. Rahbar regarding update and discussion of various issues related to the application; fees update to IGUA;
OTH-ATT	2023-05-01	0.90	lan Mondrow	Review notes between IGUA and B. Knecht regarding cost allocation issues; note to D. Stevens regarding timing on promised cost allocation continuity mapping;
OTH-ATT	2023-05-02	1.10	lan Mondrow	Call with B. Knecht to review status of work, issues for further work and timing; correspondence with D. Stevens regarding cost allocation filing anticipated in further undertaking responses;
SCP	2023-05-05	0.70	lan Mondrow	Discussion with M. Millar regarding process for Settlement Conference; message to D. Stevens and e-mail to intervenor colleagues regarding process for Settlement Conference; review recent hearing related correspondence;
IEP	2023-05-08	3.30	lan Mondrow	Review A. Hopkins final draft evidence and provide final comments and instructions for formatting in preparation for filing
RAE	2023-05-08	0.60	Ian Mondrow	Review draft of C. Neme evidence shared;
OTH-ATT	2023-05-09	0.40	Ian Mondrow	Update to IGUA for distribution to members;
IEP	2023-05-09	1.80	lan Mondrow	Final review of A. Hopkins' evidence; draft transmittal letter including request for confidential treatment of model to be filed;
IEP	2023-05-10	0.60	lan Mondrow	Review formatted Synapse evidence and transmittal letter and provide final instructions for preparation for filing;
IEP	2023-05-11	0.90	lan Mondrow	Final review of A. Hopkins evidence filing and transmittal letter; retrieve other parties' filings and distribute to IGUA/experts;
IE-IRR	2023-05-11	0.80	Ian Mondrow	Commence review of draft IRRs from S. Cleary;
RAE	2023-05-11	0.60	Ian Mondrow	Review ED/GEC evidence;
IE-IRR	2023-05-12	5.50	lan Mondrow	Continue review and comment on S. Cleary draft IRRs; commence review and comment on D. Madsen draft IRRs;
IE-IRR	2023-05-13	2.40	lan Mondrow	Continue review of, and comment on, D. Madsen draft IRRs;
IE-IRR	2023-05-15	5.70	Ian Mondrow	Review expert comments on draft IRRs and work on compilation for filing;



RAE	2023-05-15	0.10	lan Mondrow	Review EGI letter regarding additional evidence in response to ED (Hydrogen);
IRR	2023-05-15	0.20	Ian Mondrow	Review IRR filings by other parties;
IE-IRR	2023-05-15	0.70	lan Mondrow	Complete review of assembled IRRs on IGUA evidence and final instructions to finalize and file;
IE-IRR	2023-05-16	1.90	Ian Mondrow	Final instructions regarding filing of IGUA IRRs; further consideration and correspondence regarding circulation of filings in manageable pieces;
IEP	2023-05-16	0.50	lan Mondrow	Review S. Cleary interim invoice against retainer terms and review legal fees budget update;
IEP	2023-05-17	0.60	lan Mondrow	Draft filing letter and provide instructions for Cleary evidence update;
IE-IRR	2023-05-17	1.00	Ian Mondrow	Review incoming IRs on energy transition evidence; transmit applicable IRs to Synapse with additional background information;
IEP	2023-05-17	0.30	Ian Mondrow	Review expert retainers and correspondence requesting updates on hours worked; note to N. Sebaa with cost:budget update;
OTH-ATT	2023-05-18	0.50	Ian Mondrow	Call with S. Rahbar regarding status update;
IE-IRR	2023-05-18	1.40	lan Mondrow	Review incoming IRs and forward to A. Hopkins for response;
SCP	2023-05-18	0.40	lan Mondrow	Intervenor correspondence and correspondence with D. Madsen regarding information for Settlement Conference;
RAE	2023-05-19	2.40	lan Mondrow	Review updated cost allocation and rate design filing and note to B. Knecht with updated materials and questions;
SCP	2023-05-19	0.20	lan Mondrow	Intervenor correspondence regarding Settlement Conference preparation;
SCP	2023-05-19	0.50	lan Mondrow	Review recent correspondence with B. Knecht and A. Vachon (IGUA) regarding cost allocation and rate design questions and IGUA member impacts;
SCP	2023-05-20	3.00	lan Mondrow	Commence detailed review of B. Knecht report on cost allocation and rate design issues;
SCP	2023-05-22	0.30	lan Mondrow	Review D. Madsen calculations regarding adjusted net salvage parameters;
IE-IRR	2023-05-22	3.70	Ian Mondrow	Review Synapse draft IRRs and provide comments;
SCP	2023-05-22	0.20	lan Mondrow	Review D. Madsen response to request for calculation of revenue requirement impact of net salvage recommendations and correspondence for discussion with M. Rubenstein (SEC) and D. Madsen to review;
SCP	2023-05-23	2.80	Ian Mondrow	Intervenor Settlement Conference co-ordination meeting;
SCP	2023-05-23	3.30	Ian Mondrow	Meeting with M. Rubenstein and D. Madsen to review depreciation calculation issues; drafting note to EGI requesting alternative depreciation parameter calculations in preparation for settlement discussions; review OEB letter



				regarding energy transition considerations for Settlement Conference; review EGI letter regarding green hydrogen responding evidence intent;
IE-IRR	2023-05-23	0.20	lan Mondrow	Correspondence regarding Synapse IRRs;
OTH-ATT	2023-05-23	0.90	lan Mondrow	Update and issues discussion with S. Rahbar;
IRR	2023-05-24	0.50	lan Mondrow	Review LEI IRRs;
IE-IRR	2023-05-24	1.20	lan Mondrow	Review revised Synapse IRRs and provide further comments/clarifications and provide final filing instructions;
IRR	2023-05-25	0.60	lan Mondrow	Complete review of LEI IRRs; review OPI IRRs;
IRR	2023-05-25	0.40	lan Mondrow	Review recent filings (IRRs and EGI correspondence);
OTH-ATT	2023-05-25	4.10	Ian Mondrow	Intervernor subgroup call regarding energy transition; review B. Knecht materials regarding cost allocation and discussion with City of Kitchener concerning common interests; correspondence with B. Yauch for APPrO regarding T2 rate impacts issues; correspondence with M. Rubenstein relating to PDO "double recovery" issue;
SCP	2023-05-26	0.20	Ian Mondrow	Correspondence regarding requested depreciation figures for Settlement Conference;
SCP	2023-05-26	1.20	Ian Mondrow	Review pre-Settlement Conference correspondence (questions and positions circulated); conference with APPrO (B. Yauch) regarding potential common issues;
SCP	2023-05-26	2.80	Ian Mondrow	Call with B. Knecht and IGUA to review cost allocation and rate design topics;
SCP	2023-05-27	3.30	Ian Mondrow	Review pre-Settlement Conference intervenor correspondence and position summaries circulated;
SCP	2023-05-28	0.20	Ian Mondrow	Correspondence with S. Rahbar regarding settlement discussion issues;
SCP	2023-05-28	2.80	Ian Mondrow	Review correspondence between parties in preparation for Settlement Conference;
SCA	2023-05-29	7.00	lan Mondrow	Attend Settlement Conference;
SCP	2023-05-29	0.10	lan Mondrow	Update note to S. Rahbar;
SCP	2023-05-30	2.50	Ian Mondrow	Correspondence with other intervenors regarding issues/settlement discussions;
SCA	2023-05-30	7.70	lan Mondrow	Attend Settlement Conference;
SCA	2023-05-31	7.20	lan Mondrow	Attend Settlement Conference;
SCP	2023-05-31	0.30	lan Mondrow	Review correspondence with client/expert regarding cost allocation issues;
SCP	2023-05-31	1.60	lan Mondrow	Intervenor correspondence regarding settlement discussions formulating proposal to resolve certain issues;

#### **Total Fees for Professional Services**



TK Name		Hours
Mondrow, Ian		95.40
	Total	95.40



July 24, 2023 INVOICE: 20092473

#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
SCP	2023-06-01	1.20	lan Mondrow	Review materials in preparation for Settlement Conference; correspondence with OEB Staff and M. Rubenstein regarding OEB approach to indigenous related regulatory obligations; review and comment on intervenor material circulated in support of settlement proposal;
SCA	2023-06-01	6.40	an Mondrow	Attend Settlement Conference;
SCA	2023-06-02	7.60	an Mondrow	Attend Settlement Conference;
SCP	2023-06-03	0.70	lan Mondrow	Correspondence with D. Madsen regarding input in support of Settlement Conference discussions (and related confidentiality requirements);
SCP	2023-06-04	0.70	an Mondrow	Review Settlement Conference-related correspondence among intervenors;
SCA	2023-06-05	9.00	lan Mondrow	Attend Settlement Conference and continue review of materials and intervenor correspondence regarding settlement issues;
SCA	2023-06-06	7.90	an Mondrow	Attend Settlement Conference and continue work with intervenors on settlement issues/proposals;
SCP	2023-06-06	1.30	an Mondrow	Update discussion with S. Rhabar and update note for members;
SCA	2023-06-07	7.90	an Mondrow	Attend Settlement Conference;
SCP	2023-06-08	0.60	an Mondrow	Intervenor correspondence regarding clarification of settlement proposal and reconvening;
SCP	2023-06-08	0.90	an Mondrow	Reviewing material on 2024 rate changes in preparation for reconvening of settlement conference;
SCA	2023-06-08	4.20	an Mondrow	Attend Settlement Conference;
IE-WP	2023-06-08	0.20	an Mondrow	Response to A. Hopkins on hearing scheduling expectations and fees update to IGUA;
SCP	2023-06-08	0.60	an Mondrow	Correspondence with intervenors regarding settlement positions;
SCA	2023-06-09	4.00	an Mondrow	Attend Settlement Conference;
PSP	2023-06-12	1.70	lan Mondrow	Review proposed EGI communication to OEB Staff regarding issues settled; discussions with M. Rubenstein relating to proposed communication, and consider whether changes required to provide formal response to OEB's late day letter requesting public filing;
IE-WP	2023-06-12	0.30	an Mondrow	Interim update to client and experts regarding conclusion of

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July 24, 2023 INVOICE: 20092473

				Settlement Conference; timing for further settlement details; and preparation for the oral hearing;
PSP	2023-06-13	0.40	lan Mondrow	Review additional intervenor correspondence on settlement confirmation and associated filing requested by the OEB; review and comment on draft EGI settlement advice letter to the OEB;
OHP	2023-06-14	0.70	lan Mondrow	Discussion with S. Rahbar regarding various issues for hearing;
RAE	2023-06-15	0.40	an Mondrow	Review IRP material in context of rebasing issues;
PSP	2023-06-15	1.80	lan Mondrow	Review intervenor correspondence and discussions regarding ongoing settlement discussions and hearing logistics;
SCA	2023-06-16	3.80	an Mondrow	Attend continuation of Settlement Conference;
SUB	2023-06-16	1.00	lan Mondrow	Drafting OEB letter regarding in-person hearing and interim cost awards;
RAE	2023-06-17	0.60	lan Mondrow	Review transmittal letter for EGI capital plan update; attempts to download and open document; note to intervenors regarding apparent scope of update and concerns;
PSP	2023-06-17	0.40	lan Mondrow	Reviewing intervenor correspondence regarding settlement discussions issues;
PSP	2023-06-18	2.50	lan Mondrow	Complete review of, and comment on, draft Settlement Agreement;
PSP	2023-06-19	2.60	lan Mondrow	Review intervenor correspondence and Settlement Agreement mark-ups and additional notes regarding revisiting potential settlement on particular issue; intervenor conference to discuss;
RAE	2023-06-19	0.50	an Mondrow	Review capital update;
RAE	2023-06-20	0.30	an Mondrow	Continue review of EGI capital update filing;
PSP	2023-06-20	1 <u>.</u> 10	an Mondrow	Further intervenor correspondence regarding review of draft Settlement Agreement;
RAE	2023-06-21	0.80	an Mondrow	Conclude review of capital update filing;
PSP	2023-06-21	0.10	an Mondrow	Intervenor correspondence regarding ongoing work to write up Settlement Proposal;
RPD	2023-06-21	0.30	an Mondrow	Review intervenor correspondence regarding need for follow-on updates to capital update;
RAE	2023-06-22	0.40	an Mondrow	Review EGI reply evidence regarding Blue Hydrogen;
RPD	2023-06-22	0.10	lan Mondrow	Review additional intervenor correspondence regarding capital update and hearing implications;
OTH-ATT	2023-06-22	0.30	an Mondrow	Report to IGUA and member on reference in EGI "blue hydrogen" reply evidence to member's work on hydrogen production;
RAE	2023-06-22	0.20	an Mondrow	Review EGI letter advising of intention for further capital

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July 24, 2023 INVOICE: 20092473

				update evidence and hearing presentation scheduling;
OTH-ATT	2023-06-23	0.50	an Mondrow	Discussion with S. Rahbar to update and discuss upcoming process;
RPD	2023-06-23	0.40	an Mondrow	Party correspondence regarding capital update additional filings and "Phase 3" timing;
RPD	2023-06-23	0.50	an Mondrow	Review P.O. No. 6 and update to client; directions regarding preparation of interim cost award;
PSP	2023-06-24	1.60	an Mondrow	Full review of Settlement Proposal draft two and draft accounting orders;
OTH-ATT	2023-06-24	2.30	lan Mondrow	Develop hearing and argument phase fees forecast (legal and expert) and provide to S. Rahbar; instructions for preparation of interim cost claim;
OHP	2023-06-24	0.40	an Mondrow	Update note regarding hearing process and schedule to IGUA experts;
PSP	2023-06-26	0.40	an Mondrow	Review intervenor comments/notes on draft two of Settlement Proposal;
PSP	2023-06-26	1.30	an Mondrow	Intervenor correspondence regarding outstanding Settlement Proposal issues;
PSP	2023-06-26	0.60	an Mondrow	Reporting note to S. Rahbar regarding settlement discussions on outstanding issue to obtain instructions;
PSP	2023-06-27	1.60	an Mondrow	Participate in reconvened intervenor discussion regarding Settlement Proposal and further correspondence;
PSP	2023-06-28	0.70	an Mondrow	Review further settlement correspondence regarding finalizing discussions and proposal;
PSP	2023-06-28	1.70	an Mondrow	Further correspondence regarading finalization of Settlement Proposal;
OTH-ATT	2023-06-28	1.30	lan Mondrow	Discussion with S. Rahbar regarding update on forecast work/budget and develop updated forecast summary for IGUA review;
OHP	2023-06-29	0.10	an Mondrow	IGUA correspondence regarding energy transition issues/approach;
PSP	2023-06-29	0.30	an Mondrow	Review settlement proposal filing and ADR Responses confidentiality request;
OHP	2023-06-29	0 <u>.</u> 90	an Mondrow	Review scheduling order and consider approach; note to M. Rubenstein to initiate scheduling discussion;
OHP	2023-06-29	0.30	an Mondrow	Note to client regarding scheduling issues and for guidance;
OHP	2023-06-30	1.10	an Mondrow	Call with N. Sebaa to review updated budget forecast;
OHP	2023-06-30	0.50	an Mondrow	Correspondence with M. Rubenstein and OEB Staff regarding hearing logistics/scheduling;

#### **Total Fees for Professional Services**



July 24, 2023 INVOICE: 20092473

#### SUMMARY OF FEES

**TK Name** Mondrow, **I**an

Tota

Hours 90.00 90.00



#### Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
	2023-07-03	0.40	lan Mondrow	Review and consider EGI list of witness panels regarding examination time estimates;
	2023-07-03	2.40	Ian Mondrow	Drafting update/issues memo for IGUA Ontario Caucus;
	2023-07-04	2.30	Ian Mondrow	Commence hearing preparation;
	2023-07-04	0.20	Ian Mondrow	Prepare for and attend IGUA Ontario Caucus meeting and provide update;
OHP	2023-07-04	0.30	lan Mondrow	Correspondence with intervenors regarding hearing scheduling and issues;
	2023-07-05	3.60	Ian Mondrow	Continue hearing preparation;
	2023-07-05	0.60	lan Mondrow	Call with Kitchener regarding common interests;
	2023-07-06	1.10	lan Mondrow	Hearing preparation;
	2023-07-06	0.40	lan Mondrow	Cost/budget update discussion with S. Rahbar;
	2023-07-07	0.40	Ian Mondrow	Continue hearing preparation;
	2023-07-08	2.70	Ian Mondrow	Continue hearing preparation;
IE-WP	2023-07-09	2.90	Ian Mondrow	Work on preparation for A. Hopkins;
OHP	2023-07-10	6.00	lan Mondrow	Continue hearing preparation; conference with OEB Staff, EGI and indigenous representatives and SEC regarding Issue 4 resolution concerns;
PREP-MM	2023-07-10	0.30	Ian Mondrow	Oversight of preparation of interim cost application and providing guidance;
IE-WP	2023-07-11	5.40	Ian Mondrow	Continue hearing preparation; preparation session (Part II) with A. Hopkins;
OHP	2023-07-11	0.90	Ian Mondrow	Further settlement discussions regarding Indigenous Issue 4;
OHP	2023-07-12	0.80	Ian Mondrow	Review EGI presentation material filed; review decision on confidentiality;
OHP	2023-07-12	2.40	lan Mondrow	Review correspondence regarding settlement discussion continuation on Issue 4 and participate in intervenor meeting to discuss options and agree on position;
OHP	2023-07-12	3.20	lan Mondrow	Hearing preparation: consider and draft opening statement and send to client for review; draft notes for EGI ET panel X;
PREP-MM	2023-07-12	0.40	Ian Mondrow	Call with C. Galler to review status and content of interim cost claim and approve;
OHP	2023-07-12	0.20	Ian Mondrow	Intervenor correspondence regarding approach to opening statements;

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OHP	2023-07-12	0.30	Ian Mondrow	Correspondence regarding scheduling adjustments;
OHP	2023-07-12	0.30	Ian Mondrow	Continue hearing preparation;
OHP	2023-07-12	0.30	Ian Mondrow	Review decision on confidentiality requests;
OHA	2023-07-13	7.10	Ian Mondrow	Attend hearing;
IE-WP	2023-07-14	0.30	Ian Mondrow	Update note to IGUA and A. Hopkins;
PSP	2023-07-14	0.30	Ian Mondrow	Review correspondence from various parties regarding hearing issues and updated Settlement Proposal filing;
OHA	2023-07-14	6.10	Ian Mondrow	Attend hearing;
OHP	2023-07-15	1.00	Ian Mondrow	Correspondence review and with other parties regarding scheduling and other hearing issues;
OHP	2023-07-15	1.30	Ian Mondrow	Hearing preparation; review materials;
OHP	2023-07-16	4.30	Ian Mondrow	Hearing preparation;
IE-WP	2023-07-17	1.40	Ian Mondrow	Review materials in preparation for hearing resumption and A. Hopkins testimony and correspondence with A. Hopkins to provide compendia filed and further explain expected process;
OHA	2023-07-17	7.70	Ian Mondrow	Attend hearing;
OHA	2023-07-18	7.60	Ian Mondrow	Attend hearing;
OHP	2023-07-18	1.00	Ian Mondrow	Hearing preparation;
OHP	2023-07-18	0.50	Ian Mondrow	Debrief with S. Rahbar on hearing to date;
OHP	2023-07-19	0.60	Ian Mondrow	Debrief following hearing with S. Rahbar;
OHA	2023-07-19	7.60	Ian Mondrow	Attend hearing;
OHP	2023-07-20	3.40	Ian Mondrow	Hearing preparation;
OHA	2023-07-21	0.50	Ian Mondrow	Review transcripts in lieu of attendance;
OHP	2023-07-21	1.80	Ian Mondrow	Hearing preparation;
OHP	2023-07-21	0.30	Ian Mondrow	Budget/fees update reporting to client;
IE-WP	2023-07-21	1.70	lan Mondrow	Correspondence and discussion with D.R. Quinn and M. Rubenstein to co-ordinate Dawn-Pakway topic approach; messages to M. Millar regarding format for equity thickness evidence;
IE-WP	2023-07-22	2.40	Ian Mondrow	Meeting with S. Cleary to orient and brief on hearing status and upcoming appearance;
OHP	2023-07-22	2.00	Ian Mondrow	Hearing preparation;
OHP	2023-07-23	7.60	Ian Mondrow	Hearing preparation;
OHP	2023-07-24	5.30	Ian Mondrow	Hearing preparation;
OHA	2023-07-24	3.70	Ian Mondrow	Attend hearing;
OHP	2023-07-24	0.20	Ian Mondrow	Review OEB clarification on confidentiality decision; review post-hearing day correspondence among parties;
OHP	2023-07-25	0.50	Ian Mondrow	Hearing preparation;
OHA	2023-07-25	8.00	lan Mondrow	Attend hearing;

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OHP	2023-07-26	1.00	Ian Mondrow	Intervenor correspondence regarding co-ordination on various issues;
OHA	2023-07-26	5.70	Ian Mondrow	Attend hearing;
IE-WP	2023-07-26	1.10	Ian Mondrow	Hearing preparation, including final logistics discussion with S. Cleary regarding upcoming appearance;
OHA	2023-07-27	8.00	lan Mondrow	Attend hearing;
OHP	2023-07-28	0.40	Ian Mondrow	Hearing preparation;
OHP	2023-07-29	1.60	Ian Mondrow	Client fees and hearing status update and forecast to year end;
IE-IRR	2023-07-29	0.50	Ian Mondrow	Review draft U/T response from A. Hopkins and provide guidance on format and approach for finalizing response;
OHP	2023-07-29	0.50	Ian Mondrow	Review materials updated in response to confidentiality decision;
OHP	2023-07-29	0.20	Ian Mondrow	Review parties' correspondence regarding various issues;
IRR	2023-07-31	2.70	Ian Mondrow	Review U/T responses filed;
OHP	2023-07-31	0.80	Ian Mondrow	Correspondence between parties regarding various hearing issues and scheduling matters;
ARG	2023-07-31	1.00	Ian Mondrow	Argument: review additional COC materials and notes for argument;
IE-IRR	2023-07-31	1.20	Ian Mondrow	Review S. Cleary proposal for U/T responses and related transcripts and provide format/approach guidance;
OHP	2023-07-31	0.20	Ian Mondrow	Note to IGUA for member update on hearing progress;

## **Total Fees for Professional Services**

## SUMMARY OF FEES

TK Name		Hours
Mondrow, Ian		146.90
	Total	146.90



#### DISBURSEMENTS

Taxable Costs		
2023-07-17	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6058719007241204 DATE: 07/24/2023 Mondrow, Ian, Parking for attendance at Hearing. 07/17/23	\$21.24
2023-07-18	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6058719007241204 DATE: 07/24/2023 Mondrow, Ian, Parking for attendance at Hearing. 07/18/23	\$21.24
2023-07-19	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6058719007241204 DATE: 07/24/2023 Mondrow, Ian, Parking for attendance at Hearing. 07/19/23	\$21.24
2023-07-25	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6100364208102107 DATE: 08/10/2023 Mondrow, Ian, Parking for attendance at hearing held at the Ontario Energy Board. 07/25/23	\$21.24
2023-07-27	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6100364208102107 DATE: 08/10/2023 Mondrow, Ian, Parking for attendance at hearing held at the Ontario Energy Board. 07/27/23	\$21.24
	Total Taxable Disbursements	<u>\$106.20</u>



Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
OHA	2023-08-01	0.60	Ian Mondrow	Review transcripts in lieu of attendance;
OHP	2023-08-01	1.10	Ian Mondrow	Update call with S. Rahbar regarding budget, IGUA positions on various hearing issues and workplan update;
IE-IRR	2023-08-01	2.10	lan Mondrow	Update note to D. Madsen regarding schedule and to confirm plans to attend and communication with OEB Staff to confirm in person attendance; reviewing revised Undertaking response from S. Cleary and instructions to finalize and file; notes regarding transcript corrections and "subject to check" update regarding Cleary testimony;
OHP	2023-08-01	0.30	Ian Mondrow	Review various filings made;
OHA	2023-08-02	2.60	Ian Mondrow	Review transcripts in lieu of attendance;
OHP	2023-08-02	0.40	Ian Mondrow	Review parties' filings regarding upcoming panels;
ARG-SUB	2023-08-02	0.80	Ian Mondrow	Argument: review additional AUC cost of capital historical material; discussion with S. Rahbar regarding refining position on energy transition topic(s);
OHP	2023-08-02	2.40	Ian Mondrow	Hearing preparation (depreciation work);
OHA	2023-08-03	1.80	Ian Mondrow	Review transcripts (in lieu of attendance);
	2023-08-03	3.20	an Mondrow	Hearing preparation (depreciation);
	2023-08-04	4.80	Ian Mondrow	Hearing preparation (depreciation);
	2023-08-05	4.60	Ian Mondrow	Hearing preparation (depreciation);
OHP	2023-08-06	5.50	Ian Mondrow	Hearing preparation (depreciation);
	2023-08-07	7.70	Ian Mondrow	Hearing preparation;
	2023-08-08	0.60	lan Mondrow	Review hearing materials filed by EGI;
	2023-08-08	7.90	Ian Mondrow	Hearing preparation;
	2023-08-08	0.60	Ian Mondrow	Hearing preparation;
OHA	2023-08-09	8.10	Ian Mondrow	Attend hearing;
OHA	2023-08-10	8.10	Ian Mondrow	Attend hearing;
OHP	2023-08-10	0.60	Ian Mondrow	Hearing preparation;
OHA	2023-08-11	6.10	Ian Mondrow	Attend hearing;
OHP	2023-08-13	0.20	Ian Mondrow	Review recent correspondence;
ARG-SUB	2023-08-14	0.20	Ian Mondrow	Argument: review material from S. Cleary regarding ROE and equity thickness positions and awards in other jurisdictions;

Terms: payment due within 30 days of invoice date Interest at the rate of 4.8% per annum will be charged on all amounts not paid within 30 days of invoice date Errors and omissions excluded



IE-IRR	2023-08-14	0.20	Ian Mondrow	Review D. Madsen draft Undertaking response and provide guidance to finalize;
IE-IRR	2023-08-15	0.40	lan Mondrow	Review D. Madsen revised Undertaking response and instructions for formatting and filing; review D. Madsen notes regarding transcript corrections and forward request to reporters;
ARG-SUB	2023-08-15	0.40	Ian Mondrow	Update to client on budget and forecast; correspondence with client on issue of net salvage recovery period and recent CER approach;
ARG-SUB	2023-08-18	0.50	Ian Mondrow	Argument;
ARG-SUB	2023-08-21	4.10	Ian Mondrow	Review EGI AIC;
ARG-SUB	2023-08-21	0.50	Ian Mondrow	Review recent filings;
ARG-SUB	2023-08-22	0.30	Ian Mondrow	Update note to inquiring member; correspondence with IGUA experts regarding feedback on EGI AIC;
ARG-SUB	2023-08-22	2.60	Ian Mondrow	Continue review of EGI AIC; preliminary discussion with S. Rahbar regarding argument process and positions;
ARG-SUB	2023-08-23	3.40	Ian Mondrow	Continue reviewing EGI AIC and referenced materials;
ARG-SUB	2023-08-24	4.90	Ian Mondrow	Continue review of EGI AIC and related materials;

## **Total Fees for Professional Services**

## SUMMARY OF FEES

TK Name		Hours
Mondrow, Ian		87.60
	Total	87.60



#### DISBURSEMENTS

Taxable Costs		
2023-08-09	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6108170808152104 DATE: 08/15/2023 Mondrow, Ian, Parking for attendance at hearing at the Ontario Energy Board. 08/09/23	\$21.24
2023-08-10	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6108170808152104 DATE: 08/15/2023 Mondrow, Ian, Parking for attendance at hearing at the Ontario Energy Board. 08/10/23	\$21.24
2023-08-11	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6108170808152104 DATE: 08/15/2023 Mondrow, Ian, Parking for attendance at hearing at the Ontario Energy Board. 08/11/23	\$21.24
	Total Taxable Disbursements	<u>\$63.72</u>



October 16, 2023 INVOICE: 20138365

Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
	2023-09-06	1.30	Ian Mondrow	Review comments from experts regarding points for argument;
	2023-09-06	1.60	Ian Mondrow	Notes for and delivery IGUA Board of Directors' update;
	2023-09-07	3.70	Ian Mondrow	Review materials for, and work on, argument;
	2023-09-08	3.40	Ian Mondrow	Continue review of materials and work on argument;
	2023-09-12	6.40	lan Mondrow	Continue review of materials and formulation of argument;
	2023-09-13	4.40	Ian Mondrow	Continue review of materials and preparation of argument;
ARG-SUB	2023-09-14	5.50	Ian Mondrow	Continue review of materials and formulation of argument;
	2023-09-15	4.80	Ian Mondrow	Continue review of materials and drafting argument;
	2023-09-16	1.20	Ian Mondrow	Continue work on argument;
	2023-09-17	2.50	lan Mondrow	Continue formulating argument;
	2023-09-18	6.70	Ian Mondrow	Continue work on IGUA argument;
	2023-09-19	8.30	Ian Mondrow	Continue work on IGUA argument;
	2023-09-20	6.30	Ian Mondrow	Continue work on argument;
	2023-09-21	6.90	Ian Mondrow	Complete work on final argument;
	2023-09-22	2.50	lan Mondrow	Review and typo corrections to argument for refiling;
	2023-09-26	0.30	Ian Mondrow	Review EGI letter regarding Phases 2/3 timing and update to IGUA;

#### **Total Fees for Professional Services**

TK Name		Hours
Mondrow, Ian		65.80
	Total	65.80

Terms: payment due within 30 days of invoice date Interest at the rate of 5,3% per annum will be charged on all amounts not paid within 30 days of invoice date Errors and omissions excluded



November 13, 2023 INVOICE: 20155859

Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
	2023-10-04	0.20	Ian Mondrow	Review OEB letter regarding preference for January, 2024 Phase 2 evidence update and status note to IGUA;
	2023-10-12	0.90	Ian Mondrow	Commence review of EGI reply argument;
	2023-10-14	0.20	Ian Mondrow	Update to IGUA and D. Madsen (expert) on proceeding status and balance of process;
ARG-SUB	2023-10-14	0.90	lan Mondrow	Continue review of EGI reply argument;
	2023-10-16	4.50	Ian Mondrow	Continue review of EGI reply argument;
	2023-10-17	4.80	Ian Mondrow	Complete review of EGI reply argument and summary report to IGUA;
	2023-10-18	0.20	Ian Mondrow	Review and finalize OEB letter regarding AUC COC decision for filing;
	2023-10-19	0.30	lan Mondrow	Review and consider EGI letter to OEB regarding Phase 2 timing and consequent approach;

## **Total Fees for Professional Services**

#### SUMMARY OF FEES

TK Name		Hours
Mondrow, Ian		12.00
	Total	12.00



December 31, 2023 INVOICE: 20202824

Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

Date	Hours	Timekeeper	Description
2023-12-15	0.30	Ian Mondrow	Review ED correspondence and attached Mass. gas future decision summary; review EGI responding correspondence;
2023-12-19	0.20	Ian Mondrow	Review OEB letter regarding decision release and update to S. Rahbar; submit request for confidential access;
2023-12-21	2.30	lan Mondrow	Commence detailed review of decision;
2023-12-21	1.00	lan Mondrow	Continue review of decision;
2023-12-22	0.60	Ian Mondrow	Continue review of decision;
2023-12-22	2.00	Ian Mondrow	Debrief discussions with intervenor and with S. Rahbar;
2023-12-23	3.40	Ian Mondrow	Correspondence with customer/NGO representatives regarding Ministerial intervention and IGUA response and further discussions;
2023-12-24	0.60	lan Mondrow	Further correspondence regarding revenue horizon/Ministerial reaction topic and decision implications;
2023-12-26	2.70	Ian Mondrow	Continue full review of decision;
2023-12-27	4.10	Ian Mondrow	Drafting full decision report to client and IGUA experts;

## **Total Fees for Professional Services**

#### SUMMARY OF FEES

TK Name		Hours
Mondrow, lan		17.20
	Total	17.20



February 21, 2024 INVOICE: 20221746

Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

Date	Hours	Timekeeper	Description
2024-01-03	1.60	Ian Mondrow	Review recent report and call with IGUA to debrief;
2024-01-04	2.10	Ian Mondrow	Briefing note for IGUA on new connections revenue horizon topic (rationale and quantification of OEB considerations);
2024-01-05	0.20	Ian Mondrow	Further notes with IGUA on aftermath of decision and determinations and next steps in the process (Phase 2);
2024-01-09	0.30	lan Mondrow	Discussion with S. Rahbar regarding next procedural steps in EGI proceeding (DRO and review); review and comment on A. Vachon report on dollar and rate implications of decision;
2024-01-10	0.40	Ian Mondrow	Review member summary prepared by S. Rahbar and provide comments;
2024-01-11	0.30	Ian Mondrow	Review A. Vachon note regarding financial/rate impact of decision and provide initial comment;
2024-01-11	0.90	Ian Mondrow	Review HRAI intervention filing and related information package regarding issues raised relating to Enbridge Sustain and nexus with Phase 2 and 3 rebasing issues; update note to IGUA;
2024-01-16	1.10	Ian Mondrow	Decision and next steps briefing to IGUA Ontario Caucus;
2024-01-17	0.20	Ian Mondrow	Review EGI letter regarding HRAI intervention request and GEC counsel change;
2024-01-24	0.40	lan Mondrow	Review responses of HRAI and ED/GEC to EGI intervention and cost eligibility objections;

## **Total Fees for Professional Services**

### SUMMARY OF FEES

TK Name		Hours
Mondrow, Ian		7.50
	Total	7.50

Terms: payment due within 30 days of invoice date Interest at the rate of 5,3% per annum will be charged on all amounts not paid within 30 days of invoice date Errors and omissions excluded



March 12, 2024 INVOICE: 20233903

Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
	2024-02-16	0.20	Ian Mondrow	Retrieve DRO package for review and review transmittal letter;
	2024-02-17	0.50	Ian Mondrow	Commence review of DRO materials;
	2024-02-19	1.60	lan Mondrow	Review EGI post-decision briefing materials from IGUA member and provide comments to S. Rahbar for member briefing;
	2024-02-19	1.20	Ian Mondrow	Continue review of DRO package and interim update note to S. Rahbar;
DEC-DRO	2024-02-20	0.20	Ian Mondrow	Continue review of DRO materials;
	2024-02-20	0.30	Ian Mondrow	Discussion with S. Rahbar re: decision debrief meeting with EGI;
	2024-02-21	0.50	lan Mondrow	Complete review of DRO materials;
	2024-02-21	2.20	Ian Mondrow	Review materials/rate impact calculations from A. Vachon and compose DRO briefing for IGUA members;
	2024-02-22	0.80	Ian Mondrow	E-mail to D. Madsen with DRO materials and request for review of depreciation and SRC aspects of the filing;
	2024-02-22	0.50	lan Mondrow	Review new OEB legislation re: impact on Phase 1 decision;
	2024-02-23	0.40	lan Mondrow	Review D. Madsen feedback on depreciation (including net salvage) aspect of DRO filing; share feedback with other interested parties;
	2024-02-24	1.00	Ian Mondrow	Review and consider draft legislation and report to IGUA re: potential impacts on proceeding;
	2024-02-25	0.20	Ian Mondrow	Review draft of SEC DRO submission on integration capital and note to counsel re: IGUA position;
	2024-02-29	0.30	Ian Mondrow	Review intervenor correspondence/drafts re: DRO;
	2024-02-29	1.30	Ian Mondrow	Draft DRO comments and correspondence with M. Rubenstein re: additional DRO issues;

## **Total Fees for Professional Services**



March 12, 2024 INVOICE: 20233903

#### SUMMARY OF FEES

**TK Name** Mondrow, Ian

Total

**Hours** 11.20

11.20



April 17, 2024 INVOICE: 20254189

Industrial Gas Users Association Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	Timekeeper	Description
	2024-03-01	3.10	lan Mondrow	Draft DRO submissions (including review with D. Madsen);
	2024-03-15	0.60	Ian Mondrow	Commence review of EGI updated DRO filing letter;
DEC-DRO	2024-03-16	2.20	Ian Mondrow	Complete review of EGI response to DRO submissions; e- mail depreciation related aspects of response to D. Madsen for review and confirmation;
	2024-03-19	0.40	lan Mondrow	Response to D. Francis regarding inquiry on UFG issue and settlement reached for 2024-2028;

## **Total Fees for Professional Services**

## SUMMARY OF FEES

TK Name		Hours
Mondrow, Ian		6.30
	Total	6.30



Req'd By: ParkK

Matter

Billing Professional

1760 Mondrow, Ian

Client 190123 Industrial Gas Users Association 851 Industrial Avenue R.O. Rev 30 Ottawa ON K1 Report: G\_Bill1.rpt 04/29/2024 - 9:51 AM Page: 1

851 Industrial Avenue P.O. Box 30 Ottawa ON K1G 4L3 Contact: Rahbar, Dr. Shahrzad

**Casual Prebill** 

T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **Unbilled Time**

 Date	Actual Tmkpr	_	ToBill Hours	Work Description
04/19/2024	1760	REV-RO	1.00	Review interim rate order;
04/25/2024	8440		5.00	Compiling final cost claim;
04/25/2024	1760	OTH-ATT	3.20	Work on preparation of cost claim;
04/26/2024	1760	OTH-ATT	0.20	Continue work on Phase 1 cost claim;
04/28/2024	1760	OTH-ATT	3.30	Review final draft cost claim and provide questions/directions; draft transmittal letter;
		10 -		

12.70

## **Timekeeper Summary**

Timekeeper Name	TKeeper Code	Hours	Last Time Entry
Galler, Cathy	8440	5.00	04/25/2024
Mondrow, Ian	1760	7.70	04/28/2024
	Totals	12.70	



#### DISBURSEMENTS

Taxable Costs		
2023-07-17	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6058719007241204 DATE: 07/24/2023 Mondrow, Ian, Parking for attendance at Hearing. 07/17/23	\$21.24
2023-07-18	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6058719007241204 DATE: 07/24/2023 Mondrow, Ian, Parking for attendance at Hearing. 07/18/23	\$21.24
2023-07-19	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6058719007241204 DATE: 07/24/2023 Mondrow, Ian, Parking for attendance at Hearing. 07/19/23	\$21.24
2023-07-25	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6100364208102107 DATE: 08/10/2023 Mondrow, Ian, Parking for attendance at hearing held at the Ontario Energy Board. 07/25/23	\$21.24
2023-07-27	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6100364208102107 DATE: 08/10/2023 Mondrow, Ian, Parking for attendance at hearing held at the Ontario Energy Board. 07/27/23	\$21.24
	Total Taxable Disbursements	<u>\$106.20</u>

Yonge Eglinton Centre AUTOMATED PARKING SYSTEM					
RECEIPT (DUPLICATE)					
CARYonge & Eglinton Ctr SHORT TERM 065857	DEVICE: PAID:	Paystation 3 17/07/23 04:59P			
entry: 17/07/23 08:29A Parking Duration: Charged Duration: Term:	EXIT	17/07/23 04:59P 000 08:30 000 08:30 17/07/23 04:59P			
PAID: \$24.00 V.A.T. 13% :	NET	\$21.24 \$2.76			
CREDIT CARD		\$24.00			
THANK YOU. HAVE A NICE DAY!					

1561 pebasing

	RECE	IPT	
CARYonge & Egli SHORT TERM	Inton Ctr Ø66173	DEVICE: PAID:	Paystation 4 18/07/23 05:20P
ENTRY: 18/07/2 PARKING DURATIO CHARGED DURATIO TERM:		EXIT:	18/07/23 05:19P 000 08:40 000 08:40 18/07/23 05:19P
PAID: V.A.T. 13% :	\$24.00	NET	\$21.24 \$2.76
CREDIT CARD			\$24.00

EGI Rebasing

Yonge Eglinton Centre AUTOMATED PARKING SYSTEM							
RECEIPT (DUPLICATE)							
CARYonge & Eglinton Ctr DEVICE: Paystation 3 SHORT TERM 066399 PAID: 19/07/23 05:17P							
ENTRY:         19/07/23         08:44A         EXIT:         19/07/23         05:16P           PARKING DURATION:         0000         08:32           CHARGED DURATION:         0000         08:32           TERM:         19/07/23         05:16P							
PAID: \$24.00 NET \$21.24 V.A.T. 13% : \$2.76							
CREDIT CARD \$24.00							
THANK YOU. HAVE A NICE DAY!							

EGI Rebusing

Yonge Eglinton Centre AUTOMATED PARKING SYSTEM ***	Yonge Eglinton Centre AUTOMATED PARKING SYSTEM ***
RECEIPT	RECEIPT
CARYonge & Eglinton Ctr DEVICE: Paystation 4 SHORT TERM 067677 PAID: 25/07/23 05:12P	CARYonge & Eglinton Ctr DEVICE: Paystation 4 SHORT TERM 068162 PAID: 27/07/23 04:57P
ENTRY: 25/07/23 08:35A EXIT: 25/07/23 05:12P PARKING DURATION: 0000 08:37 CHARGED DURATION: 0000 08:37 TERM: 25/07/23 05:12P	ENTRY: 27/07/23 08:36A EXIT: 27/07/23 04:57P PARKING DURATION: 000 08:21 CHARGED DURATION: 27/07/23 04:57P TERM: 27/07/23 04:57P
PAID: \$24.00 NET \$21.24 V.A.T. 13%: \$2.76 CREDIT CARD \$24.00	PAID: \$24.00 NET \$21.24 V.A.T. 13%: \$2.76 SECREDIT CARD \$24.00
THANK YOU, HAVE A NICE DAY! DO NOT ALLOW EXIT	DO NOT ALLOW EXIT
EGI pebasing	E61 pebasing



#### DISBURSEMENTS

Taxable Costs		
2023-08-09	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6108170808152104 DATE: 08/15/2023 Mondrow, Ian, Parking for attendance at hearing at the Ontario Energy Board. 08/09/23	\$21.24
2023-08-10	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6108170808152104 DATE: 08/15/2023 Mondrow, Ian, Parking for attendance at hearing at the Ontario Energy Board. 08/10/23	\$21.24
2023-08-11	Parking & Tolls - Local Travel VENDOR: Mondrow, Ian INVOICE#: 6108170808152104 DATE: 08/15/2023 Mondrow, Ian, Parking for attendance at hearing at the Ontario Energy Board. 08/11/23	\$21.24
	Total Taxable Disbursements	<u>\$63.72</u>

Yonge Eglinton Centre AUTOMATED PARKING SYSTEM RECEIPT CARYonge & Eglinton Ctr DEVICE: SHORT TERM 070929 PAID: Paystation 4 11/08/23 03:53P 11/08/23 03:53P ENTRY: 11/08/23 08:51A EXIT: 000 07:02 PARKING DURATION: 000 07:02 CHARGED DURATION: 11/08/23 03:53P TERM: \$21.24 \$24.00 NET PAID: \$2.76 V.A.T. 13% : \$24.00 CREDIT CARD DO NOT ALLOW EXIT

EGI Rebasing

	LINTON CENTRE PARKING SYSTEM **** ECEIPT
CARYonge & Eglinton SHORT TERM 070 ENTRY: 10/09/23 08: CHARGED DRAILON:	tr DEVICE: Paystation 4 69 PAID: 10/08/23 05:07P
TERM: PAID: \$24 V.A.T. 13% : CREDIT CARD	e24.24
DO NOT	HAVE A NICE DAY!

EGI rebasing

	Yonge Eglinton Centre AUTOMATED PARKING SYSTEM
	RECEIPT
	CARYonge & Eglinton Ctr DEVICE: Paystation 4 SHORT TERM 075571 PAID: 09/08/23 04:53P
	ENTRY: 09/08/23 08:34A EXIT: 09/08/23 04:53P PARKING DURATION: 000 08:19 CHARGED DURATION: 000 08:19 TERM: 09/08/23 04:53P
A WORLD	PAID: \$24.00 NET \$21.24 V.A.T. 13% : \$2.76
	CREDIT CARD \$24.00
	DO NOT ALLOW EXIT
	EGT rebasing



April 29, 2024

**VIA RESS** 

Ms. Nancy Marconi Registrar **ONTARIO ENERGY BOARD** P.O. Box 2319, 27<sup>th</sup> Floor 2300 Yonge Street Toronto, Ontario M4P 1E4

Dear Ms. Marconi:

#### Ian A. Mondrow Direct 416-369-4670 ian.mondrow@gowlingwlg.com

Assistant: Cathy Galler Direct: 416-369-4570 cathy.galler@gowlingwlg.com

## Re: EB-2022-0200 – Enbridge Gas Inc. (EGI) Application for 2024 Cost of Service Rates.

## Industrial Gas Users Association (IGUA) Phase 1 Final Cost Claim.

This letter is submitted along with IGUA's Final Cost Claim for Phase 1 of the captioned proceeding (Phase 1 Claim). As provided for in Procedural Order No. 8, IGUA's Phase 1 Claim includes all time and associated costs for Phase 1, including the time and associated costs that were detailed in IGUA's interim cost claim filed on July 12<sup>th</sup>, 2023 (Interim Claim).

IGUA was a very active intervenor in Phase 1 of this case, though remained focussed throughout on the primary topics identified in its January 16<sup>th</sup>, 2023 Proposal to File Expert Evidence letter (Expert Proposal Letter). In co-ordination with other customer-focussed intervenors, IGUA generally concentrated its resources and participation on the topics of;

- 1. energy transition driven risk;
- 2. equity thickness; and
- 3. depreciation (including net salvage).

As also identified in the Expert Proposal Letter, until resolved (through deferral) as part of the settlement process, IGUA focussed significant effort on the rate harmonization/cost allocation and rate design proposal advanced by EGI (and anticipates continuing this focus during Phase 3 of this proceeding).

In most other aspects of this proceeding to date, IGUA consulted with, and generally deferred to, the work of other intervenors. In this respect we note in particular our reliance on SEC's work in several areas, including rate base and capital spending issues, the overhead capitalization topic, deferral and variance account issues (including specifically pre-2017 Union pension amounts), and the issue of proceeds from disposition of property.

**T** +1 416 862 7525 **F** +1 416 862 7661 **gowlingwlg.com** 



Focussed on its identified topics of particular interest, IGUA actively participated in all aspects of this case, including the settlement process. It is IGUA's hope that its participation herein assisted the Hearing Panel in its conduct and consideration of Phase 1 of EGI's application.

IGUA's total claim for fees (legal and expert) is \$623,446 (before tax). In reviewing this total we found the following breakdown to be useful and validating context:

Category/Expert	Hours	Fees	% of Total Fees
Legal	952.5	\$311,312	49.9%
Depreciation/Emrydia	386.2	\$127,446	20.4%
Energy Transition/Synapse	245.75	\$76,448	12.3%
Equity Thickness/Cleary	208	\$68,640	11.0%
Cost Allocation and Rate Design/Knecht	120	\$39,600	6.4%
TOTALS	1912.45	\$623,446	100%

We also considered the expert related expenditures forecast in our January 16<sup>th</sup>, 2023 Expert Proposal Letter in comparison to actual expert expenditures. At the time of the proposal we estimated ~\$300,000 for the three experts whose evidence IGUA sponsored, inclusive of incremental legal time in respect of the preparation and presentation of that expert evidence. The actual total time and associated costs being claimed for these three experts (Emrydia, Synapse and Cleary) is \$272,533 (pre-tax), and the associated legal time captured in our docket categorizations is \$51,843, for a total expert and associated legal time of \$324,377, a variance from our initial high level forecast of just over 8%, which we submit is consistent with the approximate nature of our initial high level forecast.

Further, as noted in our Expert Proposal Letter, IGUA's actual cost responsibility for sponsoring this evidence was significantly more than the cost eligible component determined by the application of the OEB's prescribed cost award tariff. IGUA and its members will absorb a net cost associated with its expert evidence sponsorship of in excess of the \$100,000 figure mentioned in the Expert Proposal Letter, plus additional actual legal costs which exceed those being claimed herewith.

IGUA's cost eligible expenditures (and that of other intervenors) should also be considered in light of an as filed revenue deficiency claim over the proposed 5 year rate plan period of well in excess of \$1.2 billion. IGUA's legal and expert fees claim equals 0.052% (just over 5 hundredths of a percent) of this as filed revenue deficiency. While we do not have information, for comparison purposes, on EGI's legal and expert costs, we expect that such costs exceed the costs summarized above by orders of magnitude, and point out that all such costs will be paid for by all of EGI's customers, including IGUA's members.

In the submitted Phase 1 Claim supporting documentation we have endeavoured to categorize our docketed activities in accord with the OEB's updated classification categories. In this respect we note as follows:

• A number of supporting time entries that were earlier included in IGUA's interim cost claim have been reclassified using the OEB's updated activity classification categories.



- With the elimination of the separate client reporting category, time reporting to our client and taking instructions has been included in alternative classifications, including:
  - Technical Conference follow-up (for example the writer's docket dated June 18, 2022).
  - Preparation of Intervenor Evidence (for example the writer's dockets dated August 1<sup>st</sup>, September 21<sup>st</sup>, 22<sup>nd</sup> and 28<sup>th</sup> and November 1<sup>st</sup>, 2022).
- With the elimination of the separate communication with other parties category, time spent communicating with other parties regarding the issues in the case has been included in alternative classifications including:
  - Reading and researching the application and evidence (for example the writer's September 27<sup>th</sup> and 28<sup>th</sup>, 2022 dockets).
  - Preparation of intervenor evidence (including several of the writer's docket entries in December, 2022 and January, 2023).
- We have included the writer's time reviewing parties' correspondence in the Review Procedural Documents subcategory under the Procedural category (for example docket entries dated June 21<sup>st</sup>, 22<sup>nd</sup> and 23<sup>rd</sup>, 2023).

Yours truly,

nondrow

Ian A. Mondrow

- c: S. Rahbar (IGUA)
  - V. Innis (EGI)
  - D. Stevens (Aird & Berlis LLP)
  - D. O'Leary (Aird & Berlis LLP)
  - K. Viraney (OEB Staff)

62133331\1

# **Cathy Galler**

CASE EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.

Galler, Cathy ; +1 (416) 369-4570

FILING PARTICIPANT

**COST CLAIM** EB-2022-0200 : 1 : Cathy Galler

NEW

PARTICIPANT

INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com

PARTICIPANT F. NAME

NON-FILING

PARTICIPANT CLAIM STATUS Submitted

NON-FILING PARTICIPANT L. NAME

cathy.galler@gowlingwlg.com	No		
SERVICE PROVIDER TYPE* Articling Student/Paralegal	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE*	HOURLY RATE 100
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Required	LAST CV DATE	OVERRIDE HOURLY RATE No
HST NUMBER 89659 3323 RT0001	<b>HEARINGS</b> Yes	CONSULTATIONS No	DISBURSEMENTS No

## **HEARINGS**

Hearings Hours 6.90	Hearings Subtotal (\$) 690.00		Hearings Total 89.70	Tax (\$)		<b>js Total (\$)</b> 79.70
<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY Read and Research Application an Evidence	nd	100		13.00		
Preparation of Interrogatories	0.30	100	30.00	13.00	3.90	33.90
Review Interrogatory Responses		100		13.00		
Technical Conference Preparation		100		13.00		
Technical Conference Attendance		100		13.00		
Technical Conference Follow-up		100		13.00		
Subtotal of DISCOVERY	0.30		30.00		3.90	33.90
PROCEDURAL Preparation of Issues List Submiss	sion	100		13.00		
Attendance at Issues List Confere	nce	100		13.00		
Preparation for a Confidentiality R	equest	100		13.00		
Prepare Submissions on Confider	tiality	100		13.00		
Preparation of Motion(s) Materials		100		13.00		
Prepare Submissions on the Motio	on(s)	100		13.00		
Attendance at Hearing on Motion	s)	100		13.00		
Review Procedural Documents		100		13.00		

CC\_Participant\_Combined.rpt - last Update 20230601

<u>Name</u>		<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	Sub Total	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
Subtotal of PROCEDURAL	Subtotal of PROCEDURAL			0.00		0.00	0.00
INTERVENOR EVIDENCE Preparation of Intervenor Evi	idence	1.00	100	100.00	13.00	13.00	113.00
Interrogatory Responses			100		13.00		
Preparation of Witness(es) fo at Hearing <b>Subtotal of INTERVENOR E</b>		1.00	100	100.00	13.00	13.00	113.00
SETTLEMENT CONFERENCE							
Preparation for Settlement C	onference		100		13.00		
Attendance at Settlement Co	onference		100		13.00		
Preparation of Settlement Pr	oposal		100		13.00		
Attendance at Presentation t	o Panel		100		13.00		
Subtotal of SETTLEMENT CONFERENCE		0.00		0.00		0.00	0.00
WRITTEN ARGUMENT Written Submissions		0.60	100	60.00	13.00	7.80	67.80
Subtotal of WRITTEN ARGU	JMENT	0.60		60.00		7.80	67.80
ORAL ARGUMENT Preparation for Oral Hearing			100		13.00		
Attendance at Oral Hearing			100		13.00		
Oral Submissions			100		13.00		
Attendance at Oral Submissi	ons		100		13.00		
Subtotal of ORAL ARGUME	NT	0.00		0.00		0.00	0.00
DECISION							
Review Decision			100		13.00		
Review Rate/Accounting Orc	ler		100		13.00		
Prepare Submission on Rate	e Order		100		13.00		
Subtotal of DECISION		0.00		0.00		0.00	0.00
OTHER Other Attendance (e.g., Inter Conferences)	venor	5.00	100	500.00	13.00	65.00	565.00
Subtotal of OTHER		5.00		500.00		65.00	565.00
TOTAL SERVICE PROVIDER FEES Total Service Provider Fees		6.90		690.00		89.70	779.70

## Attachments

Attachment

IGUA\_EB-2022-0200\_Final CostClaim\_Galler\_TimeDockets\_20240429.p df Document Type Time Docket Import Message

## Hearings, Consultations, Disbursements Attachments

## Attachment

Document Type Time Docket <u>Claim Type</u> Hearings Import Message

IGUA\_EB-2022-0200\_Final CostClaim\_Galler\_TimeDockets\_20240429. pdf t



December 31, 2022 INVOICE: 19990224

## **Industrial Gas Users Association** Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
IEP	2022-12-01	2.10	Ian Mondrow	Intervenor meeting to continue discussion of issues and potential experts;
IEP	2022-12-01	0.60	Ian Mondrow	Discussion with S. Rahbar regarding IGUA issues/potential experts and work plan;
SUB	2022-12-02	0.10	Ian Mondrow	Review and finalize intervention letter;
SUB	2022-12-05	0.20	Cathy Galler	Formatting and filing intervention request letter;
OTH-ATT	2022-12-05	0.40	Ian Mondrow	Review intervenor correspondence and consolidated working issues list incorporating additional topics;
RAE	2022-12-06	0.50	Ian Mondrow	Continue review of pre-filed material;
RAE	2022-12-08	2.80	Ian Mondrow	Continue review of pre-filed material;
OTH-ATT	2022-12-08	1.00	Ian Mondrow	Interim note to IGUA on EGI evidence regarding energy transition business risk and potential impact on expert evidence under consideration' discussion with S. Rahbar regarding experts and other application issues;
IEP	2022-12-09	0.10	Ian Mondrow	Correspondence with potential expert regarding materials to review;
RAE	2022-12-09	1.00	Ian Mondrow	Continue review of pre-filed materials;
RAE	2022-12-12	2.30	Ian Mondrow	Continue review of pre-filed materials;
RAE	2022-12-13	0.70	Ian Mondrow	Continue review of pre-filed material;
IEP	2022-12-13	0.10	Ian Mondrow	Correspondence with S. Rahbar regarding package from pre-filed material for expert input;
IEP <u>RAE-0.2</u>	2022-12-14	2.20	lan Mondrow	Review correspondence from external advisors and assemble information packages for them; discussion with S. Rahbar regarding timing and next steps on application issues definition and summary report for planning; review reference materials regarding previous equity thickness consideration for EGI;
RAE	2022-12-15	2.40	Ian Mondrow	Continue review of pre-filed materials;
IEP	2022-12-15	1.10	Ian Mondrow	Discussion with potential external advisor;
OTH-ATT	2022-12-16	1.30	Ian Mondrow	Call with intervenor representatives regarding various issues/expertise/co-ordination;
RAE	2022-12-16	1.50	Ian Mondrow	Continue review of pre-filed materials; review Procedural Order No. 1;
OTH-ATT	2022-12-16	0.30	Ian Mondrow	Interim update to IGUA regarding Procedural Order, dates for expert proposals and main drivers of revenue deficiency in 2024;

Interest at the rate of 2.8% per annum will be charged on all amounts not paid within 30 days of invoice date Errors and omissions excluded



February 17, 2023 INVOICE: 20005427

## **Industrial Gas Users Association** Our Matter: T1029927 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
RAE	2023-01-08	2.10	Ian Mondrow	Continue review of pre-filed materials;
ILP	2023-01-08	0.50	lan Mondrow	Review draft Issues List comments circulated among intervenors in preparation for Issues Conference;
AIC	2023-01-09	6.40	Ian Mondrow	Attend Issues Conference;
IEP	2023-01-09	0.50	lan Mondrow	Review correspondence with IGUA and potential experts regarding issues and possible work scopes;
RAE	2023-01-10	0.50	Ian Mondrow	Continue review of pre-filed materials;
ILP	2023-01-10	0.10	lan Mondrow	Correspondence among parties further to Issues List resolution;
IEP	2023-01-10	2.70	lan Mondrow	Conferences with S. Rahbar and potential experts regarding work scopes and workplan and follow-up correspondence;
ILP	2023-01-10	0.50	Ian Mondrow	Review and comment on revised draft Issues List;
<u>IEP-1.0</u> SUB-4.0	2023-01-11	5.00	Ian Mondrow	Call with IGUA and potential expert; follow-up discussion with IGUA regarding all potential experts and how to balance/determine proposal to advance to OEB for approval; consider and draft IGUA expert evidence sponsorship proposal and circulate to client and co-ordinating intervenors for review and comment; review OEB Staff letter regarding extension to procure expert proposals and consider and first draft of responding letter and transmission to client for review and consideration;
RAE	2023-01-11	0.60	Ian Mondrow	Continue review of pre-filed materials;
RAE	2023-01-12	0.70	Ian Mondrow	Continue review of pre-filed materials;
IEP	2023-01-12	6.70	Ian Mondrow	Continue work on expert proposals, including detailed review with S. Rahbar regarding individual expert discussions and work scopes;
SUB	2023-01-13	5.10	Ian Mondrow	Continue work on expert proposal submission and conference with S. Rahbar and N. Sebaa to discuss and finalize; develop IGUA/expert work plan;
IEP	2023-01-13	0.50	Ian Mondrow	Review revised draft Issues List and draft transmittal letter and comments from Issues Conference participants; review OEB response to OEB Staff letter regarding expert retainer status and dates and update note to IGUA;
IEP	2023-01-14	0.30	lan Mondrow	Review J.C. Shepherd letter regarding support for proposed expert witnesses and provide note of clarification regarding scope for proposed IGUA evidence;
SUB	2023-01-16	0.40	Cathy Galler	Formatting and filing Proposal to File Expert Evidence and

Terms: payment due within 30 days of invoice date

Interest at the rate of 4.0% per annum will be charged on all amounts not paid within 30 days of invoice date Errors and omissions excluded



## February 17, 2023 INVOICE: 20005427

				Comment on Issues List;
SUB-2.5 IEP-0.7	2023-01-16	3.20	Ian Mondrow	Review and finalize work on expert evidence proposal, including workplan and budgets; review submissions of other parties; update to experts with workplan;
ILP	2023-01-16	1.20	Ian Mondrow	Review OEB Staff submission on Issues List and draft comment for filing; review issues submissions from others;
IEP	2023-01-17	3.60	Ian Mondrow	Working with IGUA on final expert retainer arrangements;
ILP	2023-01-17	0.10	Ian Mondrow	Review balance of Issues submissions filed;
OTH-ATT	2023-01-17	1.50	Ian Mondrow	Briefing IGUA Caucus regarding status and Issues identified;
RAE	2023-01-19	0.40	Ian Mondrow	Continue review of pre-filed materials;
IEP	2023-01-19	1.00	Ian Mondrow	Further correspondence/discussions with experts to finalize detailed engagement terms;
IEP	2023-01-20	0.30	Ian Mondrow	Further correspondence to resolve terms of expert retainers;
IEP	2023-01-20	0.60	Ian Mondrow	Review OEB Staff letter regarding progress on proposed expert retainers and update to client and IGUA's proposed experts;
RAE	2023-01-23	2.80	Ian Mondrow	Continue review of pre-filed materials;
IEP	2023-01-24	1.30	Ian Mondrow	Work with IGUA on finalizing expert retainers;
RAE	2023-01-24	2.20	Ian Mondrow	Continue review of pre-filed materials;
IRP	2023-01-24	1.10	Ian Mondrow	Consideration of, correspondence with other parties regarding PDO "double payment" issue and formulating interrogatory approach to the issue;
OTH-ATT	2023-01-24	0.40	Ian Mondrow	Client update for report to members;
RAE	2023-01-25	1.60	Ian Mondrow	Continue review of pre-filed materials;
OTH-ATT	2023-01-25	0.20	Ian Mondrow	Intervenor group e-mail regarding rate harmonization proposals;
IEP	2023-01-25	0.10	Ian Mondrow	Further communication internally regarding expert work plans;
OTH-ATT	2023-01-26	0.70	Ian Mondrow	Further intervenor correspondence regarding rate harmonization proposal; notes to IGUA cost allocation advisor regarding rate harmonization discussion and further information on Panhandle/St. Clair allocation issue;
RAE	2023-01-26	1.00	Ian Mondrow	Continue review of pre-filed material;
RAE	2023-01-27	1.10	Ian Mondrow	Continue review of materials;
IEP	2023-01-27	0.60	Ian Mondrow	Update client and experts regarding decision on evidence proposals and note interrogatory delivery date in workplan;
RAE	2023-01-27	0.50	Ian Mondrow	Review P.O. No. 2 regarding issues and expert evidence proposal determinations;
RAE	2023-01-28	3.10	Ian Mondrow	Continue review of pre-filed material;
RAE	2023-01-30	3.40	Ian Mondrow	Continue review of pre-filed materials;



## May 31, 2023 INVOICE: 20064841

IEP	2023-04-18	4.80	lan Mondrow	Continued detailed review and comment on expert evidence;
TCF	2023-04-18	0.50	Ian Mondrow	Review EGI updated Technical Conference responses for IGUA cost allocation matters; note to B. Knecht regarding status and next steps on cost allocation and rate design work;
OTH-ATT	2023-04-19	0.80	Ian Mondrow	Update to Ontario Caucus;
IEP	2023-04-19	0.20	Ian Mondrow	Review additional revisions to D. Madsen evidence;
IEP	2023-04-20	1.90	Ian Mondrow	Final review of S. Cleary evidence as formatted for filing and filing directions provided; correspondence with other experts regarding work status/finalizing evidence;
OTH-ATT	2023-04-20	1.40	lan Mondrow	Review and consider note from intervenor regarding load balancing cost allocation, review associated evidence, and forward to B. Knecht for consideration; review IGUA approach to calculation of member rate impacts; call with A. Vachon (IGUA) to review approach to rate impact calculations;
IEP	2023-04-21	1.00	Cathy Galler	Formatting and filing expert evidence;
IEP	2023-04-21	1.90	lan Mondrow	Review and final instructions for compilation and filing of IGUA sponsored evidence; drafting evidence transmittal letter;
RAE	2023-04-21	2.00	Ian Mondrow	Review EGI gas supply plan update regarding relevance to IGUA members and rebasing application topics; review EGI updates and parties' evidence filed;
OTH-ATT	2023-04-21	1.00	Ian Mondrow	Call with IGUA Ontario Caucus chairs (outgoing and incoming) regarding next update to Caucus and Board of Directors;
RAE	2023-04-21	0.60	Ian Mondrow	Review Guidehouse update and related EGI filing; note to A. Hopkins regarding next steps in finalizing Synapse evidence;
RAE	2023-04-22	2.80	Ian Mondrow	Review LEI evidence filed by OEB Staff and note to IGUA cost of capital experts with observations and request for input;
RAE	2023-04-23	1.20	Ian Mondrow	Review AGA/CGA study report referred to in LEI evidence;
RAE	2023-04-23	0.60	Ian Mondrow	Reading OPI and FRPO evidence;
RAE-1.0 IRP-1.4	2023-04-24	2.40	Ian Mondrow	Continue review of intervenor evidence filed and related correspondence with IGUA experts; drafting proposed IRs on intervenor/Staff evidence;
OTH-ATT	2023-04-24	0.50	Ian Mondrow	Intervenor correspondence regarding various issues;
RAE	2023-04-25	0.80	Ian Mondrow	Review ED and GEC Technical Conference (P2NZ Update) filings and related materials and update note to A. Hopkins regarding energy transition discussions anticipated;
IEP	2023-04-25	1.20	lan Mondrow	Review and revise experts work plan and update note to experts and client group regarding upcoming steps and schedule;

Terms: payment due within 30 days of invoice date Interest at the rate of 4.8% per annum will be charged on all amounts not paid within 30 days of invoice date Errors and omissions excluded



## May 31, 2023 INVOICE: 20064841

IRP	2023-04-25	0.80	Ian Mondrow	Review and revise IRs for LEI based on S. Cleary input; correspondence with D. Madsen regarding potential IRs for Intergroup;
IEP	2023-04-26	0.30	Ian Mondrow	Correspondence with experts regarding work plan;
OTH-ATT	2023-04-26	0.20	Ian Mondrow	Update note to IGUA;
RAE	2023-04-26	2.20	Ian Mondrow	Review Intergroup depreciation evidence;
TCP	2023-04-26	0.30	Ian Mondrow	Review correspondence regarding scope of Technical Conference (and ED materials filed);
IRP	2023-04-26	0.60	Ian Mondrow	Review and supplement IRs for LEI based on input from IGUA experts;
RAE	2023-04-26	0.60	Ian Mondrow	Continue review of Intergroup depreciation evidence and question to D. Madsen; correspondence with K. Elson (ED) regarding implications of further Guidehouse report discovery;
IRP	2023-04-27	0.30	Cathy Galler	Formatting and filing IRs to LEI;
RAE	2023-04-27	3.10	Ian Mondrow	Complete review of Intergroup evidence;
TCA	2023-04-27	1.30	Ian Mondrow	Attend Technical conference continuation;
IRP	2023-04-27	0.30	Ian Mondrow	Final review and revision to IRs for LEI;
TCA	2023-04-28	0.40	Ian Mondrow	Technical Conference: Review transcripts in lieu of attendance;
IE-IRR	2023-04-28	0.10	Ian Mondrow	Review IRs received on IGUA evidence and distribute to experts for consideration and response;
IRP	2023-04-28	1.40	Ian Mondrow	Review comments from D. Madsen and draft IRs for Intergroup;
IE-IRR	2023-04-28	1.00	Ian Mondrow	Continue review of IRs received and distribute to experts for response;
TCA	2023-04-28	0.40	Ian Mondrow	Technical Conference: Continue review of transcript in lieu of attendance;
OTH-ATT	2023-04-28	0.20	Ian Mondrow	Correspondence with K. Elson regarding issues of common interest;
IE-IRR	2023-04-29	1.70	lan Mondrow	Review IRs received and dispatch to experts for drafting responses as appropriate;

## **Total Fees for Professional Services**



Req'd By: ParkK

**Billing Professional** 

1760 Mondrow, lan

Matter T1029927

Client 190123 Industrial Gas Users Association 851 Industrial Avenue P.O. Box 30 Ottawa ON K1G 4L3 Report: G\_Bill1.rpt 04/29/2024 - 9:51 AM Page: 1

27 EGI 2024 Rebasing and IRM Application (EB-2022-0200) (IGUA22-ON-EGI-8)

## **Unbilled Time**

Contact: Rahbar, Dr. Shahrzad

**Casual Prebill** 

Date	Actual Tmkpr	ToBill Hours	Work Description
04/19/2024	1760	1.00	Review interim rate order;
04/25/2024	8440 OTH-AT	T 5.00	Compiling final cost claim;
04/25/2024	1760	3.20	Work on preparation of cost claim;
04/26/2024	1760	0.20	Continue work on Phase 1 cost claim;
04/28/2024	1760	3.30	Review final draft cost claim and provide questions/directions; draft transmittal letter;
		12.70	

**Timekeeper Summary** 

Timekeeper Name	TKeeper Code	Hours	Last Time Entry
Galler, Cathy	8440	5.00	04/25/2024
Mondrow, Ian	1760	7.70	04/28/2024
	Totals	12.70	

# Sonia Knowlton

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Sonia	NON-FILING PARTICIPANT L. NAME Knowlton
SERVICE PROVIDER TYPE* Articling Student/Paralegal	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE*	HOURLY RATE 100
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Required	LAST CV DATE	OVERRIDE HOURLY RATE No
HST NUMBER 89659 3323 RT0001	<b>HEARINGS</b> Yes	CONSULTATIONS No	DISBURSEMENTS No

# HEARINGS

Hearings Hours 3.00	Hearings Subtotal (\$) 300.00		Hearings Total 39.00	Tax (\$)	-	<b>s Total (\$)</b> 39.00
<u>Name</u>	Hours	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY Read and Research Application an Evidence	nd	100		13.00		
Preparation of Interrogatories		100		13.00		
Review Interrogatory Responses		100		13.00		
Technical Conference Preparation	I	100		13.00		
Technical Conference Attendance		100		13.00		
Technical Conference Follow-up		100		13.00		
Subtotal of DISCOVERY	0.00		0.00		0.00	0.00
PROCEDURAL Preparation of Issues List Submis	sion	100		13.00		
Attendance at Issues List Confere	nce	100		13.00		
Preparation for a Confidentiality R	equest	100		13.00		
Prepare Submissions on Confider	ntiality	100		13.00		
Preparation of Motion(s) Materials		100		13.00		
Prepare Submissions on the Motio	on(s)	100		13.00		
Attendance at Hearing on Motion(	s)	100		13.00		
Review Procedural Documents		100		13.00		
Technical Conference Follow-up Subtotal of DISCOVERY PROCEDURAL Preparation of Issues List Submiss Attendance at Issues List Confere Preparation for a Confidentiality R Prepare Submissions on Confider Prepare Submissions on the Motion Attendance at Hearing on Motion(	0.00 sion nce equest ntiality con(s)	100 100 100 100 100 100 100	0.00	13.00 13.00 13.00 13.00 13.00 13.00 13.00 13.00	0.00	0.00

CC\_Participant\_Combined.rpt - last Update 20230601

	Name	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
	Subtotal of PROCEDURAL	0.00		0.00		0.00	0.00
INTE	RVENOR EVIDENCE Preparation of Intervenor Evidence		100		13.00		
	Interrogatory Responses		100		13.00		
	Preparation of Witness(es) for Attendance at Hearing Subtotal of INTERVENOR EVIDENCE	0.00	100	0.00	13.00	0.00	0.00
SETT	<b>LEMENT CONFERENCE</b> Preparation for Settlement Conference		100		13.00		
	Attendance at Settlement Conference		100		13.00		
	Preparation of Settlement Proposal		100		13.00		
	Attendance at Presentation to Panel		100		13.00		
WRIT	Subtotal of SETTLEMENT CONFERENCE TEN ARGUMENT	0.00	100	0.00	40.00	0.00	0.00
			100		13.00		
004		0.00		0.00		0.00	0.00
URA	L ARGUMENT Preparation for Oral Hearing		100		13.00		
	Attendance at Oral Hearing		100		13.00		
	Oral Submissions		100		13.00		
	Attendance at Oral Submissions		100		13.00		
	Subtotal of ORAL ARGUMENT	0.00		0.00		0.00	0.00
DECI	SION Review Decision		100		13.00		
	Review Rate/Accounting Order		100		13.00		
	Prepare Submission on Rate Order		100		13.00		
	Subtotal of DECISION	0.00		0.00		0.00	0.00
OTHE	ER Other Attendance (e.g., Intervenor Conferences) Subtotal of OTHER	3.00 <b>3.00</b>	100	300.00 <b>300.00</b>	13.00	39.00 <b>39.00</b>	339.00 <b>339.00</b>
τοτα		5					
	Total Service Provider Fees	3.00		300.00		39.00	339.00

## Attachments

Attachment

IGUA\_EB-2022-0200\_Final CostClaim\_Knowlton\_TimeDockets\_2024042 9.pdf Document Type Time Docket Import Message

## Hearings, Consultations, Disbursements Attachments

## Attachment

Document Type

<u>Claim Type</u> Hearings Import Message

IGUA\_EB-2022-0200\_Final CostClaim\_Knowlton\_TimeDockets\_202404 29.pdf Time Docket



July 11, 2022 INVOICE: 19867421

Industrial Gas Users Association Our Matter: T1029927 EGI Rebasing and IRM Application (IGUA22-ON-EGI-8)

#### **PROFESSIONAL SERVICES**

	Date	Hours	⊺imekeeper	Description
OTH-ATT	2022-06-13	0.40	Ian Mondrow	Briefing S. Knowlton regarding attendance at EGI rebasing application briefing;
OTH-ATT	2022-06-15	1.00	Ian Mondrow	Review correspondence regarding Stakeholder Conference; briefing note to S. Knowlton regarding attendance and topics to listen for;
OTH-ATT	2022-06-16	2.00	Sonia Knowlton	Attended and took minutes for EGI Stakeholder Conference on Rebasing Application;
OTH-ATT	2022-06-16	1.00	Sonia Knowlton	Prepared summary e-mail from EGI Stakeholder Meeting;
OTH-ATT	2022-06-18	0.90	Ian Mondrow	Review EGI materials from Stakeholder Conference and S. Knowlton notes and draft update for IGUA members;
OTH-ATT	2022-06-20	0.20	Ian Mondrow	Complete update note to IGUA;

#### **Total Fees for Professional Services**

#### SUMMARY OF FEES

TK Name		Hours
Knowlton, Sonia		3.00
Mondrow, lan		2.50
	Total	5.50

# **Chris Hummel**

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Chris	NON-FILING PARTICIPANT L. NAME Hummel
SERVICE PROVIDER TYPE* Legal Counsel	YEAR CALLED TO BAR* 2019	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 4	HOURLY RATE 170
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Required	LAST CV DATE	OVERRIDE HOURLY RATE No
HST NUMBER 89659 3323 RT0001	<b>HEARINGS</b> Yes	CONSULTATIONS No	DISBURSEMENTS No

# HEARINGS

Hearings Hours 4.60	Hearings Subtotal (\$) 782.00		Hearings Total T 101.66	āx (\$)	-	<b>s Total (\$)</b> 83.66
<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY Read and Research Application Evidence	on and	170		13.00		
Preparation of Interrogatories		170		13.00		
Review Interrogatory Respon	ses	170		13.00		
Technical Conference Prepar	ation	170		13.00		
Technical Conference Attenda	ance	170		13.00		
Technical Conference Follow-	up	170		13.00		
Subtotal of DISCOVERY	0.00		0.00		0.00	0.00
PROCEDURAL Preparation of Issues List Sul	omission	170		13.00		
Attendance at Issues List Cor	nference	170		13.00		
Preparation for a Confidential	ity Request	170		13.00		
Prepare Submissions on Con	fidentiality	170		13.00		
Preparation of Motion(s) Mate	erials	170		13.00		
Prepare Submissions on the I	Motion(s)	170		13.00		
Attendance at Hearing on Mo	tion(s)	170		13.00		
Review Procedural Documen	ts	170		13.00		

CC\_Participant\_Combined.rpt - last Update 20230601

<u>Name</u>		<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	Sub Total	<u>HST</u> Rate	HST	<u>Total</u>
Subtotal	of PROCEDURAL	0.00		0.00		0.00	0.00
INTERVENOR E Preparatio	VIDENCE on of Intervenor Evidence	4.60	170	782.00	13.00	101.66	883.66
Interrogat	ory Responses		170		13.00		
at Hearing			170		13.00		
	of INTERVENOR EVIDENCE	4.60		782.00		101.66	883.66
SETTLEMENT C Preparatio	CONFERENCE on for Settlement Conference		170		13.00		
Attendand	ce at Settlement Conference		170		13.00		
Preparatio	on of Settlement Proposal		170		13.00		
Attendand	ce at Presentation to Panel		170		13.00		
CONFER		0.00		0.00		0.00	0.00
WRITTEN ARGU Written St	JMEN I ubmissions		170		13.00		
Subtotal	of WRITTEN ARGUMENT	0.00		0.00		0.00	0.00
ORAL ARGUME Preparatio	I <b>NT</b> on for Oral Hearing		170		13.00		
Attendand	ce at Oral Hearing		170		13.00		
Oral Subr	nissions		170		13.00		
Attendand	ce at Oral Submissions		170		13.00		
Subtotal	of ORAL ARGUMENT	0.00		0.00		0.00	0.00
DECISION			470		10.00		
Review D			170		13.00		
	ate/Accounting Order		170		13.00		
	Submission on Rate Order		170		13.00		
	of DECISION	0.00		0.00		0.00	0.00
OTHER Other Atte Conference	endance (e.g., Intervenor ces)		170		13.00		
Subtotal	of OTHER	0.00		0.00		0.00	0.00
	E PROVIDER FEES vice Provider Fees	4.60		782.00		101.66	883.66

# Attachments

<u>Attachment</u>

IGUA\_EB-2022-0200\_Final CostClaim\_Hummel\_TimeDockets\_2024042 9.pdf Document Type Time Docket Import Message

# Hearings, Consultations, Disbursements Attachments

#### Attachment

Document Type

<u>Claim Type</u> Hearings Import Message

IGUA\_EB-2022-0200\_Final CostClaim\_Hummel\_TimeDockets\_202404 29.pdf Time Docket



### May 31, 2023 INVOICE: 20064841

RAE	2023-04-07	0.60	lan Mondrow	Review EGI/Guidehouse update filing;
IEP	2023-04-08	2.90	Ian Mondrow	Review S. Cleary draft evidence and provide comments;
TCA	2023-04-10	0.30	lan Mondrow	Review Technical Conference transcripts in lieu of attendance;
IEP	2023-04-10	1.10	lan Mondrow	Correspondence with experts to clarify cross-references in draft evidence and regarding evidence revision and finalization; correspondence with experts regarding potential revised schedule and response to OEB Staff;
OTH-ATT	2023-04-10	1.20	lan Mondrow	Review e-mail inquiries from members regarding rate changes, provide preliminary responses, and inquiry of B. Knecht for assistance in validating rate impacts;
RPD	2023-04-10	1.00	lan Mondrow	Review ED and SEC motions day letters and share with IGUA business risk experts;
IEP	2023-04-11	4.60	Christopher Hummel	Prepared and circulated Expert Form A for A. Hopkins, S. Cleary, and D. Madsen; researched history of OEB's equity thickness test and drafted analysis on rationale for I. Mondrow;
TCA	2023-04-11	0.40	Ian Mondrow	Continue review of Technical Conference transcripts in lieu of attendance;
OTH-ATT	2023-04-11	1.70	Ian Mondrow	Correspondence/discussions with parties regarding proposed updated schedule;
IEP	2023-04-11	0.50	Ian Mondrow	Update notes to client and experts on evolving rescheduling discussions and revision of expert work plan timing to finalize evidence and prepare for IRs;
IEP	2023-04-12	0.70	Ian Mondrow	Reviewing C. Hummel reporting note on cost of capital policy research and interm note to A. Hopkins with relevant OEB materials;
IEP	2023-04-12	1.50	lan Mondrow	Correspondence with experts and discussion with S. Rahbar regarding status of work and finalizing evidence;
RPD	2023-04-12	0.40	lan Mondrow	Review EGI response to motions day submissions and consider;
IEP	2023-04-13	0.30	Ian Mondrow	Review recent IGUA expert correspondence;
RAE	2023-04-13	0.50	Ian Mondrow	Review EGI filing updates;
IEP	2023-04-13	1.20	Ian Mondrow	Review Procedural Order No. 5 and revised experts work plan accordingly; circulate revised work plan with covering note highlighting next steps;
AHM	2023-04-14	1.00	Ian Mondrow	Review Motions Day transcript in lieu of attendance;
OTH-ATT	2023-04-14	0.70	lan Mondrow	Discussion with D.R. Quinn regarding T2 cost allocation issue;
IEP	2023-04-16	3.00	lan Mondrow	Full review and additional comment on S. Cleary draft evidence;
IEP	2023-04-17	2.80	Ian Mondrow	Final review of S. Cleary evidence changes and instructions for assembly; review D. Madsen revised draft evidence;

# **Robert Knecht**

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Robert	NON-FILING PARTICIPANT L. NAME Knecht
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 20	HOURLY RATE 330
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 25, 2024	OVERRIDE HOURLY RATE No
HST NUMBER 89659 3323 RT0001	<b>HEARINGS</b> Yes	CONSULTATIONS No	DISBURSEMENTS No

# HEARINGS

Hearings Hours 120.00	Hearings Subtotal (\$) 39,600.00		Hearings Total 5,148.00	Tax (\$)		<b>rrings Total (\$)</b> 44,748.00
<u>Name</u>	<u>Hours</u>	Hourly Rate	Sub Total	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY						
Read and Research Application a Evidence	ind 16.00	330	5,280.00	13.00	686.40	5,966.40
Preparation of Interrogatories	33.00	330	10,890.00	13.00	1,415.70	12,305.70
Review Interrogatory Responses	16.50	330	5,445.00	13.00	707.85	6,152.85
Technical Conference Preparation	n 5.50	330	1,815.00	13.00	235.95	2,050.95
Technical Conference Attendance	e 4.00	330	1,320.00	13.00	171.60	1,491.60
Technical Conference Follow-up	2.50	330	825.00	13.00	107.25	932.25
Subtotal of DISCOVERY	77.50		25,575.00		3,324.75	28,899.75
PROCEDURAL Preparation of Issues List Submis	ssion	330		13.00		
Attendance at Issues List Conference	ence	330		13.00		
Preparation for a Confidentiality F	Request	330		13.00		
Prepare Submissions on Confide	ntiality	330		13.00		
Preparation of Motion(s) Material	8	330		13.00		
Prepare Submissions on the Moti	on(s)	330		13.00		
Attendance at Hearing on Motion	(s)	330		13.00		
Review Procedural Documents		330		13.00		

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	<u>Name</u>	<u>Hours</u>	Hourly Rate	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Tota</u>
	Subtotal of PROCEDURAL	0.00		0.00		0.00	0.00
	VENOR EVIDENCE Preparation of Intervenor Evidence	42.50	330	14,025.00	13.00	1,823.25	15,848.25
	Interrogatory Responses		330		13.00		
	Preparation of Witness(es) for Attendance at Hearing Subtotal of INTERVENOR EVIDENCE	42.50	330	14,025.00	13.00	1,823.25	15,848.28
	EMENT CONFERENCE Preparation for Settlement Conference		330	·	13.00		
	Attendance at Settlement Conference		330		13.00		
	Preparation of Settlement Proposal		330		13.00		
	Attendance at Presentation to Panel		330		13.00		
	Subtotal of SETTLEMENT CONFERENCE EN ARGUMENT	0.00		0.00		0.00	0.00
	Written Submissions		330		13.00		
	Subtotal of WRITTEN ARGUMENT	0.00		0.00		0.00	0.00
	ARGUMENT Preparation for Oral Hearing		330		13.00		
	Attendance at Oral Hearing		330		13.00		
	Oral Submissions		330		13.00		
	Attendance at Oral Submissions		330		13.00		
	Subtotal of ORAL ARGUMENT	0.00		0.00		0.00	0.00
ECIS	ION Review Decision		330		13.00		
	Review Rate/Accounting Order		330		13.00		
	Prepare Submission on Rate Order		330		13.00		
	Subtotal of DECISION	0.00		0.00		0.00	0.00
	<b>R</b> Other Attendance (e.g., Intervenor Conferences)		330		13.00		
	Subtotal of OTHER	0.00		0.00		0.00	0.00
	SERVICE PROVIDER FEES Total Service Provider Fees	120.00		39,600.00		5,148.00	44,748.00

Attachment	Document Type
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Knecht_TimeDockets_20240429.	
pdf	
IGUA_EB-2022-0200_Final	CV
CostClaim_Knecht CV_20240429.pdf	

Import Message

# Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Knecht_TimeDockets_2024042			
9.pdf			
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Knecht CV_20240429.pdf			

#### Robert D. Knecht 5 Plymouth Road

Lexington, MA 02421

Invoice to:	Industrial Gas Users Association
Invoice Date:	11-Jul-23
Invoice Period:	January - June 2023
Client:	Industrial Gas Users Association
	Ontario Energy Board Docket No. EB-2022-0200: Enbridge Rebasing

**Retainer:** 

Retainer agreement between Robert D. Knecht and IGUA dated 10 January 2023, amended 28 March 2023

Date	Project	Hours	Category	Description of Work			
22-Jan-23	Enbridge Rebasing	2.0	1	Review cost allocation spreadsheets, identify key cost accounts for IGUA			
26-Jan-23	Enbridge Rebasing	4.0	1,2	Review filing, draft IRs, correspond with counsel re transmission assets			
27-Jan-23	Enbridge Rebasing	4.0	1,2	Review overall filing, draft IRs.			
28-Jan-23	Enbridge Rebasing	2.0	1,2	Review cost allocation filing, draft IRs.			
29-Jan-23	Enbridge Rebasing	4.0	1,2	Review cost allocation filing, draft IRs.			
30-Jan-23	Enbridge Rebasing	3.0	1,2	Review cost allocation filing/draft IRs.			
1-Feb-23	Enbridge Rebasing	4.0	1,2	Review rate design filing, draft IRs.			
2-Feb-23	Enbridge Rebasing	3.0	1,2	Review rate design filing, draft IRs.			
3-Feb-23	Enbridge Rebasing	4.0	1,2	Review rate design filing, draft IRs.			
4-Feb-23	Enbridge Rebasing	6.0	2	Draft cost allocation IRs.			
5-Feb-23	Enbridge Rebasing	6.0	2	Draft rate design IRs			
6-Feb-23	Enbridge Rebasing	4.0	2	Finalize rate design IRs; respond to Synapse inquiry			
7-Feb-23	Enbridge Rebasing	1.0	2	Respond to issues raised by IGUA.			
9-Feb-23	Enbridge Rebasing	2.0	2	Edit and finalize IRs to EGI, correspond with IGUA counsel			
9-Mar-23	Enbridge Rebasing	2.0	3	Begin review of IR responses.			
10-Mar-23	Enbridge Rebasing	3.0	3,7	Review/analyze IR responses, draft issues memo			
11-Mar-23	Enbridge Rebasing	6.0	3,7	Review/analyze IR responses, draft issues memo			
12-Mar-23	Enbridge Rebasing	4.0	3,7	Review/analyze IR responses; draft issues memo			
12 Mar 22	Enhvidae Dehesina	F O	2 7	Prep for and attend conference call; continuing review/analysis of IR responses and issues			
13-Mar-23	Enbridge Rebasing	5.0	3,7	memo			
15-Mar-23	Enbridge Rebasing	3.0	3,7	Review/analyze IR responses, ongoing work on issues memo.			
18-Mar-23	Enbridge Rebasing	4.0	3,7	Review/analyze IR responses, draft issues memo, Panhandle/St. Clair analysis			
19-Mar-23	Enbridge Rebasing	4.0	3,7	Review/analyze IR responses, ongoing work on issues memo, submit draft review to IGUA.			
20-Mar-23	Enbridge Rebasing	2.0	4	Prep for and attend call with IGUA counsel.			
25-Mar-23	Enbridge Rebasing	1.0	4	Correspond with counsel, edit and submit revised technical questions.			
26-Mar-23	Enbridge Rebasing	3.0	4,7	Review/edit issues memo; prepare alternative PH/SC allocation per IGUA request, consult			
27-Mar-23	Enhridge Behaving	1.0	47	with IGUA counsel.			
28-Mar-23	Enbridge Rebasing Enbridge Rebasing	1.0 1.0	4,7	Consult with IGUA counsel re substance and schedule.			
31-Mar-23	Enbridge Rebasing	4.0	4,7 5	Review/edit technical questions, forward to counsel. Prep for and attend technical session; correspond with IGUA/Counsel			
3-Apr-23	Enbridge Rebasing	3.0	6,7	Ongoing work on issues memo.			
4-Apr-23	Enbridge Rebasing	2.0	6,7	Prep for and attend expert call			
5-Apr-23	Enbridge Rebasing	1.0	7	Review IGUA analysis; ongoing work on issues memo.			
J-Api-23	LIDINGE REDASING	1.0	/	Review IGUA analysis, ongoing work on issues memo. Review IGUA rate calculations, consult with IGUA, evaluate T2 rate impacts and contrast to			
6-Apr-23	Enbridge Rebasing	5.0	7	EGI sample bill analysis, submit review to IGUA			
12-Apr-23	Enbridge Rebasing	4.0	7	Ongoing analysis and drafting of issues memo; correspondence with IGUA and counsel.			
13-Apr-23	Enbridge Rebasing	2.0	7	Draft issues review.			
15-Apr-23	Enbridge Rebasing	4.0	7	Draft issues review.			
16-Apr-23	Enbridge Rebasing	3.0	7	Draft Issues review.			
20-Apr-23	Enbridge Rebasing	2.0	7	Respond to IGUA demand for information.			
21-Apr-23	Enbridge Rebasing	1.0	7	Respond to IGUA counsel question.			
25-Apr-23	Enbridge Rebasing	2.0 1.0	7	Issues memo; begin review of PDCI issue at IGUA request.			
26-Apr-23	Enbridge Rebasing	3.0	7	Research and respond in detail to questions from IGUA re rate impacts.			
30-Apr-23	Enbridge Rebasing	4.0	7	Review details of upstream transportation and load balancing cost allocation and			
55 mp. 25	Energe needenig			harmonization, respond in detail to question from IGUA.			
2-May-23	Enbridge Rebasing	4.0	7	Review and evaluate updated mapping sheet forwarded by IGUA, consult with IGUA counsel.			
3-May-23	Enbridge-Rebasing	4.0	7	Review and evaluate updated mapping sheet forwarded by IGUA, consult with IGUA counsel.			
4-May-23	Enbridge Rebasing	5.0	7	Draft issues review, prepare exhibits.			
	• •						
5-May-23	Enbridge Rebasing	3.0	7	Edit and finalize first draft of report, submit to IGUA.			

#### **Robert D. Knecht**

#### 5 Plymouth Road Lexington, MA 02421

Invoice to: Invoice Date:	Industrial Gas Users Association 11-Jul-23
Invoice Period:	January - June 2023
Client:	Industrial Gas Users Association Ontario Energy Board Docket No. EB-2022-0200: Enbridge Rebasing
Retainer:	Retainer agreement between Robert D. Knecht and IGUA dated 10 January 2023, amended 28 March 2023

Date	Project	Hours	Category	Description of Work
20-May-23	Enbridge-Rebasing	3.0	8	Review updated filing; begin comparative analysis of results; correspond with IGUA.
26-May-23	Enbridge Rebasing	3.0	8	Prep for and attend call with IGUA, follow up notes on Panhandle/St Clair.
27-May-23	Enbridge Rebasing	1.0	8	Prepare detailed writeup of alternative Panhandle/St. Clair allocation; submit to IGUA
28-May-23	Enbridge-Rebasing	1.0	8	counsel. Consult with counsel.
	Total Hours	152.0		
	Adjust Hours to Contract:	120.0		

<b>Adjust Hours to Contract:</b>	120.0	
Hourly Rate (CAD)		
Professional Fees (CAD):		
Travel Disbursements:	\$0.00	
Total (CAD)		

Estimated Hours by Category	Hours
(1) Review Application and Evidence	16.0
(2) Preparation of Interrogatories	33.0
(3) Review Interrogatory Responses	16.5
(4) Technical Conference Prep	5.5
(5) Technical Conference Attendance	4.0
(6) Technical Conference Follow Up	2.5
(7) Preparation of Issues Memo*	66.5 42.5
(8) Settlement Preparation	8.0
	<u>152.0</u> 120

\* Preparation of issues memo is probably comparable to preparation of evidence

CONFIDENTIAL

### **Overview**

Mr. Knecht has more than 40 years of economic consulting experience, focusing on the energy, utility, metals and mining industries. For the past 30 years, Mr. Knecht's practice has primarily involved providing analysis, consulting support and expert testimony in regulatory matters, primarily involving electric and natural gas utilities. Mr. Knecht's work includes many aspects of utility regulation, including industry restructuring, cost unbundling, cost allocation, rate design, rate of return, customer contributions, energy efficiency programs, smart metering programs, treatment of stranded costs and utility revenue requirement issues. He has consulted to state advocacy agencies, industrial customer groups, law firms, regulatory agencies, government agencies and utilities, in both the United States and Canada. He has provided expert testimony in more than one hundred separate utility proceedings.

In addition to his work with regulated utilities, Mr. Knecht has consulted on international industry restructuring studies, prepared economic policy analyses, participated in a variety of litigation matters involving economic damages, and developed energy industry forecasting models.

Mr. Knecht served as a Principal of IEc for 33 years, and as its Treasurer for 15 years. He is currently an independent consultant who remains affiliated with IEc.

#### **Education**

Master of Science, Management (Applied Economics and Finance), Sloan School of Management, M.I.T.

Bachelor of Science, Economics, Massachusetts Institute of Technology

#### **Select Project Experience**

For more than 25 years, Mr. Knecht has provided consulting services, analysis and expert testimony before the Pennsylvania Public Utility Commission on all manner of regulatory proceedings to the **PENNSYLVANIA OFFICE OF SMALL BUSINESS ADVOCATE**. In addition to expert testimony, Mr. Knecht has assisted OSBA with the development of public policy positions, litigation strategy, and longer term strategy.

For the **ATTORNEY GENERAL OF THE STATE OF RHODE ISLAND**, Mr. Knecht provided consulting and expert witness services in an acquisition proceeding involving PPL Corporation's proposed acquisition of Narragansett Electric from National Grid. Mr. Knecht's testimony addressed financial, economic, environmental, tax, operating cost and rate implications.

For the **New BRUNSWICK PUBLIC INTERVENER**, Mr. Knecht provides consulting and expert witness services in a variety of regulatory proceeding before the New Brunswick Energy and Utilities Board involving New Brunswick Power, Enbridge Gas New Brunswick, and petroleum products. Mr. Knecht has addressed issues of load forecasting, costs forecasting, cost of capital, allocation of corporate overhead costs, utility cost allocation, revenue allocation, market-based rate design, cost-based rate design, and rate decoupling.

For L'ASSOCIATION QUÉBÉCOISE DES CONSOMMATEURS INDUSTRIELS D'ÉLECTRICITÉ (AQCIE) AND LE CONSEIL DE L'INDUSTRIE FORESTIÈRE DU QUÉBEC (CIFQ), Mr. Knecht provided analysis, consulting advice and expert testimony before the Régie de l'énergie in regulatory matters involving Hydro Québec Distribution and TransÉnergie. This work includes revenue requirement, power purchasing, cost allocation, treatment of cross-subsidies, and rate design.

For the **INDEPENDENT POWER PRODUCERS SOCIETY OF ALBERTA**, Mr. Knecht provided consulting advice, analysis and expert testimony before the Alberta Energy and Utilities Board in a series of proceedings involving the restructuring of the electric utility industry, the unbundling of rates, and the development of transmission rates.

Yes

# **Dustin Madsen**

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Dustin	<b>NON-FILING PARTICIPANT L. NAME</b> Madsen
SERVICE PROVIDER TYPE* Consultant	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 20	HOURLY RATE 330
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 25, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

Yes

# HEARINGS

89659 3323 RT0001

Hea	rings Hours 386.20	Hearings Subtotal (\$) 127,446.00		Hearings Total 16,568.00	Tax (\$)		<b>rrings Total (\$)</b> 44,014.00
	<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCO	VERY						
	Read and Research Application at Evidence	nd 28.20	330	9,306.00	13.00	1,209.78	10,515.78
	Preparation of Interrogatories	16.50	330	5,445.00	13.00	707.85	6,152.85
	Review Interrogatory Responses	42.20	330	13,926.00	13.00	1,810.38	15,736.38
	Technical Conference Preparation	2.30	330	759.00	13.00	98.67	857.67
	Technical Conference Attendance	0.65	330	214.50	13.00	27.89	242.39
	Technical Conference Follow-up		330		13.00		
	Subtotal of DISCOVERY	89.85		29,650.50		3,854.57	33,505.07
PROC	EDURAL Preparation of Issues List Submis	sion	330		13.00		
	Attendance at Issues List Confere	nce	330		13.00		
	Preparation for a Confidentiality R	equest	330		13.00		
	Prepare Submissions on Confider	tiality	330		13.00		
	Preparation of Motion(s) Materials		330		13.00		
	Prepare Submissions on the Motio	on(s)	330		13.00		
	Attendance at Hearing on Motion(	s)	330		13.00		
	Review Procedural Documents		330		13.00		

CC\_Participant\_Combined.rpt - last Update 20230601

	Name	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
	Subtotal of PROCEDURAL	0.00		0.00		0.00	0.00
INTE	RVENOR EVIDENCE Preparation of Intervenor Evidence	104.00	330	34,320.00	13.00	4,461.60	38,781.60
	Interrogatory Responses	35.30	330	11,649.00	13.00	1,514.37	13,163.37
	Preparation of Witness(es) for Attendance at Hearing	85.45	330	28,198.50	13.00	3,665.81	31,864.31
	Subtotal of INTERVENOR EVIDENCE	224.75		74,167.50		9,641.78	83,809.28
SETT	<b>LEMENT CONFERENCE</b> Preparation for Settlement Conference	14.50	330	4,785.00	13.00	622.05	5,407.05
	Attendance at Settlement Conference		330		13.00		
	Preparation of Settlement Proposal		330		13.00		
	Attendance at Presentation to Panel		330		13.00		
WRIT	Subtotal of SETTLEMENT CONFERENCE TEN ARGUMENT	14.50		4,785.00		622.05	5,407.05
	Written Submissions	26.65	330	8,794.50	13.00	1,143.29	9,937.79
	Subtotal of WRITTEN ARGUMENT	26.65		8,794.50		1,143.29	9,937.79
ORA	L ARGUMENT Preparation for Oral Hearing	6.10	330	2,013.00	13.00	261.69	2,274.69
	Attendance at Oral Hearing	20.10	330	6,633.00	13.00	862.29	7,495.29
	Oral Submissions		330		13.00		
	Attendance at Oral Submissions		330		13.00		
	Subtotal of ORAL ARGUMENT	26.20		8,646.00		1,123.98	9,769.98
DECI	SION Review Decision		330		13.00		
	Review Rate/Accounting Order	4.25	330	1,402.50	13.00	182.33	1,584.83
	Prepare Submission on Rate Order	1.20	330	1,102.00	13.00	102.00	1,001.00
	Subtotal of DECISION	4.25	000	1,402.50	10.00	182.33	1,584.83
отн		4.20		1,402.00		102.00	1,004.00
0111	Other Attendance (e.g., Intervenor Conferences)		330		13.00		
	Subtotal of OTHER	0.00		0.00		0.00	0.00
ΤΟΤΑ	L SERVICE PROVIDER FEES Total Service Provider Fees	386.20		127,446.00		16,568.00	144,014.00

# Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	Invoice
CostClaim_Emrydia_Invoices_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Emrydia_TimeDockets_2024042	
9.pdf	
IGUA_EB-2022-0200_Final	CV
CostClaim_Madsen CV_20240429.pdf	

Import Message

DISBURSEMENTS										
Disbursement Subtotal(\$) 2,343.09		<b>isbursem</b> Total Tax 304.61	(\$)		C	other Tax Tota 0.0			Tota	sement al(\$) 17.70
<u>Name</u>	<u>ATT.</u> REQ'D	<u>ATT.</u> PROV	<u>Qty</u>	<u>\$/</u> Unit	<u>Net</u> Cost	<u>HST</u> Rate	<u>HST</u>	<u>Other</u> <u>Taxes/Tip</u>	<u>Total</u>	<u>Rationale/</u> <u>Comment</u>
Scanning/Photocopy (Internal)						13.00				
Scanning/Photocopy						13.00				
External) Printing (Internal)						13.00				
Printing (External)						13.00				
Courier						13.00				
eleconference						13.00				
ravel: Air	Yes	Yes	1.00	875.05	875.05	13.00	113.76		988.81	
ravel: Car Rental						13.00				
ravel: Gas						13.00				
ravel: Car Mileage – outhern Ontario ravel: Car Mileage –				0.40 0.41						
lorthern Ontario Travel: Rail						13.00				
ravel (Other)						13.00				
Parking						13.00				
axi	Yes	Yes	1.00	196.14	196.14	13.00	25.50		221.64	
Accommodation	Yes	Yes	4.00	200.00	800.00	13.00	104.00		904.00	
Other	Yes	Yes	1.00	471.90	471.90	13.00	61.35		533.25	Meals Allowance
Total Disbursements:					2,343.09		304.61	0.00	2,647.70	

# Attachments

IGUA\_EB-2022-0200\_Final CostClaim\_Emrydia\_Costs\_20240429.pdf

Import Message

## Hearings, Consultations, Disbursements Attachments

<u>Attachment</u> IGUA_EB-2022-0200_Final CostClaim Emrydia Costs 20240429.pdf	Document Type	Claim Type Import Message Disbursements
IGUA_EB-2022-0200_Final CostClaim_Emrydia_Invoices_20240429.pd f	Invoice	Hearings
IGUA_EB-2022-0200_Final CostClaim_Emrydia_TimeDockets_202404 29.pdf	Time Docket	Hearings
IGUA_EB-2022-0200_Final CostClaim_Madsen CV_20240429.pdf	CV	Hearings

Attachment

## Summary of time and Charges of Dustin Madsen

	Read and Research			tal charges		HST		Il charges inc HST
	Bacaarah							
	Research							
_	Application and							
	Evidence	28.20	\$	9,306.00	\$	1,209.78	\$	10,515.78
	Preparation of			,				,
	Interrogatories	16.50	\$	5,445.00	\$	707.85	\$	6,152.85
-	Review		Ŧ	-,	Ŧ		Ŧ	-,
~	Interrogatory							
Discovery	Responses	42.20	\$	13,926.00	\$	1,810.38	\$	15,736.38
8	Technical	0	÷	,0_0.00	Ŷ	.,0.000	Ŷ	
Dis	Conference							
	Preparation	2.30	\$	759.00	\$	98.67	\$	857.67
-	Technical	2.00	Ψ	100.00	Ψ	50.07	Ψ	001.01
	Conference							
	Attendance	0.65	\$	214.50	\$	27.89	\$	242.39
	Technical	0.00	Ψ	217.00	Ψ	21.03	Ψ	272.00
	Conference							
	Follow-up	_	\$	_	\$	_	\$	_
	Preparation of	-	φ	-	φ	-	φ	-
	Issues List							
	Submission		\$		\$		\$	
_	Attendance at	-	Ф	-	Þ	-	Þ	-
	Issues List							
			¢		¢		<b>~</b>	
<sub></sub>	Conference	-	\$	-	\$	-	\$	-
	Preparation for a							
	confidentiality		<b>•</b>		<b>^</b>		<u>^</u>	
a	request	-	\$	-	\$	-	\$	-
Inp	Prepare							
Ce	submissions on							
Procedural	confidentiality	-	\$	-	\$	-	\$	-
<b>L</b>	Preparation of							
	Motion(s)							
	materials	-	\$	-	\$	-	\$	-
	Attendance at							
	hearing on							
	Motion(s)	-	\$	-	\$	-	\$	-
R	Review procedural							
	documents	-	\$	-	\$	-	\$	-
0	Preparation of							
U C	Intevenor							
Intervenor Evidence	Evidence	104.00	\$	34,320.00	\$	4,461.60	\$	38,781.60
i v	Interrogatory							
- L	Responses	35.30	\$	11,649.00	\$	1,514.37	\$	13,163.37
Sue	Preparation of							
2	Witness(es) for							
nte	Attendance at							
-	Hearing	85.45	\$	28,198.50	\$	3,665.81	\$	31,864.31

		Total hours	то	otal charges		HST	Tot	al charges inc HST
	Preparation for							
a)	Settlement							
nce	Conference	14.50	\$	4,785.00	\$	622.05	\$	5,407.05
ere	Attendance at							
nfe	Settlement							
Settlement Conference	Conference	-	\$	-	\$	-	\$	-
ent	Preparation of							
me	Settlement							
tle	Proposal	-	\$	-	\$	-	\$	-
Set	Attendance at							
	Presentation to							
	Panel	-	\$	-	\$	-	\$	-
Written Argument	Written							
3	submissions	26.65	\$	8,794.50	\$	1,143.29	\$	9,937.79
	Preparation for	- ·						
Ħ	Oral hearing	6.10	\$	2,013.00	\$	261.69	\$	2,274.69
Jer	Attendance at Oral							
un	Hearing	20.10	\$	6,633.00	\$	862.29	\$	7,495.29
Oral Argument	Oral Submissions	-	\$	-	\$	-	\$	-
ō	Attendance at Oral Submissions	-	\$	-	\$	-	\$	-
	Review Decision	-	\$	-	\$	-	\$	-
Decision	Review Rate/	4.05		4 400 50		400.00		4 504 00
	Accounting Order	4.25	\$	1,402.50	\$	182.33	\$	1,584.83
ă	Prepare Submission on							
	Rate Order		¢		¢		¢	
	Other attendance	-	\$	-	\$	-	\$	-
ler	(e.g., Intervenor							
Other	Conferences)		\$		\$		\$	
	Total	- 386.2	Գ \$	- 127,446.00	Գ \$	- 16,567.98	Գ \$	- 144,013.98
		J00.Z	ψ	121,440.00	Ψ	10,307.30	φ	144,013.30

#### Time and Charges of Dustin Madsen

#### Project:

#### Enbridge rebasing 2024-2028

Date	Time	Description of Activity	
17-01-2023		Conduct detailed review of filed application materials pertaining to depreciation expense. Prepare notes re: the same.	
17-01-2023	2.55	Conduct detailed review of filed application materials pertaining to depreciation expense. Prepare notes	
18-01-2023	2.75	re: the same.	
		Conduct detailed review of filed application materials pertaining to depreciation expense. Prepare notes	
19-01-2023	3.20	re: the same.	
20.04.2022	2.45	Conduct detailed review of filed application materials pertaining to depreciation expense. Prepare notes	
20-01-2023	3.45	re: the same. Conduct detailed review of filed application materials pertaining to depreciation expense. Prepare notes	
28-01-2023	5.20	re: the same.	
		Continue detailed review of filed application materials pertaining to depreciation expense. Prepare note	
29-01-2023	6.05	re: the same.	
		Continue detailed review of filed application materials pertaining to depreciation expense. Prepare note	
31-01-2023		re: the same.	
02-02-2023 03-02-2023		Begin preparing information requests to Enbridge. Continue preparing information requests to Enbridge.	
04-02-2023		Continue preparing information requests to Enbridge.	
05-02-2023		Continue preparing information requests to Enbridge. Send first draft of requests to counsel.	
09-02-2023		Review revisions to requests from counsel and revise accordingly.	
10-02-2023		Conduct final review of interrogatories and send revised version to counsel. Prepare notes for follow up	
11-02-2023		Review interrogatories from other parties and prepare notes re: the same.	
23-02-2023	6.55	Begin preparing draft evidence.	
24-02-2023		Continue preparing draft evidence.	
25-02-2023		Continue preparing draft evidence.	
26-02-2023		Continue preparing draft evidence.	
27-02-2023 02-03-2023		Continue preparing draft evidence. Continue preparing draft evidence.	
03-03-2023			
04-03-2023		ontinue preparing draft evidence.	
05-03-2023		ontinue preparing draft evidence. ontinue work on draft evidence. Prepare draft outline of evidence for counsel.	
06-03-2023		Finalize draft outline of evidence and send to counsel. Continue preparation of draft evidence.	
09-03-2023		Review emails from counsel and begin reviewing responses to interrogatories to parties.	
10-03-2023		Continue detailed review of responses to interrogatories and prepare notes re: the same.	
11-03-2023		Continue detailed review of responses to interrogatories and prepare notes re: the same.	
12-03-2023	7.05	Continue detailed review of responses to interrogatories and prepare notes re: the same.	
10.00.0000	5.00	Continue detailed review of responses to interrogatories and prepare notes re: the same. Attend	
13-03-2023	5.60	conference call. Finalize detailed review of responses to interrogatories and preparation of notes. Respond to email fror	
		counsel re: sufficiency of EGI responses. Review counsel's tech conference questions and respond	
14-03-2023	6.00	accordingly.	
15-03-2023		Continue work on preparing evidence.	
16-03-2023		Continue preparing evidence on depreciation issues.	
		Continue preparing evidence on depreciation issues. Review emails from counsel re: technical	
17-03-2023	4.95	conference and discuss the same. Begin working on preparing draft evidence.	
		Continue preparing evidence on depreciation issues. Send email to counsel re: EGI depreciation updat	
20-03-2023	3.40	and clarifications re: the same.	
		Continue preparing evidence on depreciation issues. Respond to email from counsel re: tech	
21-03-2023		conference.	
22-03-2023		Continue preparing evidence on depreciation issues.	
23-03-2023	3.25	Continue preparing evidence on depreciation issues.	
24-03-2023	4 20	Continue preparing evidence on depreciation issues. Call with OEB staff witnesses re: depreciation. Continue work on depreciation evidence. Send first draft of evidence to counsel.	
24-03-2023	4.20	Continue preparing evidence on depreciation issues. Attend OEB technical conference per counsel's	
27-03-2023	4.25	request. Prepare notes for evidence.	
12-04-2023		Continue work finalizing remaining sections of evidence on salvage costs.	
13-04-2023		5 Finalize next draft of evidence. Send to counsel.	
19-04-2023		Revise draft evidence. Send further revised draft to counsel.	
20-04-2023		Finalize evidence and send to counsel.	
21-04-2023		Review email from counsel. Review evidence of Intergroup and prepare notes re: the same.	

27-04-2023		Respond to email from counsel re: Intergroup evidence.	
03-05-2023	5.55	Review interrogatories from all parties in detail and begin preparing responses.	
04-05-2023	5.00	Continue work on responses to EGI.	
05-05-2023	5.85	Continue work on responses to EGI.	
06-05-2023		Continue work on responses to EGI and OEB. Send first draft of responses to EGI to counsel.	
07-05-2023		Continue responding to OEB and other party requests.	
08-05-2023		Continue responding to OEB and other party requests.	
		Continue responding to OEB and other party requests. Send near final responses to counsel. Revise	
09-05-2023	3.70	responses to EGI and send to counsel.	
14-05-2023	1.80	Update and revise responses to interrogatories. Send to counsel.	
15-05-2023		Finalize responses to IRs. Send final edits to counsel.	
10 00 2020		Respond to email from counsel re: depreciation estimates for use in negotiations. Reply to further err	
		from counsel and counsel for School Energy Coalition re: estimating depreciation impacts. Begin run	
18-05-2023		depreciation estimate update per request.	
19-05-2023	7.00	Finalize depreciation estimate calculations and related spreadsheet. Send to counsel.	
		Prepare for call with counsel. Attend call with counsel re: depreciation estimates for negotiations. Pro	
		updated depreciation tables and information to counsel for negotiations. Respond to emails from cou	
23-05-2023		re: the same, including counsel for SEC.	
23-03-2023			
		Review email from counsel re: negotiations. Respond to email re: depreciation matters subject to	
03-06-2023		negotiations and provide opinion re: the same. Respond to numerous emails re: the same.	
		Witness preparation, including reviewing own evidence, responses to interrogatories, Intergroup	
		evidence and interrogatory responses, and Enbridge evidence in preparation to testify. Review	
25-07-2023		transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
26-07-2023	8.20	Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
31-07-2023		Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
31-07-2023			
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
01-08-2023	8.10	Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
02.08.2022			
02-08-2023		Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
03-08-2023	6.15	Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
04.08.2022			
04-08-2023		Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
05-08-2023	4.00	Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Continue witness preparation, including reviewing own evidence, responses to interrogatories,	
		Intergroup evidence and interrogatory responses, and Enbridge evidence in preparation to testify.	
06.09.0000			
06-08-2023	7.90	Review transcripts as necessary per advice of counsel. Prepare notes re: the same.	
		Respond to email from counsel re: generation arrangement. Continue witness preparation and review	
07-08-2023		EGI compendium. Reply to counsel with additional information regarding various hearing related mat	
		Travel to Toronto. No time charged for travel, only time charged relates to preparation. Email counse	
		Review cross examination notes and reply re: the same. Attend meeting with counsel for witness	
		preparation and discussion of hearing matters. Review revised cross notes. Review and prepare not	
08-08-2023		on SEC compendium.	
		Attendance at oral hearing. Review staff and TFG compendium and prepare notes re: the same.	
		Prepare notes on matters related to the oral hearing. Respond to emails from counsel re: the same.	
00 08 2022		••••	
09-08-2023		Attend meetings with counsel re: the same.	
		Attendance at oral hearing. Prepare notes on matters related to the oral hearing. Respond to counse	
		emails and attend meetings re: the same. Prepare notes on testimony. Prepare to testify. Review an	
10-08-2023	9.45	discuss direct examination with counsel.	
11-08-2023		Preparation to testify at oral hearing. Attendance at oral hearing include testimony.	
		Review final transcript from testimony and provide notes/corrections to counsel re: the same. Prepar	
44.00.0000			
14-08-2023		response to undertaking and send to counsel.	
15-08-2023	0.10	Revise undertaking response and resend to counsel.	
27-08-2023		Review EGI argument and prepare notes re: the same for counsel.	
28-08-2023		Review EGI argument and prepare notes re: the same for counsel.	
29-08-2023		95 Review EGI argument and prepare notes re: the same for counsel.	
30-08-2023		Review EGI argument and prepare notes re: the same for counsel. Send notes to counsel.	
13-09-2023	3.40	Review OEB staff submission. Prepare notes re: the same.	
13-03-2023		Review counsel's draft of argument. Provide comments and edits re: the same. Send to counsel.	

12-27-2023	-	Review of OEB Decision (no time charged).
		Review draft rate order per request of counsel. Provide comments on draft rate order via email. Respond
22-02-2024	3.15	to further emails re: the same.
		Review responses from EGI on DRO submissions per counsel's request. Provide feedback re: the
16-03-2024	1.10	same, including comments EGI's responses.
Total	386.20	
Hourly Rate	\$ 330.00	
Total Charges	\$ 127,446.00	
HST	\$ 16,567.98	
Total Charges (incl. GST)	\$ 144,013.98	
Total	\$ 144,013.98	
Disbursements (before G	ST)	

Disbursements (before	GST)	
GST on disbursements		
Total	\$ 144,013.98	
Previous charges		
Total charges	\$ 144,013.98	

# **Emrydia Consulting Corporation**



89 Auburn Springs Blvd SE Calgary, AB T3M 0Z4 Phone: 403-869-9294

Ottawa, ON K1G 4L3

TO:

INVOICE #IGUA-2023-02 DATE: SEPTEMBER 29, 2023 GST 720920115-RT0001

FOR:

Attn: Shahrzad RahbarInvoice fIndustrial Gas Users Association (IGUA)Enbridge851 Industrial AveEnbridge

Invoice for disbursements in relation to the Enbridge 2024-2028 rebasing application

DESCRIPTION	HOURS	RATE	AMOUNT
Disbursements (see detailed breakdown and support attached)			\$3,023.03
HST on services			0.00
GST on disbursements			45.25
HST on disbursements			208.28
		TOTAL	\$3,276.56

Make all checks payable to Emrydia Consulting Corporation

Thank you for your business!

#### Time and Charges of Dustin Madsen

#### Project:

Enbridge rebasing 2024-2028

Description of Activity

ls:

Date		Time	
Total		-	
Hourly Rate	\$	330.00	
Total Charges	\$	-	
HST	\$	-	
Total Charges (incl. HST)	\$	-	
	-		
Total	\$	-	

#### Disbursements (before GST)

Dispursements (before (	551)	
	761.85	Air Canada flight
	113.20	Air Canada flight change fee and seat booking fee
	1,479.94	Sheraton Centre hotel stay
	54.51	Uber trip Tuesday to airport excluding tips
	39.24	Uber trip Tuesday to hotel excluding tips
	45.73	Uber trip Saturday from hotel to airport excluding tips
	56.66	Uber trip Saturday from airport to home excluding tips
		Meals allowance (@ Canada Revenue Agency Meal Allowance Rate https://www.canada.ca/en/revenue-
		agency/corporate/about-canada-revenue-agency-cra/travel-directive/appendix-b-meals-allowances-april-
		2023.html) Breakfast \$23.60, Lunch \$23.90, Dinner \$58.60 (Tuesday, Wednesday, Thursday, Friday 3 meals and
	471.90	Satruday 2 meals) = \$23.60 * 5 days, \$23.90 * 5 days, \$58.60 * 4 days.
GST on disbursements	45.25	
HST on disbursements	208.28	
Total	\$ 3,276.56	
Previous charges		
Total charges	\$ 3,276.56	]



**Booking Confirmation** 



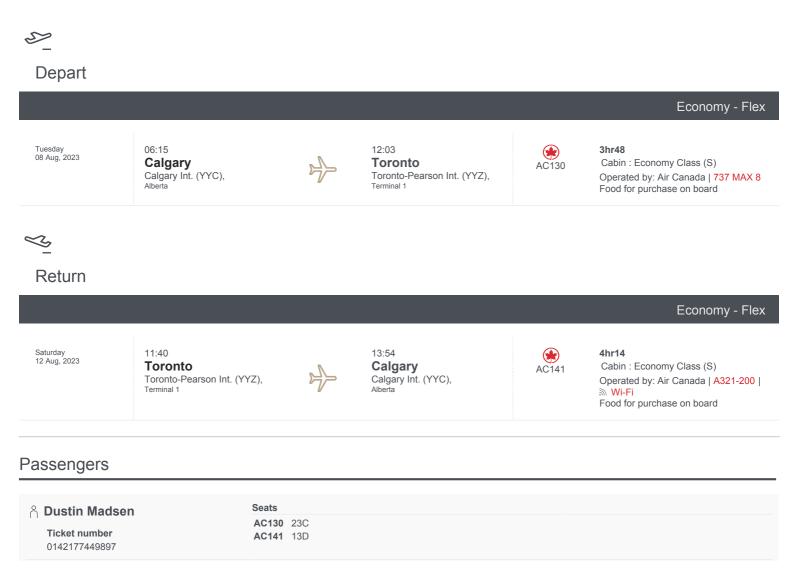
## Booking Reference: 3MTS3F

Date of issue: 01 Aug, 2023

This is your official itinerary/receipt. You must bring it with you to the airport for check-in and we recommend you keep a copy for your records. Please also take the time to review it as it contains the general conditions of carriage and applicable tariffs that apply to the tickets, bookings and air services detailed below, as well as baggage, dangerous goods and other important information related to your trip.

Data Protection Notice: Your personal data will be processed in accordance with the applicable carrier's privacy policy and, if your booking is made via a reservation system provider ("GDS"), with its privacy policy. These are available at the IATA Travel Centre website or from the carrier or GDS directly. You should read this documentation, which applies to your booking and specifies, for example, how your personal data is collected, stored, used, disclosed and transferred. We also invite you to view Air Canada's Privacy Policy directly.

Ensure you are in compliance with the entry requirements of your destination. For the latest information on entry requirements, our flexible booking policy, or our health and safety measures visit our Travel Ready hub.



# Purchase summary

# American Express

\***1001** Amount paid: \$802.74

	1 adult
Flights	
Air transportation charges	
Base fare - Depart Economy - Flex	328.80
Base fare - Return Economy - Flex	328.80
Carrier surcharges	20.00
Taxes, fees and charges	
Air Travellers Security Charge - Canada	14.25
Goods and Services Tax - Canada - 100092287 RT0001	36.34
Harmonized Sales Tax - Canada - 100092287 RT0001	4.55
Airport Improvement Fee - Canada	70.00
Total before options (per passenger)	<sup>\$</sup> 802 <sup>74</sup>
GRAND TOTAL (Canadian dollars)	<sup>\$</sup> 802 <sup>74</sup>

	Check-in and boarding gate deadlines
Within Canada	
<b>90</b>	When to arrive at the airport
minutes	You should arrive no later than the time indicated at left. This will ensure you have plenty of time to check in, drop off your checked bags and pass through security.
45	Check-in and baggage drop-off deadline
minutes <sup>1</sup>	You must have checked in, obtained your boarding pass and deposited all checked bags at the baggage drop-off counter before the end of the check-in period for your flight.
<b>30</b>	Boarding gate deadline
minutes	This is the latest you should be at the departure gate, ready for boarding.
15	Boarding gate closes
minutes	Arriving after this time will result in reassignment of any reserved seats, the cancellation of reservations, and/or ineligibility for denied boarding compensation.

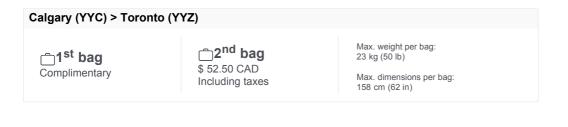
From Toronto City Airport (YTZ) - Check-in and baggage drop-off deadline: 20 minutes.

#### Carry-on baggage

On flights operated by Air Canada, Air Canada Rouge or Air Canada Express, you may carry with you in the cabin 1 standard item (max. size: 23 x 40 x 55 cm [9 x 15.5 x 21.5 in]) and 1 personal item (max. size: 16 x 33 x 43 cm [6 x 13 x 17 in]). Your carry-on baggage must be light enough that you can store it in the overhead bin unassisted. See our complete carry-on baggage policy.

#### Checked baggage

Please see below for details on the bags you plan on checking at the baggage counter.



Toronto (YYZ) > Calgary (YYC)				
ப்1 <sup>st</sup> bag Complimentary	2nd bag     52.50 CAD Including taxes	Max. weight per bag: 23 kg (50 lb) Max. dimensions per bag: 158 cm (62 in)		

\* For travel within Canada or between Canada and the United States, a Canadian tax of \$3.00 CAD may apply to baggage fees. For travel between Canada or the United States and Mexico, the Dominican Republic and Barbados, an applicable local sales tax of \$4.00 CAD may apply to baggage fees. For all other itineraries to/from Mexico, the Dominican Republic and Barbados as well as itineraries to/from South America, an applicable local sales tax of \$21.00 CAD may apply to baggage fees. For all other itineraries to/from Mexico, the Dominican Republic and Barbados as well as itineraries to/from South America, an applicable local sales tax of \$21.00 CAD may apply to baggage fees. All above tax amounts are based on the maximum applicable tax amounts per itinerary type. Actual amounts may vary and will be charged in the currency used in your departure airport. Tax amounts are subject to change without notice by local government.

#### Currency

Fee amounts are displayed in the currency of the first departure city on your ticket. On the day of travel, applicable fees will be assessed in the local currency of the country/region you are travelling from. Certain exceptions may apply where the departure airport does not charge in local currency. The currency exchange rate will be determined by the date of travel.

Stopovers

Checked baggage fees may be reassessed when itineraries include an enroute stopover of more than 24 hours.

Note: If you exceed your baggage allowance (in number, size and/or weight), additional checked baggage charges will apply. The policy and fees will be those of the carrier identified in the checked baggage information section.

- View Air Canada's additional checked baggage policy.
- · View the additional checked baggage policy of Air Canada's codeshare and interline partners.

Fare Rules

#### Economy - Flex

Changes	Departing flight
	<ul> <li>Before departure of first flight         <ul> <li>Ticket reissue is allowed but may be subject to certain restrictions. Please refer to the link above for complete fare rules.</li> <li>Changes are permitted without a fee, subject to availability. Any taxes and fare difference may apply.</li> <li>New travel dates must be prior to Thursday, 01 Aug, 2024</li> <li>The maximum change fee applied is \$0 CAD per direction, per passenger, plus any applicable taxes and fare difference. Child/Infant discounts may apply.</li> </ul> </li> </ul>
	After departure of first flight     Ticket reissue is not allowed.
	• Flights can only be used in sequence from the place of departure specified on the itinerary.
	• Failure to show up for your flight (No Show) may result in a penalty. Please see the complete fare rules for details.
Cancellations	<ul> <li>Tickets are non-refundable and are non-transferable.</li> <li>Partially used tickets may be submitted for a refund assessment. The refund will be calculated as follows: Actual fare paid minus the value of the portion of the journey that has been flown and minus the applicable fee.</li> <li>Cancellations can be made up to 45 minutes prior to departure. Exception: Aeroplan flight rewards must be cancelled no later than 2 hours before departure.</li> <li>Find out more about Air Canada's refund services.</li> </ul>
Minimum stay	There is no maximum or minimum day stay associated with this fare.
Maximum stay	There is no maximum or minimum day stay associated with this fare.
Aeroplan	<ul> <li>100% Aeroplan points</li> <li>The equivalent in Status Qualifying Miles</li> <li>For all flights operated by Air Canada, Air Canada Express and Air Canada Rouge</li> </ul>
Economy - Flex	
Changes	Return flight
	<ul> <li>Before departure of first flight         <ul> <li>Ticket reissue is allowed but may be subject to certain restrictions. Please refer to the link above for complete fare rules.</li> <li>Changes are permitted without a fee, subject to availability. Any taxes and fare difference may apoly.</li> </ul> </li> </ul>

	<ul> <li>Changes are permitted without a fee, subject to availability. Any taxes and fare difference may apply.</li> <li>New travel dates must be prior to Thursday, 01 Aug, 2024</li> <li>The maximum change fee applied is \$0 CAD per direction, per passenger, plus any applicable taxes and fare difference. Child/Infant discounts may apply.</li> </ul>
	<ul> <li>After departure of first flight         <ul> <li>Ticket reissue is allowed but may be subject to certain restrictions. Please refer to the link above for complete fare rules.</li> <li>Changes are permitted without a fee, subject to availability. Any taxes and fare difference may apply.</li> <li>New travel dates must be prior to Thursday, 08 Aug, 2024</li> <li>The maximum change fee applied is \$0 CAD per direction, per passenger, plus any applicable taxes and fare difference. Child/Infant discounts may apply.</li> </ul> </li> </ul>
	<ul> <li>Flights can only be used in sequence from the place of departure specified on the itinerary.</li> <li>Failure to show up for your flight (No Show) may result in a penalty. Please see the complete fare rules for details.</li> </ul>
Cancellations	<ul> <li>Tickets are non-refundable and are non-transferable.</li> <li>Partially used tickets may be submitted for a refund assessment. The refund will be calculated as follows: Actual fare paid minus the value of the portion of the journey that has been flown and minus the applicable fee.</li> <li>Cancellations can be made up to 45 minutes prior to departure. Exception: Aeroplan flight rewards must be cancelled no later than 2 hours before departure.</li> <li>Find out more about Air Canada's refund services.</li> </ul>
Minimum stay	There is no maximum or minimum day stay associated with this fare.
Maximum stay	There is no maximum or minimum day stay associated with this fare.
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- 1. You must obtain your boarding pass and check in any baggage by the check-in deadline. Additionally, you must be available for boarding at the boarding gate by the boarding gate deadline. Failure to respect check-in and boarding gate deadlines may result in the reassignment of any pre-reserved seats, the cancellation of reservations, and/or ineligibility for denied boarding compensation.
- 2. Although reconfirmation of flights is not required, we strongly recommend that you check your flight status online at aircanada.com or by calling our flight information system at 1-888-422-7533 prior to your departure.
- 3. Advance seat assignments are not guaranteed and may change without notice. If your pre-assigned seat is unavailable, we will try to accommodate you in a comparable seat in the same class of service and will refund any applicable fees.
- 4. Any travel credit banked for unused tickets is non-transferable: when the credit is redeemed, it must be used by the same person whose name appears on the original ticket.
- 5. Air Canada will cancel any purchased ticket and provide a full refund without penalty up to 24 hours after purchase. Beyond 24 hours, voluntary changes to your itinerary may require the payment of additional fees and fare upgrades. If you are travelling on a non-refundable ticket, Air Canada will be unable to make exceptions in the event of an unexpected trip cancellation or medical emergency. We recommend the purchase of travel insurance.

#### 6. Dangerous goods

For safety reasons, dangerous goods must not be packed in checked or carry-on baggage, except as specifically permitted. Dangerous goods include, but are not limited to: compressed gases, corrosives, explosives, flammable liquids and solids, radioactive materials, oxidizing materials, poisons, infectious substances, and briefcases with installed alarm devices. For security reasons, other restrictions may apply. Please refer to the Restricted and Prohibited Items page on our website for more information.

7. Subject to the provisions of the Montreal Convention and the Warsaw Convention, as well as the provisions of its applicable tariffs, Air Canada may refuse carriage of property in checked luggage that is not suitable for transportation, such as fragile or perishable items and may refuse to carry valuable items (a valuable is deemed to be any item whose value is \$1,000 CAD or more, per Kilogram or \$1 CAD per gram). Air Canada may refuse claims based on the inherent nature of an item (e.g. its perishable nature), or for loss or delay of unsuitably or inadequately packed items, to the extent that the destruction, loss or damages resulted from the inherent defect, quality or vice of the baggage, or, in the case of delay, that the carrier, its agents, and servants took all measures that could reasonably be required to avoid the damage, or that it was impossible to take such measures.

#### 8. International travel

Governments may require your carrier to provide information on or permit access to passenger data. You cannot travel if you do not have all required travel documents, such as a passport and visa (where applicable), to enter in or transit through each country/region on your itinerary. Please refer to the Travel Documents page on our website for more information.

#### 9. In-flight health

Most people are fit to travel by air, but special attention is required for passengers whose health problems may be exacerbated by altitude, travel stress, hypoxia and other travel related difficulties. Our website offers important health tips and information for customers with special needs who may require medical approval before flying.

Please also note that aircraft disinsection is carried out on certain routes, in compliance with the requirements of the World Health Organization (WHO), the International Civil Aviation Organization, Transport Canada and applicable foreign regulatory authorities. More information is available on our website.

#### 10. Schedules and timetables

Time and aircraft type shown in timetables or elsewhere are approximate and not guaranteed, and form no part of the contract. Schedules are subject to change without notice and carrier assumes no responsibility for passenger making connections not included as part of the itinerary set out in the ticket. Carrier is not responsible for changes, errors or omissions either in timetables or other representations of schedules.

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🔍 Canada, U.S.: 1 (888) 247-2262 Other numbers



A STAR ALLIANCE MEMBER MEMBRE DU RÉSEAU STAR ALLIANCE



**Booking Confirmation** 



## Booking Reference: 3MTS3F

Date of issue: 01 Aug, 2023

This is your official itinerary/receipt. You must bring it with you to the airport for check-in and we recommend you keep a copy for your records. Please also take the time to review it as it contains the general conditions of carriage and applicable tariffs that apply to the tickets, bookings and air services detailed below, as well as baggage, dangerous goods and other important information related to your trip.

Data Protection Notice: Your personal data will be processed in accordance with the applicable carrier's privacy policy and, if your booking is made via a reservation system provider ("GDS"), with its privacy policy. These are available at the IATA Travel Centre website or from the carrier or GDS directly. You should read this documentation, which applies to your booking and specifies, for example, how your personal data is collected, stored, used, disclosed and transferred. We also invite you to view Air Canada's Privacy Policy directly.

Ensure you are in compliance with the entry requirements of your destination. For the latest information on entry requirements, our flexible booking policy, or our health and safety measures visit our Travel Ready hub.

5

Depart



Passengers

Seats AC139 16C **Ticket number** 0142178084314 Air Canada - Aeroplan 532069267

#### **Purchase summary**

#### Your additional charges

Your additional charges The GST/HST is included in change and cancellation fees charged in relation to Canadian domestic flights which are subject to the GST/HST. The GST and the QST are included in change and cancellation fees charged in relation to flights within Canada originating in Quebec which are subject to the GST and the QST. The GST is included in change and cancellation fees charged in relation to flights originating in Canada with a destination in the United States (except Hawaii) which are subject to the GST. If you require a receipt with a tax breakdown, please contact Air Canada

Your additional charges	1 adult
$\sum_{i=1}^{n}$ Air transportation charges	
Base fare	61.20
Taxes, fees and charges	
Goods and Services Tax - Canada - 100092287 RT0001	3.06
Subtotal	64.26
Change Fee	0.00
Dustin Madsen (ADT)	0.00
Taxes, fees and charges	
Subtotal	0.00
Travel Options	0.00
Seat selection	
AC 139: 16C - Preferred Seat (Aisle) - 0144250200035	52.00
Harmonized Sales Tax - Canada - 100092287 RT0001	6.76
TOTAL CHARGES	<sup>\$</sup> 123 <sup>02</sup>

U

within Canada	
90	When to arrive at the airport
minutes	You should arrive no later than the time indicated at left. This will ensure you have plenty of time to check in, drop off your checked bags and pass through security.
<b>45</b>	Check-in and baggage drop-off deadline
minutes <sup>1</sup>	You must have checked in, obtained your boarding pass and deposited all checked bags at the baggage drop-off counter before the end of the check-in period for your flight.
<b>30</b>	Boarding gate deadline
minutes	This is the latest you should be at the departure gate, ready for boarding.
<b>15</b>	Boarding gate closes
minutes	Arriving after this time will result in reassignment of any reserved seats, the cancellation of reservations, and/or ineligibility for denied boarding compensation.

From Toronto City Airport (YTZ) - Check-in and baggage drop-off deadline: 20 minutes.

# Baggage allowance

#### Carry-on baggage

On flights operated by Air Canada, Air Canada Rouge or Air Canada Express, you may carry with you in the cabin 1 standard item (max. size: 23 x 40 x 55 cm [9 x 15.5 x 21.5 in]) and 1 personal item (max. size: 16 x 33 x 43 cm [6 x 13 x 17 in]). Your carry-on baggage must be light enough that you can store it in the overhead bin unassisted. See our complete carry-on baggage policy.

#### Checked baggage

Please see below for details on the bags you plan on checking at the baggage counter.

#### Toronto (YYZ) > Calgary (YYC)

Complimentary

**2<sup>nd</sup> bag** \$ 52.50 CAD Including taxes Max. weight per bag: 23 kg (50 lb)

Max. dimensions per bag: 158 cm (62 in)

\* For travel within Canada or between Canada and the United States, a Canadian tax of \$3.00 CAD may apply to baggage fees. For travel between Canada or the United States and Mexico, the Dominican Republic and Barbados, an applicable local sales tax of \$4.00 CAD may apply to baggage fees. For all other itineraries to/from Mexico, the Dominican Republic and Barbados as well as itineraries to/from South America, an applicable local sales tax of \$21.00 CAD may apply to baggage fees. For all other itineraries to/from Mexico, the Dominican Republic and Barbados as well as itineraries to/from South America, an applicable local sales tax of \$21.00 CAD may apply to baggage fees. All above tax amounts are based on the maximum applicable tax amounts per itinerary type. Actual amounts may vary and will be charged in the currency used in your departure airport. Tax amounts are subject to change without notice by local government.

#### Currency

Fee amounts are displayed in the currency of the first departure city on your ticket. On the day of travel, applicable fees will be assessed in the local currency of the country/region you are travelling from. Certain exceptions may apply where the departure airport does not charge in local currency. The currency exchange rate will be determined by the date of travel.

#### Stopovers

Checked baggage fees may be reassessed when itineraries include an enroute stopover of more than 24 hours.

Note: If you exceed your baggage allowance (in number, size and/or weight), additional checked baggage charges will apply. The policy and fees will be those of the carrier identified in the checked baggage information section.

- View Air Canada's additional checked baggage policy.
- · View the additional checked baggage policy of Air Canada's codeshare and interline partners.

Fare Rules

#### Economy - Flex

Changes	Departing flight
	<ul> <li>Before departure of first flight         <ul> <li>Ticket reissue is allowed but may be subject to certain restrictions. Please refer to the link above for complete fare rules.</li> <li>Changes are permitted without a fee, subject to availability. Any taxes and fare difference may apply.</li> <li>New travel dates must be prior to Thursday, 01 Aug, 2024</li> <li>The maximum change fee applied is \$0 CAD per direction, per passenger, plus any applicable taxes and fare difference. Child/Infant discounts may apply.</li> </ul> </li> </ul>
	After departure of first flight     Ticket reissue is not allowed.
	Flights can only be used in sequence from the place of departure specified on the itinerary.
	Failure to show up for your flight (No Show) may result in a penalty. Please see the complete fare rules for details.
Cancellations	<ul> <li>Tickets are non-refundable and are non-transferable.</li> <li>Partially used tickets may be submitted for a refund assessment. The refund will be calculated as follows: Actual fare paid minus the value of the portion of the journey that has been flown and minus the applicable fee.</li> <li>Cancellations can be made up to 45 minutes prior to departure. Exception: Aeroplan flight rewards must be cancelled no later than 2 hours before departure.</li> <li>Find out more about Air Canada's refund services.</li> </ul>
Minimum stay	There is no maximum or minimum day stay associated with this fare.
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Aeroplan	See how many Aeroplan points you will earn on your Air Canada operated flight based on your fare type and Aeroplan Elite Status.

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🔍 Canada, U.S.: 1 (888) 247-2262 Other numbers



A STAR ALLIANCE MEMBER MEMBRE DU RÉSEAU STAR ALLIANCE Sheraton Centre Toronto Hotel 123 Queen Street West Toronto, ON M5H 2M9 Canada Tel: (416) 361-1000 Fax: 416-947-4854



#### DUSTIN MADSEN

Page Number	:	1	Invoice Nbr	:	1000962924
Guest Number	:	8000683			
Folio ID	:	А			
Arrive Date	:	08-AUG-23	15:14		
Depart Date	:	12-AUG-23	07:00		
No. Of Guest	:	1			
Room Number	:	3914			
Marriott Bonvoy Number :		5764			

Tax Invoice

#### Tax ID : 737124495

Sheraton Centr YYZTC AUG-12-2023 07:10 FAHME510

Date	Reference	Description			Charges (CAD)	Credits (CAD)
08-AUG-23	DEPOSIT	Deposit-AX-	1001			-1611.04
08-AUG-23	RT3914	Room Chrg -	Advance Purchase		374.00	
08-AUG-23	RT3914	Room HST			48.62	
08-AUG-23	RT3914	Municipal Ta	x		22.44	
08-AUG-23	RT3914	HST Municip	al Tax		2.92	
09-AUG-23	JL 3914	Laundry/Vale	et		45.00	
09-AUG-23	JL 3914	Delivery Chg			3.00	
09-AUG-23	JL 3914	HST			5.85	
09-AUG-23	JL 3914	HST Delivery	/ Charge		0.39	
09-AUG-23	RT3914	Room Chrg -	Advance Purchase		332.00	
09-AUG-23	RT3914	Room HST			43.16	
09-AUG-23	RT3914	Municipal Ta	x		19.92	
09-AUG-23	RT3914	HST Municip	al Tax		2.59	
10-AUG-23	RT3914	Room Chrg -	Advance Purchase		341.00	
10-AUG-23	RT3914	Room HST			44.33	
10-AUG-23	RT3914	Municipal Ta	x		20.46	
10-AUG-23	RT3914	HST Municip	al Tax		2.66	
11-AUG-23	RT3914	Room Chrg -	Advance Purchase		298.00	
11-AUG-23	RT3914	Room HST			38.74	
11-AUG-23	RT3914	Municipal Ta	x		17.88	
11-AUG-23	RT3914	HST Municip	al Tax		2.32	
12-AUG-23	AX	American Ex	press-1001			-54.24
	***For Authori	ization Purpose	Only***			
	xxxxxx1001					
	Date	Time	Code	Authorized		
	08-AUG-23	13:14	864846	333.76		
	11-AUG-23					

Continued on the next page

Sheraton Centre Toronto Hotel 123 Queen Street West Toronto, ON M5H 2M9 Canada Tel: (416) 361-1000 Fax: 416-947-4854



	DUSTIN M			Page Number	:	2	Invoice Nbr	: 1000962924
				Guest Number	•	2 8000683		. 1000902924
				Folio ID	•	A		
				Arrive Date	:	A 08-AUG-23	15:14	
					:			
I				Depart Date		12-AUG-23	07:00	
				No. Of Guest	:	1		
				Room Number	:	3914		
				Marriott Bonvoy Nun	nber :	5764		
								02:54:10
164953		136.80						
		Approve EMV Receipt for	AX - 1001: PINI Verified					
		TC:E2834F4E8A07D67F						
		AID:A000000025010801						
		AID.A00000025010801		RICAN EAFRESS				
			** Total			1665.28	-1	665.28
			*** Balance			0.00		
	HST Sumn	nary					Amour	nt (CAD)
		HST Room:						174.85
		HST Food and Beverage						0.00
								0.00

HST Food and Beverage	0.00
HST Telephone:	0.00
HST Other:	10.49
HST Total	185.34

When you stay with us, we Go Beyond so you can too with thoughtful service, exceptional experiences and everything you seek when traveling. Book your next stay at Sheraton.com Tell us about your stay. www.sheraton.com/reviews

Bring the Sheraton sleep experience home with you. Visit SheratonStore.com.



Dustin Madsen <dmadsen.consulting@gmail.com>

# Your Tuesday morning trip with Uber

**Uber Receipts** <noreply@uber.com> To: dmadsen.consulting@gmail.com 8 August 2023 at 04:10



Total CA\$57.38 August 8, 2023

# Thanks for being an Uber One member, Dustin

We hope you enjoyed your ride this morning.



Total	CA\$57.38
-------	-----------

You saved CA\$2.87 on this ride with Uber One and promos

Trip fare	CA\$43.93
Subtotal	CA\$43.93
Membership Benefit	-CA\$2.87
Reservation Fee	CA\$6.00
Booking Fee 😢	CA\$3.00
Airport Recovery Surcharge	CA\$4.00

TNC fee recovery surcharge

GST

CA\$0.45 CA\$2.87

## Payments



**American Express ••••1001** 8/8/23 4:10 AM

CA\$57.38

A temporary hold of CA\$57.38 was placed on your payment method •••• 1001. This is not a charge and will be removed. It should disappear from your bank statement shortly. Learn More

Visit the trip page for more information, including invoices (where available)

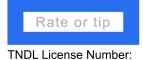
Switch Payment Method

**Download PDF** 

# You rode with DAVINDER

4.99 **★** Rating

2. Has passed a multi-step safety screen



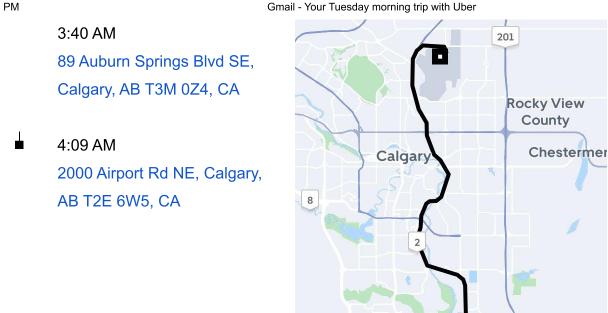
Please call 3-1-1 with any Compliments/Concerns



Every rideshare trip in Calgary is insured for a covered auto accident by Economical Insurance.

Learn more >

UberX 41.11 kilometers | 29 min



22X

Report lost item >

Contact support >

My trips >

201

Forgot password

Privacy

Terms

Uber Rasier Canada Inc. 66 Wellington Street West Suite 5300, TD Bank Tower Toronto ON M5K 1E6

Fare does not include fees that may be charged by your bank. Please contact your bank directly for inquiries.



Dustin Madsen <dmadsen.consulting@gmail.com>

# Your Tuesday afternoon trip with Uber

**Uber Receipts** <noreply@uber.com> To: dmadsen.consulting@gmail.com 8 August 2023 at 11:11



Total CA\$44.61 August 8, 2023

# Thanks for being an Uber One member, Dustin

We hope you enjoyed your ride this afternoon.



CA\$44.6	31
	CA\$44.6

You saved CA\$2.07 on this ride with Uber One and promos

Trip fare	CA\$32.94
Subtotal	CA\$32.94
Membership Benefit	-CA\$2.07
Booking Fee 😨	CA\$2.75
Uber Airport Surcharge	CA\$5.32
Mississauga Fee Recovery Surcharge	CA\$0.30

Has passed a multi-step safety screen

HST

CA\$5.37

Visit the trip page for more information, including invoices (where available)

GST Registration Number 788574937RT0001

### **Download PDF**

This is not a payment receipt. It is a trip summary to acknowledge the completion of the trip. You will receive a trip receipt when the payment is processed with payment information.

₹,

# You rode with Syed

4.97 ★ Rating



PTC License D29-4748408



Every rideshare trip in Toronto is insured for a covered auto accident by Economical Insurance.

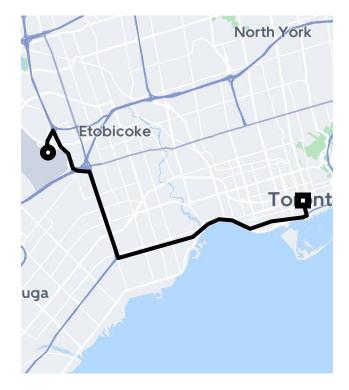
Learn more >

UberX 28.86 kilometers | 33 min

12:37 PM

Silver Dart Dr & Jetliner Rd, Mississauga, Ontario L4V, CA

1:10 PM
123 Queen St W, Toronto, ON
M5H 2M9, CA



Report lost item >

Contact support >

My trips >

Forgot password

Privacy

Terms

Uber Rasier Canada Inc. 66 Wellington Street West Suite 5300, TD Bank Tower Toronto ON M5K 1E6

Fare does not include fees that may be charged by your bank. Please contact your bank directly for inquiries.



Dustin Madsen <dmadsen.consulting@gmail.com>

# Your Saturday morning trip with Uber

**Uber Receipts** <noreply@uber.com> To: dmadsen.consulting@gmail.com 12 August 2023 at 05:22



Total CA\$51.99 August 12, 2023

# Thanks for being an Uber One member, Dustin

We hope you enjoyed your ride this morning.



CA\$51.99

You saved CA\$2.41 on this ride with Uber One and promos

Trip fare	CA\$30.24
Subtotal	CA\$30.24
Membership Benefit	-CA\$2.41
Reservation Fee	CA\$10.00
Booking Fee 😯	CA\$2.75
Toronto Accessibility Fee Recovery Surcharges	CA\$0.10

Uber Airport Surcharge	CA\$4.72
Toronto Fee Recovery Surcharges	CA\$0.33
HST	CA\$6.26

# Payments



# American Express ••••1001 8/12/23 7:21 AM

CA\$51.99

Visit the trip page for more information, including invoices (where available)

GST Registration Number 750889412RT0001

Switch Payment Method

**Download PDF** 

# You rode with FEUZI

4.96 **★** Rating

Has passed a multi-step safety screen



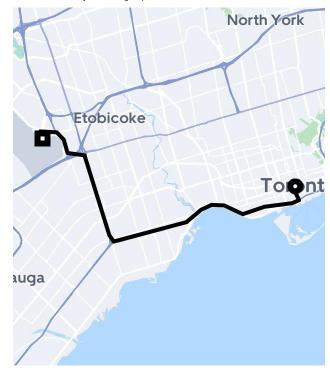
PTC License D29-5322193



Every rideshare trip in Toronto is insured for a covered auto accident by Economical Insurance.

Learn more >

- Gmail Your Saturday morning trip with Uber
- 7:01 AM
   123 Queen St W, Toronto, ON
   M5H 2M9, CA
  - 7:21 AM 6301 Silver Dart Dr, Mississauga, ON L5P 1B2, CA



Report lost item >

Contact support >

My trips >

Forgot password

Privacy

Terms

Uber Rasier Canada Inc. 66 Wellington Street West Suite 5300, TD Bank Tower Toronto ON M5K 1E6

Fare does not include fees that may be charged by your bank. Please contact your bank directly for inquiries.



Dustin Madsen <dmadsen.consulting@gmail.com>

# Your Saturday afternoon trip with Uber

**Uber Receipts** <noreply@uber.com> To: dmadsen.consulting@gmail.com 12 August 2023 at 13:46



Total CA\$59.64 August 12, 2023

# Thanks for being an Uber One member, Dustin

We hope you enjoyed your ride this afternoon.



You saved CA\$2.98 on this ride with Uber One and promos

Trip fare	CA\$51.69
Subtotal	CA\$51.69
Membership Benefit	-CA\$2.98
Booking Fee 😨	CA\$3.00
Airport Recovery Surcharge	CA\$4.50
TNC fee recovery surcharge	CA\$0.45

### GST

CA\$2.98

Visit the trip page for more information, including invoices (where available)

### **Download PDF**

This is not a payment receipt. It is a trip summary to acknowledge the completion of the trip. You will receive a trip receipt when the payment is processed with payment information.

# You rode with Darwin

4.97 ★ Rating

Has passed a multi-step safety screen



**TNDL License Number:** 

Please call 3-1-1 with any Compliments/Concerns



Every rideshare trip in Calgary is insured for a covered auto accident by Economical Insurance.

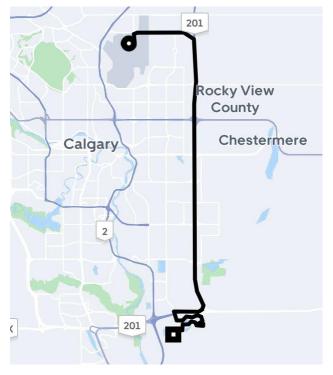
### Learn more >

UberX 44.98 kilometers | 49 min

12:57 PM
 2000 Airport Rd NE, Calgary,
 AB T2E 6W5, CA

# 1:46 PM

89 Auburn Springs Blvd SE, Calgary, AB T3M 0Z4, CA



Report lost item >

Contact support >

My trips >

Forgot password

Privacy

Terms

Uber Rasier Canada Inc. 66 Wellington Street West Suite 5300, TD Bank Tower Toronto ON M5K 1E6

Fare does not include fees that may be charged by your bank. Please contact your bank directly for inquiries.

# **Emrydia Consulting Corporation**

Industrial Gas Users Association (IGUA)



89 Auburn Springs Blvd SE Calgary, AB T3M 0Z4 Phone: 403-869-9294

Attn: Shahrzad Rahbar

851 Industrial Ave Ottawa, ON K1G 4L3 INVOICE #IGUA-2023-03 DATE: OCTOBER 18, 2023 GST 720920115-RT0001

FOR:

Invoice for second progress milestone payment. Details attached.

DESCRIPTION	HOURS	RATE	AMOUNT
Billing for Milestone #1 (\$24,750.00 + HST)			\$24,750.00
HST on services			3,217.50
	1	TOTAL	\$27,967.50

Thank you for your business!

I certify that this invoice is in confromity with the service rendered. I hereby approve this invoice and authorize its payment

Nazim Sebaa

TO:

# **Emrydia Consulting Corporation**



89 Auburn Springs Blvd SE Calgary, AB T3M 0Z4 Phone: 403-869-9294

TO:

INVOICE #IGUA-2023-FINALREV DATE: APRIL 24, 2024 GST 720920115-RT0001

FOR:

Attn: Shahrzad Rahbar Industrial Gas Users Association (IGUA) 851 Industrial Ave Ottawa, ON K1G 4L3

Invoice for time and charges of Dustin Madsen in the Enbridge 2024 rebasing application

DESCRIPTION	HOURS	RATE	AMOUNT
Dustin Madsen hours (see detailed breakdown attached)	386.20	\$330.00	\$127,446.00
HST on services			16,567.98
		TOTAL	\$144,013.98

Make all checks payable to Emrydia Consulting Corporation

Thank you for your business!

# DUSTIN MADSEN CA, CPA, CPA (IL, USA), CDP, CRRA

Tel: 403-869-9294 E-mail: dustin@emrydia.com

# Consultant, Regulatory and Financial Reporting

Summary of Work for Various Clients

- Preparation of expert testimony in a wide variety of areas including cost-of-service, revenue requirement, income tax, valuation, depreciation, cost of capital, capital expenditures and prudence.
- Hands on experience in the strategic planning, development and coordination of all elements of regulatory proceedings, including preparation of interrogatories, evidence, responding to information requests, oral testimony, and preparation of written argument and reply argument.
- Recognized expertise and detailed knowledge of financial reporting and treasury processes, utility income tax principles, and International Financial Reporting Standards ("IFRS"), including a significant amount of online and face-to-face teaching experience.

# Accounting, Finance, Tax and Regulatory Consultant

Emrydia Consulting Corporation (owner)

January 2016 – Present Calgary, Alberta

- Preparation of evidence and expert testimony both written and oral on a variety of areas, including cost-of-service, revenue requirement, income tax, valuation, depreciation, and cost of capital. Some examples of oral testimony include:
  - Witness in the New Brunswick Power 2020-21 GRA on all revenue requirement matters and retained in the New Brunswick 2023-24 GRA.
  - Prepared a depreciation study, cost-of-service study and asset valuation for a utility client in Alberta.
  - Filed expert evidence in the Northwest Territories Power Corporation 2022-23 GRA on operating costs, capitalization and depreciation matters.
  - Filed expert evidence in the ATCO Electric 2020-2022 and 2023-2025 GTAs on a variety of matters.
  - Filed expert evidence in the AltaLink 2022-2023 GTA on a variety of matters.
  - Witness in AltaLink's 2019-2021 GTA on matters related to AltaLink's proposed change in salvage collection methodology, the reasonableness of AltaLink's applied for salvage costs, and line clearance mitigation expenditures.
  - Witness in the AESO's Capacity Market Application on various matters pertaining to the AESO's application.
  - Witness in Alberta PowerLine Fort McMurray West 500 kV Project, on matters pertaining to AESO compliance with legislative requirements, and cost concerns related to routing and the competitive procurement process.
  - Witness in ATCO Electric Transmission's 2018-2019 GTA on matters related to deferral and reserve accounts, fixed and variable compensation, operating costs, head office costs, allocated costs, depreciation matters, and other various areas.
  - Witness in the 2018 Generic Cost of Capital ("GCOC") Proceeding on matters relating to generic income tax methods and the recommended capital structure.
  - Witness in ATCO Electric Transmission's 2015-2017 General Tariff Application ("GTA"), on matters relating to regulatory accounts, forecasting accuracy, approach to budgeting, operating costs, income taxes and other financial matters.
- Prepared a comprehensive cost-of-service study for an Alberta based distribution

EMRYDIA

December 2011 - Present Calgary, Alberta facility owner.

- Prepared a comprehensive business and succession plan for an Alberta based distribution facility owner.
- Completed a business valuation, including a calculation of the fair market value and replacement cost new less depreciation value of the assets of an Alberta based distribution facility owner.
- Provided advice to various parties in Alberta's regulated and unregulated utility industry on numerous matters including cost-of-service rate design, business issues, hedging, regulated rate option calculation, and other specific matters.

Business Valuation and Accounting/Regulatory Risk ConsultantNov 2015 – January 2016Berkshire Hathaway Energy CanadaCalgary, Alberta

- Advise senior management at Berkshire Hathaway Energy Canada on potential acquisition risks and rewards.
- Evaluate all financial, treasury, regulatory, operational and legal elements of potential acquisitions and coordinate with other senior team members to develop a go/no-go proposal for each potential acquisition.
- Construct and maintain a business valuation model to support calculations of the enterprise value, including development of assumptions around levered/unlevered discount rates, cash flows, terminal values and certain tax assumptions depending upon the ultimate structure of the transaction.

### **Regulatory Specialist (Consultant)**

AltaLink L.P.

November 2012 – July 2015 Calgary, Alberta

- Drafted or coordinated the drafting of AltaLink's 2012/2013 Deferral Account Application and 2015/2016 GTA, including responses to information requests, updates to the applications and other matters as required.
- Assisted AltaLink, working in conjunction with other Alberta utilities, in the drafting of the 2013 GCOC R&V application and the Utility Asset Disposition (UAD) Appeal. This work included detailed research and analysis into GCOC and UAD matters.
- Actively engaged in the AUC proceeding to assess the AltaLink sale, including responses to information requests and responding to due diligence questions from the sale itself.
- Prepared AltaLink's 2011, 2012, 2013 and 2014 Reports on Operations and Finances in compliance with AUC Rule 005.
- Assisted in the coordination of the 2013/2014 GTA oral hearing, including undertakings, preparation of cross-examination questions and monitoring of oral testimony.
- Prepared the public and confidential rebuttal evidence, responses to additional information requests, and argument/reply argument for the 2013/2014 GTA.
- Acted as AltaLink's lead representative on a variety of key applications filed by other Alberta Utilities, including PBR applications, GCOC, capital tracker applications, GTAs, Deferral Account Applications, and also the AESO's Tariff Application.
- Automated the majority of the Report on Operations model and improved the documentation related to the process, thereby reducing the time required to update the Report on Operations to a matter of a couple weeks rather than a couple months.
- Automated and refined the Hearing Cost and Legal Cost process, including filing of costs with the AUC, reconciliation of costs for accounting purposes, and installation of an improved internal information system for gathering and reporting.
- Continued monitoring of other proceedings and performed all other duties as required by the Vice President, Regulatory Rates and Tariffs.

# DUSTIN MADSEN CA, CPA, CPA (IL, USA), CDP, CRRA

Tel: 403-869-9294 E-mail: dustin@emrydia.com

# Manager, Financial Reporting (Contract)

AltaLink L.P.

April 2012 – October 2012 Calgary, Alberta

February 2012 – April 2012

Calgary, Alberta

- Managed the Financial Reporting group, and performed all duties as required of the Manager, Financial Reporting and any other duties as required.
- Coordinated the implementation of BPC to assist with the consolidation of financial results in SAP.
- Provided technical IFRS input for a variety of projects and Canadian Electricity Association matters.

# Consultant, Corporate Finance and Tax

Enerflex Ltd.

- Assisted with pre-implementation planning for IFRS 9 through 13.
- Reviewed the hedging policy in place at Enerflex to assess ongoing effectiveness and provided feedback on a new treasury management system.
- Reviewed annual financial statements, Management's Discussion and Analysis and the AIF, and provided feedback for changes and improvements to the first quarter financial statements.
- Performed a review of existing accounting policies including embedded derivative review of major contracts, lessee and lessor accounting, segmented reporting, borrowing costs, stock options and more.

Manager, Forecasts and Budgets	January 2010 – November 2011
IFRS Project Manager/Sponsor	February 2007 – December 2010
Senior Financial Accountant, Financial Reporting	February 2007 – March 2010
FortisAlberta Inc.	Calgary, Alberta

- Prepared/reviewed monthly, quarterly and annual forecasts and all associated financial analysis for the CFO in comparison to actuals.
- Review of regulatory filings and annual regulatory financial statements submitted to the Alberta Utilities Commission.
- Preparation/review of annual Business Plan for approval by Board of Directors.
- Improvement of monthly and daily treasury forecasts and involvement in debt issuances and responses to due diligence requests.
- Management and review of the monthly tax calculation and development of various tax planning strategies from both a regulatory and financial reporting perspective.
- Assisted in the review of all corporate tax processes and calculation of tax provisions, as well as, design of complex tax planning strategies.
- Responsible for the planning and oversight of the conversion to International Financial Reporting Standards including the review of all policy papers, issues lists, system conversion issues etc.
- Responsible for financial reporting, including the preparation and review of financial statements in accordance with Canadian generally accepted accounting principles, the preparation and review of the MD&A, preparation of the monthly management report, and preparation and review of accounting research and policies.
- Involved in the design, implementation and ongoing improvements of various accounting processes and internal controls within financial reporting, accounts payable, capital assets, inventory, general accounting, treasury, taxation and payroll.
- Provided IFRS transition course for all Finance staff at FortisAlberta.
- Demonstrated effective time management, organization, supervisory and problem solving/analytical skills.

Tel: 403-869-9294 E-mail: dustin@emrydia.com

# Vice Chair, CEA's Finance and Accounting Subcommittee Member

Canadian Electrical Association

May 2011 – December 2011 May 2007 – December 2011 Ottawa. Ontario

June 2009 – November 2011

January 2006 – September 2009

September 2003 – February 2007

London, England

Calgary, Alberta

- Attended all bi-annual meetings as an active participant involved in presentations at the meetings, organized special purpose conference calls, prepared response letters to both the IASB and AcSB on a variety of topics, and assisted in the special subcommittee on Rate Regulated Accounting.
- Assisted the Chair in the preparation of meeting content, arranging speakers and guest • attendees, and other duties as requested.

### **IFRS Classroom Facilitator**

**IASeminars** 

Classroom facilitator for IASeminars focusing on IFRS accounting within the Utilities • and Energy industries.

### **Experienced Module Facilitator**

CA School of Business

Facilitated Modules 1 to 5 multiple times with class sizes between 8 and 20 students. •

### **Senior Auditor**

Deloitte and Touche LLP

- Saskatoon, Saskatchewan/ Calgary, Alberta • Performed review, audit, SOX 404 and CSOX work for a variety of large multi-national clients including Petro Canada, Potash Corporation, and Superior Propane, as well as review and audit work for smaller to mid-sized for profit and not-for-profit organizations.
- Completed personal tax returns and assisted in the audit of corporate tax provisions.
- Provided audit and oil and gas accounting training to new and existing staff at Deloitte.

# **EDUCATION**

### **Certified Rate of Return Analyst**

Society of Utility and Regulatory Financial Analysts

### **Certified Depreciation Professional**

Society of Depreciation Professionals

**Certified Public Accountant** Illinois Board of Accountancy

# **Chartered Professional Accountant**

Chartered Professional Accountants of Alberta

# **Chartered Accountant**

Institute of Chartered Accountants of Alberta

# Bachelor of Commerce, Major in Accounting, with Great Distinction

University of Saskatchewan



# DUSTIN MADSEN CA, CPA, CPA (IL, USA), CDP, CRRA Tel: 403-869-9294 E-mail: <u>dustin@emrydia.com</u>

Yes

# Sean Cleary

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Sean	NON-FILING PARTICIPANT L. NAME Cleary
SERVICE PROVIDER TYPE* Consultant	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 34	HOURLY RATE 330
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

# HEARINGS

89659 3323 RT0001

Yes

Heariı	ngs Hours 208.00	Hearings Subtotal (\$) 68,640.00		Hearings Total Tax (\$) 8,923.21			<b>ings Total (\$)</b> 7,563.21
<u>N</u>	lame	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOV	/ERY						
	Read and Research Application ar	nd 20.20	330	6,666.00	13.00	866.58	7,532.58
Р	reparation of Interrogatories	20.30	330	6,699.00	13.00	870.87	7,569.87
R	Review Interrogatory Responses	6.00	330	1,980.00	13.00	257.40	2,237.40
Т	echnical Conference Preparation		330		13.00		
Т	echnical Conference Attendance	0.25	330	82.50	13.00	10.73	93.23
Т	echnical Conference Follow-up		330		13.00		
S	oubtotal of DISCOVERY	46.75		15,427.50		2,005.58	17,433.08
PROCEI P	DURAL Preparation of Issues List Submiss	sion	330		13.00		
A	ttendance at Issues List Confere	nce	330		13.00		
Р	Preparation for a Confidentiality R	equest	330		13.00		
Р	repare Submissions on Confiden	tiality	330		13.00		
Р	Preparation of Motion(s) Materials		330		13.00		
Р	Prepare Submissions on the Motic	on(s)	330		13.00		
A	ttendance at Hearing on Motion(	s)	330		13.00		
R	Review Procedural Documents		330		13.00		

CC\_Participant\_Combined.rpt - last Update 20230601

<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
Subtotal of PROCEDURAL	0.00		0.00		0.00	0.00
INTERVENOR EVIDENCE Preparation of Intervenor Evidence	90.25	330	29,782.50	13.00	3,871.73	33,654.23
Interrogatory Responses	26.50	330	8,745.00	13.00	1,136.85	9,881.85
Preparation of Witness(es) for Attendance		330		13.00		
at Hearing Subtotal of INTERVENOR EVIDENCE	116.75		38,527.50		5,008.58	43,536.08
SETTLEMENT CONFERENCE Preparation for Settlement Conference		330		13.00		
Attendance at Settlement Conference		330		13.00		
Preparation of Settlement Proposal		330		13.00		
Attendance at Presentation to Panel		330		13.00		
Subtotal of SETTLEMENT	0.00		0.00		0.00	0.00
CONFERENCE WRITTEN ARGUMENT Written Submissions	17.50	330	5,775.00	13.00	750.75	6,525.75
Subtotal of WRITTEN ARGUMENT	17.50		5,775.00		750.75	6,525.75
ORAL ARGUMENT Preparation for Oral Hearing	21.00	330	6,930.00	13.00	900.90	7,830.90
Attendance at Oral Hearing	6.00	330	1,980.00	13.00	257.40	2,237.40
Oral Submissions		330		13.00		
Attendance at Oral Submissions		330		13.00		
Subtotal of ORAL ARGUMENT	27.00		8,910.00		1,158.30	10,068.30
DECISION Review Decision		330		13.00		
Review Rate/Accounting Order		330		13.00		
Prepare Submission on Rate Order		330		13.00		
Subtotal of DECISION	0.00		0.00		0.00	0.00
OTHER Other Attendance (e.g., Intervenor Conferences)		330		13.00		
Subtotal of OTHER	0.00		0.00		0.00	0.00
TOTAL SERVICE PROVIDER FEES Total Service Provider Fees	208.00		68,640.00		8,923.21	77,563.21

# Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	Invoice
CostClaim_Cleary_Invoice_20240429.pdf	
IGUA_EB-2022-0200_Final	CV
CostClaim_Cleary CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Cleary_TimeDockets_20240429.	
pdf	

Import Message

DISBURSEMENTS	6									
Disbursement Subtotal(\$) 29.06	I	Disbursem Total Tax 3.78			C	other Taxe Total( 0.00	\$)		Tota	<b>sement</b> al(\$) 2.84
<u>Name</u>	<u>ATT.</u> REQ'D	<u>ATT.</u> PROV	<u>Qty</u>	<u>\$/</u> <u>Unit</u>	<u>Net</u> Cost	<u>HST</u> Rate	<u>HST</u>	<u>Other</u> <u>Taxes/Tip</u>	<u>Total</u>	<u>Rationale/</u> <u>Comment</u>
Scanning/Photocopy (Internal)						13.00				
Scanning/Photocopy External)						13.00				
Printing (Internal)						13.00				
Printing (External)						13.00				
Courier						13.00				
eleconference						13.00				
ravel: Air						13.00				
ravel: Car Rental						13.00				
ravel: Gas						13.00				
ravel: Car Mileage – Southern Ontario				0.40						
ravel: Car Mileage – Iorthern Ontario				0.41						
Fravel: Rail						13.00				
ravel (Other)	Yes	Yes	1.00	5.06	5.06	13.00	0.66		5.72	Meal Allowance
Parking	Yes	Yes	1.00	24.00	24.00	13.00	3.12		27.12	
Taxi						13.00				
Accommodation						13.00				
Other						13.00				
fotal Disbursements:					29.06		3.78	0.00	32.84	

# Attachments

### Attachment

IGUA\_EB-2022-0200\_Final CostClaim\_Cleary\_Costs\_20240429.pdf

Import Message

# Hearings, Consultations, Disbursements Attachments

<u>Attachment</u>	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	Invoice	Hearings	
CostClaim_Cleary_Invoice_20240429.pdf			
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Cleary CV_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Cleary_TimeDockets_20240429			
.pdf			
IGUA_EB-2022-0200_Final		Disbursements	
CostClaim_Cleary_Costs_20240429.pdf			

### Sean Cleary Time Sheet for UCA February 1 - May 15, 2023

<u>Date</u>	Hours	Task(s)	<b>Categories</b>	
02-Feb	3	Review Concentric and EGI Evidence and Prepare IRs	RAE - 1.5	IRP - 1.5
03-Feb	4	Review Concentric and EGI Evidence and Prepare IRs	RAE - 2.0	IRP - 2.0
04-Feb	5.5	Review Concentric and EGI Supporting Schedules in detail for IRs	RAE	
05-Feb	9.5	Review Concentric and EGI Evidence and Prepare IRs	RAE - 4.5	IRP - 5.0
06-Feb	8.5	Review Concentric and EGI Evidence and Prepare IRs	RAE - 4.0	IRP - 4.5
07-Feb	1	Review Concentric and EGI Evidence and Prepare IRs	RAE - 0.5	IRP - 0.5
10-Feb	1	Review Concentric and EGI Evidence and Prepare IRs	RAE - 0.5	IRP - 0.5
13-Feb	0.5	Review Concentric and EGI Evidence and Prepare IRs	RAE - 0.2	IRP - 0.3
02-Mar	1.5	Preparing Outline of evidence	IEP	
06-Mar	1.5	Preparing Outline of evidence	IEP	
09-Mar	3.5	Review IR Responses from Concentric and EGI and Prepare Notes for follow up	RIR	
10-Mar	2.5	Review IR Responses from Concentric and EGI and Prepare Notes for follow up	RIR	
13-Mar	2.5	Prep for call re IR resonses (0.5) and Call re IR responses (2.0)	IRR	
14-Mar	4	Preparing Evidence	IEP	
15-Mar	4.5	Preparing Evidence	IEP	
16-Mar	8	Preparing Evidence	IEP	
17-Mar	5	Preparing Evidence	IEP	
26-Mar		Preparing Evidence	IEP	
28-Mar		Preparing Evidence	IEP	
29-Mar	14.5	Preparing Evidence	IEP	
31-Mar	9.5	Preparing Evidence	IEP	
01-Apr	4	Preparing Evidence	IEP	
02-Apr	7.5	Preparing Evidence	IEP	
03-Apr	6	Preparing Evidence	IEP	
05-Apr	2.5	Call to discuss evidence (2.25) and review transcript (0.25)	IEP - 2.25	TCA25
08-Apr	1.5	Review undertakings and adjust evidence table	IEP	
09-Apr	3	Respond to comments on evidence	IEP	
10-Apr	1	Review and respond to emails re my evidence and others evidence	IEP	
13-Apr	0.75	Review and respond to emails re Chris Huwel summary etc.	IEP	
17-Apr	0.75	Final evidence review	IEP	
23-Apr	0.5	Read emails and browse LEI evidence	IRP	
24-Apr	5	Review LEI evidence and prepare IRs (4.25) plus call with Ian to discuss (0.75)	IRP	
25-Apr	0.5	Review and respond to lan's comments re IRs on LEI evidence	IRP	
01-May	1	Download and browse IRs on evidence	IRR	
04-May	1	Prepare IR responses	IRR	
07-May	6.5	Prepare IR responses	IRR	
08-May	9.25	Prepare IR responses	IRR	
09-May	4	Prepare IR responses	IRR	
12-May	1	Review Asa's and Chris Nime's evidence	RAE	
13-May	1.5	Respond to Ian's Comments re IR responses	IRR	
15-May	0.25	Respond to Ian's Comments re IR responses	IRR	
Total	162.5			

### Sean Cleary Time Sheet for IGUA May 15-October 17, 2023

Date H	<u>ours Task(s)</u>	<b>Categories</b>
17-May	0.5 Reading emails IR responses	IRR
18-May	0.5 Reviewing S&P reports	RAE
29-Jun	0.5 Reading and responding Ian's email	PREP-OH
18-Jul	1 Review Hearing Transcripts	ATT-OH
22-Jul	3 Preparation and review for hearings participation - including 2 hour call with Ian	PREP-OH
24-Jul	2 Credit metrics and review and prep for hearings	PREP-OH
25-Jul	6.5 Monitor virtual hearings and prepare for hearings participation	PREP-OH
26-Jul	9 Monitor virtual hearings and prepare for hearings participation	PREP-OH
27-Jul	5 Drive to Toronto and participate in hearings	ATT-OH
28-Jul	4 review transcripts and make corrections and start undertakings	W-SUB
29-Jul	2 Respond to undertakings	W-SUB
01-Aug	0.5 read and respond to emails	W-SUB
02-Aug	1.5 Prepare summary table of Alberta and Newf Decisions for Ian	W-SUB
05-Aug	4.5 Prepare summary table of Alberta and Newf Decisions for Ian and call with Ian	W-SUB
28-Aug	2 Review and comment on EGI Argument	W-SUB
29-Aug	0.5 Review and comment on EGI Argument	W-SUB
17-Oct	2.5 Review and comment on EGI Final Argument plus summarize Alberta (AUC Decision)	W-SUB
Total	45.5	

Feb 1- May 15 total hours

162.5

Total Hours submitted in May 2023 after Milestone 1

105

Remaining Hours to May 15

57.5

Total hours submitted in October 2023

103

539 Golfview Court Oakville, ON L6M4W6

October 18, 2023

Industrial Gas Users Association

# **Re: Invoice # IGUA-2 - for Work Completed for the Industrial Gas Users Association** (IGUA)

To Whom It May Concern:

Please consider this as proof of my invoice for services rendered over the February 1 – October 17, 2023 period to IGUA as per the contract dated February 10, 2023, which expires June 1, 2024, for work associated with the EB-2022-0200 proceedings before the Ontario Energy Board. In this letter I have presented hours worked multiplied by the hourly rate which I am advised IGUA will use in submitting a claim for cost recovery for payments made under our contract.

I have now completed all of the tasks associated with both Milestones 1 and 2 of this contract, as outlined in Schedule A of that contract. I have attached two accompanying detailed worksheets of hours worked for IGUA that show:

162.5 hours from February 1 - May 15, 2023 45.5 hours from May 16 – October 17, 2023

My May 15, 2023 invoice to IGUA was for the maximum payable after completing Milestone 1 repeated below:

May 15 Invoice #1:	
Maximum Payable after Milestone 1	= \$34,650.00
Plus HST (@13%)	= <u>\$ 4,504.50</u>
Maximum Payable	= \$39,154.50

The current invoice is for the amount not yet paid despite having worked the majority of the total hours before May 15, and including hours worked between May 16 and October 17, as noted below:

Current Invoice:	
Balance Payable after Milestone 2	= \$33,990.00
Plus HST (@13%)	= <u>\$ 4,418.70</u>
Balance Payable	= \$38,408.70

### **TOTAL PAYABLE** = \$38,408.70

Please send a cheque for \$38,408.70 to me at the following address: 539 Golfview Court Oakville, ON L6M4W6 Do not hesitate to contact me by email (<u>sean.cleary@.queensu.ca</u>) or by phone (613-539-5627) if you have any additional questions.

Thank you.

Yours truly,

s truly, J. Cler

Dr. Sean Cleary, CFA

### DR. SEAN CLEARY, CFA

Queen's School of Business

Goodes Hall, Queen's University Kingston, Ontario, K7L 3N6 (<u>613) 533-3384</u> FAX <u>533-2321</u> E-mail: scleary@business.queensu.ca 4014 Bath Road Kingston, Ontario K7M 4Y4 M (<u>613) 539-5627</u>

### Areas of Interest

Research: Empirical studies in corporate finance and investments.

Teaching: Investments, Business Finance and Corporate Finance. I have also taught numerous courses and delivered seminars in many preparatory programs designed to prepare students to write exams for all three levels of the CFA program and the CSC for over 10 years.

### **Education**

University of Toronto	Ph.D., Finance, 1993 - January, 1998			
Saint Mary's University	M.B.A., Finance, 1987-1989			
Saint Francis Xavier University	B.Ed., Secondary, 1983-84			
Acadia University	B.A., Economics, 1979-1983			

### Career Experience

Queen's University	Professor of Finance
	Chair, Institute of Sustainable Finance (July 2018- present) Director of Master of Finance (July 2008 – June 2014; January 2017- December 2022)
Saint Mary's University	Associate Dean and Pengrowth Nova Scotia Professor in Petroleum Financial Management: (July 2007 – June 2008)
	Professor: (September 2006 – June 2007)
	Associate Professor: Finance (September 2000 - June 2001, July 2002 – August 2006)
	Assistant Professor: Finance (July 1998 - August 2000)
	Lecturer: Finance and Statistics, (1990-1993, Full Time)

The University of Lethbridge	Assistant Professor: Finance (1997- 1998, Full Time)
The University of Toronto	Lecturer: Business Finance (Undergraduate and MBA) (1994-1997, Part Time)
Ryerson University Time)	Lecturer: Investment Finance (1994-1997, Full
WSC Investment Services	Instructor for CSC and CFA Seminars and Prepare Course Materials and Deliver Seminars for various professional organizations; (1996-present, Part Time)
Royal Bank of Canada	Commercial Lender; (1989-1990, Full Time)

### Expert Witness Experience:

September 2019-April 2020 – Utilities Consumer Advocate (UCA) of Alberta Prepared evidence regarding an appropriate ROE and capital structure for regulated Alberta utilities.

July-November 2018 – Newfoundland Consumer Advocate Prepared evidence regarding an appropriate capital structure for Newfoundland Power.

September 2017-June 2018 – Utilities Consumer Advocate (UCA) of Alberta Prepared and testified regarding an appropriate ROE and capital structure for regulated Alberta utilities.

April 2017-September 2018 – Utilities Consumer Advocate (UCA) of Alberta Preparing evidence and testifying regarding appropriate risk margins for commodity risk for regulated Alberta utilities.

July-October 2016 – Manitoba Public Insurance Prepared a report and testified regarding interest rate forecasts.

September 2015-July 2016 – Utilities Consumer Advocate (UCA) of Alberta Prepared and testified regarding an appropriate ROE and capital structure for regulated Alberta utilities.

December 2015-June 2016 – Newfoundland Consumer Advocate Prepared and testified regarding an appropriate capital structure for Newfoundland Power.

April-November 2014 – Utilities Consumer Advocate (UCA) of Alberta Prepared and testified regarding appropriate risk margins for commodity risk for regulated Alberta utilities. December 2013-August 2014 – Utilities Consumer Advocate (UCA) of Alberta Prepared and testified regarding an appropriate ROE and capital structure for regulated Alberta utilities.

### **Publications:**

#### **Academic Journals:**

"The Cost of Delaying to Invest: A Canadian Perspective," 2022, Forthcoming, Finance Research Letters. Co-authored with Neal Willcott, Smith School of Business, Queen's University.

"Post-Crisis M&As and the Impact of Financial Constraints" 2020. <u>Journal of Financial Research</u>, Vol 43 No. 2, 407-454. Co-authored with Ashrafee Hossain, Memorial University. Recipient of "Outstanding Article Award" for 2020.

"Institutional Investors, Monitoring and Corporate Finance Policies," 2017. <u>International Journal of Managerial Finance</u>, Vol. 13, Issue No. 2, 186-212. Co-authored with Jun Wang, The University of Western Ontario. Outstanding Paper Award.

"The Cash Effect and Market Reaction over Three Decades," 2016. <u>Journal of Accounting and</u> <u>Finance</u>, December 2016, 93-115. Co-authored with Fatma Sonmez, Queen's University.

"An Efficient and Functional Model for Predicting Bank Distress: In and Out of Sample Evidence," 2016. Co-authored with Greg Hebb, Dalhousie University. Journal of Banking and Finance, Vol. 64, March 2016, 101–111.

"Managerial Practices and Corporate Social Responsibility," 2015. Co-authored with Najah Attig, Saint Mary's University. Journal of Business Ethics, Vol. 131 (No. 1), 121-136.

"Organization Capital and Investment Cash Flow Sensitivity: The Effect of Management Quality Practices," 2014. Co-authored with Najah Attig, Saint Mary's University. Lead Article - <u>Financial Management</u>, Vol. 43 (No. 3), 473-504.

"Corporate Legitimacy and Investment-Cash Flow Sensitivity," 2014. Co-authored with Najah Attig, Saint Mary's University, Sadok El Ghoul, University of Alberta, and Omrane Guedhami, South Carolina University. Journal of Business Ethics, Vol. 121 (No. 2), 297-314.

"Debt Rating Initiations: Natural Evolution or Opportunistic Behavior?" 2013. Co-authored with Laurence Booth, University of Toronto, and Lynnette Purda, Queen's University. <u>Journal of Modern Accounting and Auditing</u>, Vol. 9 (No. 12), 1574-1595.

"Institutional Investment Horizons and the Cost of Equity Capital," 2013, Co-authored with

Najah Attig, Saint Mary's University, Sadok El Ghoul, University of Alberta, and Omrane Guedhami, South Carolina University. <u>Financial Management</u>, Vol. 42 (No.2), 2013, 441-477. Selected as one of 8 papers (since 2005) that was included in a Special Virtual edition on

"Monitoring Management," 2018.

"Institutional Investment Horizon and Investment-Cash Flow Sensitivity." Co-authored with Najah Attig, Saint Mary's University, Sadok El Ghoul, University of Alberta, and Omrane Guedhami, South Carolina University. Journal of Banking & Finance, Vol. 36, (No. 4), 2012, 1164-1180.

"Capital Market Developments in the Post-October 1987 Period: A Canadian Perspective." Coauthored with Laurence Booth from the University of Toronto. <u>Review of Accounting and</u> <u>Finance</u>, Vol. 8 (No.2), 2009, 155-175.

"Cash Flow Volatility, Financial Slack and Investment Decisions," 2008, <u>China Finance Review</u>, Number 1, Vol 2, 63-86. Co-authored with Laurence Booth from the University of Toronto.

"The Investment Nature of Income Trusts and Their Role in Diversified Portfolios," <u>Canadian</u> <u>Journal of Administrative Sciences</u>. Co-authored with Greg MacKinnon from Saint Mary's University, (Vol 24(4)), 2007, 314-325.

"The U-Shaped Investment Curve: Theory and Evidence." Co-authored with Paul Povel, University of Minnesota, and Michael Raith, University of Southern California, Lead article, Journal of Financial and Quantitative Analysis, Vol. 42 (No. 1), March 2007, 1-39.

"Financial Constraints and Investment: An Alternative Empirical Framework." Co-authored with Bert D'Espallier, Hasselt University, Anales de Estudios Economicos y Empresariales, Vol. 17, 2007, 9-41.

"Dividend Smoothing and Debt Ratings." Co-authored with Laurence Booth and Varouj Aivazian, both from the University of Toronto. Lead article, <u>Journal of Financial and Quantitative Analysis</u>, Vol. 41(No. 2), June 2006, 439-452.

"International Corporate Investment and the Relationships between Financial Constraint Measures," Journal of Banking and Finance, Volume 30 (5), 2006, 1559-1580.

"Are U.S. Variables Good Predictors of Foreign Equity Risk Premiums?" 2006. Co-authored with John Schmitz, President, Sci-Vest Capital Management Inc., <u>The Cyprus Journal of Sciences</u>.

"Income Trusts: Past Performance and Future Prospects." Co-authored with Greg MacKinnon of Saint Mary's University. <u>Canadian Investment Review</u>, Winter 2005, 53-54.

"Dividend Policy and the Role of Contracting Environments" <u>FSR Forum</u>, December 2005, 13-20. Co-authored with Laurence Booth and Varouj Aivazian, both from the University of Toronto.

"Corporate Investment and Financial Slack: International Evidence," <u>The International Journal of</u> <u>Managerial Finance</u>, 2005, 140-163. "Industry Affects Do Not Explain Momentum in Canadian Stock Returns," <u>Investment</u> <u>Management and Financial Innovations,</u> 2005(2), 49-60. Co-authored with John Schmitz, President, Sci-Vest Capital Management Inc., and David Doucette, Saint Mary's University.

"Do Emerging Market Firms Follow Different Dividend Policies from U.S. Firms?" <u>The Journal of Financial Research</u>, Fall 2003, 371-387. Co-authored with Laurence Booth and Varouj Aivazian, both from the University of Toronto.

"Dividend Policy and the Organization of Capital Markets." <u>Journal of Multinational Financial</u> <u>Management</u>, Spring 2003, 101-121. Co-authored with Laurence Booth and Varouj Aivazian, both from the University of Toronto.

"The Risk-Adjusted Performance of Closed-End Funds and the Impact of Discounts." <u>Journal of</u> <u>Today</u>, December 2002, 119-133. Co-authored with Greg Hebb of Dalhousie University and Greg MacKinnon from Saint Mary's University.

"Transactions Costs for TSE-Listed Stocks," <u>Canadian Investment Review</u>, Spring 2002, 20-26. Co-authored with John Schmitz, President, Sci-Vest Capital Management Inc., and Kevin Kerr, TD Securities, Toronto.

"What Has Worked on Bay Street," <u>Canadian Investment Review</u>, Winter 2001, 25-34. Coauthored with John Schmitz, President, Sci-Vest Capital Management Inc.

"The Sensitivity of Canadian Corporate Investment to Liquidity," <u>Canadian Journal of Administrative Sciences</u>, September 2000, 217-232.

"Diversification with Canadian Stocks: How Much is Enough?" <u>Canadian Investment Review</u>, Fall 1999, 21-25. Co-authored with David Copp, Mount Allison University.

"The Relationship Between Firm Investment and Financial Status," <u>Journal of Finance</u>, April 1999, 673-692. Received at least one vote from the editorial board for the top Corporate Finance Paper Award during the year of publication.

"Momentum in Canadian Stock Returns," <u>Canadian Journal of Administrative Sciences</u>, September 1998, 279-291. Co-authored with Michael Inglis, University of Toronto.

One of five nominations for "best 1998 CJAS paper."

#### **Books and Book Chapters:**

Introduction to Corporate Finance, first five editions, John Wiley & Sons Canada Limited. The first three editions were co-authored with Laurence Booth from the University of Toronto (2007, 2010, 2013), and the fourth and fifth editions (2016, 2020) co-authored with Laurence Booth and Ian Rakita from Concordia University. This is an Introductory Canadian Finance text that was written from "scratch."

<u>Corporate Finance</u>, First US Edition. Co-authored with Laurence Booth from the University of Toronto and Pamela (Petersen) Drake) from Virginia Commonwealth University. John Wiley & Sons. In progress – publication date 2013.

<u>Investments: Analysis and Management</u>, First, Second and Third Canadian Editions, co-authored with Charles P. Jones of North Carolina State University, John Wiley & Sons Canada Limited (1999, 2004, 2008). I was solely responsible for the development of all three Canadian editions, the first being based on an adaptation of the sixth U.S. edition, authored by Professor Jones.

<u>The Canadian Securities Exam Fast Track Study Guide</u>, First, Second, Third and Fourth Editions (2001, 2006, 2009, 2013) – sole author. Published by John Wiley & Sons Canada Limited.

<u>Finance in a Canadian Setting</u>, Sixth Edition, co-authored with Peter Lusztig and Bernard Schwab, both of the University of British Columbia, John Wiley & Sons Canada Limited, March, 2001. I was solely responsible for the development of this edition of the text, based on an adaptation of the fifth edition, authored by Professors Lusztig, Schwab and Randall Morck of University of Alberta.

<u>Market Efficiency</u>, a chapter in the CFA Institute Investment Series book entitled Investments: Principles of Portfolio and Equity Analysis (Wiley, 2011), which is currently used as CFA Level 1 material within the Candidate Body of Knowledge.

"Introduction to Financial Markets," (on-line course). Developed all seven modules for the Bourse de Montreal, 2002.

"Derivatives for the Retail Investor," (on-line course). Developed two modules (Forwards and Future, and Options) for the Bourse de Montreal, 2002.

"Derivatives for the Institutional Investor," (on-line course). Developed two modules (Options and Derivatives for Equity and Index Products) for the Bourse de Montreal, 2002.

"Investment Strategies and Asset Allocation," Chapter 5, <u>Investment Management Techniques</u>, The Canadian Securities Institute, 1999.

"Equity Securities," Chapter 12, <u>Investment Management Techniques</u>, The Canadian Securities Institute, 1999.

#### Cases:

"Time Value of Money: The Buy versus Rent Decision," with Stephen Foerster. Ivey Publishing, August 2014.

#### **Conference Proceedings:**

I have published numerous articles in conference proceedings, as summarized below:

European Financial Management Association annual conference, 2008, 2006, 2005, 2002.

Hawaii International Conference on Business, 2002.

Multinational Finance Society annual conference, 2001.

Atlantic Schools of Business annual conferences, 2000, 1998.

ASAC annual conferences, 2006, 2001, 2000.

#### **Conference Best Paper Awards:**

"The Information Content of Institutional Investment Horizon: Evidence from Firms' Implied Cost of Equity," 2012, Working Paper, Co-authored with Najah Attig, Saint Mary's University, Sadok El Ghoul, University of Alberta, and Omrane Guedhami, South Carolina University. Chosen Best Paper in Banking and Finance – 2012 European Business Research Conference.

"Income Trusts: Why All the Fuss and What About the Future?" 2006. Co-authored with Greg MacKinnon from Saint Mary's University. Chosen as the best paper in the Finance division for the 2006 ASAC Conference in Banff, Alberta.

"The U-Shaped Investment Curve: Theory and Evidence" 2004. Co-authored with Paul Povel, University of Minnesota, and Michael Raith, Rochester University. Presented at the 2004 NFA

Conference and received award as the "Best Paper in Managerial Finance."

"The Sensitivity of Canadian Corporate Investment to Liquidity." Published in conference proceedings for the 1999 ASAC Conference in Saint John, New Brunswick.

Chosen as the best paper in the Finance division for this conference.

#### **Conference Presentations:**

Keynote Speaker (Finance Area) - ASAC 2012 Annual Conference.

I have presented papers at numerous conferences, as summarized below:

World Finance Conference, 2015, 2014, 2013, 2011, 2010.

Paris Financial Management Conference, 2014.

Northern Finance Association annual conferences, 2022, 2013, 2011, 2010, 2008, 2005, 2004, 2002, 2000, 1996.

Multinational Finance Society annual conferences, 2010, 2001, 1999.

European Financial Management Association annual conference, 2008, 2006, 2005, 2002.

Hawaii International Conference on Business, 2002.

Eastern Finance Association annual conferences, 2003, 2000.

Atlantic Schools of Business annual conferences, 2000, 1998, 1996.

ASAC annual conferences, 2006, 2000, 1999.

Financial Management Association annual conferences, 2013, 2011, 2010, 2008, 2005, 2004, 2001, 1999, 1996.

Southern Finance Association annual conference, 2022, 2016, 2008.

#### Finance Workshops (invited presentations):

Atlantic Canada CFA Society, 2006. Melbourne Centre for Financial Studies, 2006. Melbourne CFA Society, 2006. Monash University (Caulfield), 2006. University of Melbourne, 2006. University of New South Wales, 2006. University of Sydney, 2006. University of Manitoba CGA Finance Conference 2005 Wilfred Laurier University, 2002. University of Western Ontario, 2001. York University, 2001, 2010. Dalhousie University, 2001, 2013. Queen's University, 2000. Saint Mary's University, 2002, 2001, 2000, 1999. Schulich School of Business, 2010. Concordia University, 2013.

The University of Waterloo, 2015.

### **Research Grants**

Co-investigator for an Insight Development Grant in the amount of \$55,626 from the Social Sciences and Humanities Research Council of Canada (SSHRC) for the 2016 to 2018 period (Principal investigator – Jun Wang of the University of Western Ontario).

Co-investigator for a Standard Research Grant in the amount of \$129,980 from the Social Sciences and Humanities Research Council of Canada (SSHRC) for the 2013 to 2017 period (Principal investigator - Najah Attig of Saint Mary's University).

Awarded four Research Grants of \$90,000 each over three years from the Smith School of Business at Queen's University (2008-11; 2011-14; 2014-17; 2018-2020).

Principal investigator for a Standard Research Grant in the amount of \$60,500 from the Social Sciences and Humanities Research Council of Canada (SSHRC) for the 2008 to 2011 period.

Co-investigator for a Standard Research Grant in the amount of \$111,000 from the Social Sciences and Humanities Research Council of Canada (SSHRC) for the 2006 to 2009 period (Principal investigator - Najah Attig of Saint Mary's University).

Principal investigator for a Standard Research Grant in the amount of \$70,118 from the Social Sciences and Humanities Research Council of Canada (SSHRC) for the 2003 to 2006 period.

Awarded a Research Grant of \$25,000 per year for three years from the Schulich School of Business at York University (July 2001).

Principal investigator for a Standard Research Grant in the amount of \$61,530 from the Social Sciences and Humanities Research Council of Canada (SSHRC) for the 1999 to 2002 period.

Awarded Research Grant for \$1,500 from Saint Mary's University (2003-2004).

Awarded Research Grant for 2,500 from Saint Mary's University (2002-2003).

Awarded Research Grant for \$2,500 from Saint Mary's University (2000-2001).

Awarded Research Grant for \$3,030 from Saint Mary's University (1999-2000).

Awarded Research Grant for \$2,000 from Saint Mary's University (1998-99).

Research Grant in the amount of \$20,000 from the Intellectual Infrastructure Partnership Program (IIPP) at the University of Lethbridge (1997-98).

Research Grant from the University of Lethbridge Research Fund for \$4,500 (1997-98).

#### Work-in Progress

"The Leverage-Profitability Puzzle Revisited," 2018, Working Paper. Co-authored with Alan Douglas, and Tu Nguyen, both from the University of Waterloo.

"Does Dual Holdings by Institutional Investors Make a Big Difference?" 2018, Working Paper.

Co-authored with Jun Wang, the University of Western Ontario, and Keke Song, University of Melbourne.

"Leverage, Financial Flexibility, and Dividend Smoothing: An Empirical Investigation," 2018, Working Paper. Co-authored with Alan Douglas, the University of Waterloo.

#### **Professional Activities**

Member - CFA Society Toronto Advisory Council (January 2018-present) Editorial Board – *Managerial Finance* (July 2017-present) Associate Editor (Finance area) for the Canadian Journal of Administrative Sciences (2017-present); Editor (Finance area) (2014-2016). Associate Editor for the European Journal of Finance (2008-present). Editorial Advisory Board – Investor Lit (2013-present) Senior Advisor - Toronto CFA Professional Development Committee (2014-2021); Chair (2013-14); Vice-Chair (2012-13) Chair – Awards Committee – CFA Toronto Board of Directors (2008-2011) President - Board of Directors for the Atlantic Canada CFA Society (2007-2008). Served on the board from 2001 to 2008. Editorial Board - Canadian Investment Review (2008-2011). Served as a reviewer for the Review of Financial Studies, the Journal of Financial and Quantitative Analysis, Journal of Business, Financial Management, Journal of Money, Credit and Banking, the Journal of Banking and Finance, the European Journal of Finance, the Journal of Corporate Finance, the Journal of Applied Economics, the Multinational Finance Journal, Financial Review, Journal of International Financial Management, the International Review of Economics and Finance, the Canadian Journal of Administrative Sciences, the Review of Financial Economics, the Journal of Risk Finance, and for the Journal of Management and Governance.

Reviewer for several SSHRC grant applications.

External reviewer/examiner for several tenure and renewal applications received for professors at other universities, as well as for Ph.D. dissertations.

Conference chair for 2001 Northern Finance Association Annual Meeting, held in Halifax.

Conference organizing committee and Reviewer for several conferences.

Completed the Chartered Financial Analyst (CFA) program, and awarded the CFA designation. Completed the Professional Financial Planning Course offered by the Canadian Securities Institute, as well as the Canadian Securities Course (CSC).

Completed the Investment Funds Institute of Canada's Mutual Fund Course.

Prepared course materials for several "on-line" finance courses.

Instructor for Canadian Securities Course Seminars.

Prepared Course Materials for the Canadian Securities Institute.

Delivered Seminars for the Canadian Securities Institute on the Canadian Securities

Course (CSC), Fixed Income Securities and Portfolio Management Techniques.

#### Student Supervision

External Examiner for several PhD students.

Supervisor, Queen's PhD Finance Students, Neal Willcott 2019-present, and Dhruv Baswal 2022present.

Supervisor, Queen's MSc Finance Students, Aashray Kaudinya 2022-present, Dhruv Baswal 2022, Ehsan Dehghanizadeh 2019, Wayne Charles 2010.

Served as co-director for the Investment Management of Portfolios in Atlantic Canada Training Program (IMPACT) at Saint Mary's University. This innovative program has students manage a portfolio of over \$150,000 of "real" money (2005-2008).

Served as faculty advisor to several MBA students preparing their Management Research Project (MRP) in finance (FIN 669) to satisfy their MBA requirements:

Robert March, "Using Canadian and US Macroeconomic Variables to Predict Canadian Equity Risk Premiums" (1999).

Simon Sagar, "Do Canadian Investors Overreact?" (2000). Simon also presented his paper at the 1999 Atlantic Schools of Business (ASB) conference in Halifax.

Kevin Kerr, "Bid-Ask Spreads and Commissions on the TSE" (2000).

Scott LeBlanc, "An Investigation of Derivative Use: A Case Study of Cambior Inc." (2000).

David Doucette, "Industry Momentum in Canadian Stock Returns" (2001).

Balakrishna Murty, "The Effect of Board Composition on Firm Value: Some Canadian Evidence" (2003).

Bashir Jallow, "US Economic Factors and International Equity Risk Premia Predictability" (2005).

Kathy Isnor, "The Effect of Corporate Governance Policies on the Corporate Bond Rating" (2005).

#### References

#### **Dr. Laurence Booth**

Professor of Finance University of Toronto 105 St. George Street Toronto, Ontario M5S 3E6 Phone: (<u>416).978-6311</u> Email: <u>Booth@Rotman.utoronto.ca</u>

### Dr. Paul Halpern

Professor of Finance Rotman School of Management University of Toronto

105 St. George Street

Toronto, Ontario M5S 3E6

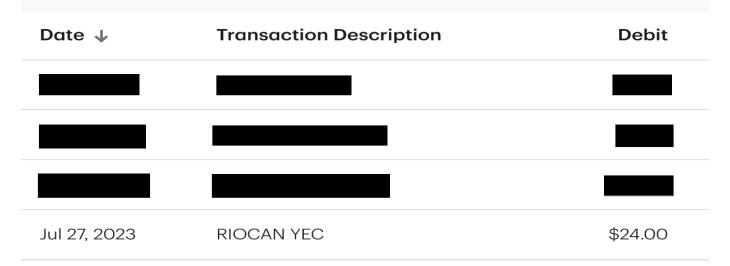
Phone: (<u>416) 978-5703</u> Email : <u>Halper@Rotman.utoronto.ca</u>

### **Dr. Gordon Sick**

Professor of Finance Haskayne School of Business University of Calgary Calgary, Alberta T5N 1N4 Phone : (403) 220-7165 E-mail: gordon.sick@haskayne.ucalgary.ca







(

# Asa Hopkins

CASECOST CLAIMEB-2022-0200 - Phase 1: Rates:EB-2022-0200 : 1 : CathyDistribution: Enbridge Gas Inc.Galler		INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted	
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Asa	<b>NON-FILING PARTICIPANT L. NAME</b> Hopkins	
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 22	HOURLY RATE 330	
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No	
HST NUMBER 89659 3323 RT0001	<b>HEARINGS</b> Yes	CONSULTATIONS No	DISBURSEMENTS Yes	

# **HEARINGS**

Hearings Hours 149.25	Hearings Subto 49,252.50	ings Subtotal (\$) 9,252.50		Hearings Total Tax (\$) 0.00		Hearings Total (\$) 49,252.50	
<u>Name</u>		<u>Hours</u>	Hourly Rate	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY							
Read and Research Appli Evidence	cation and	17.00	330	5,610.00	0.00		5,610.00
Preparation of Interrogato	ries	11.25	330	3,712.50	0.00		3,712.50
Review Interrogatory Res	ponses	2.00	330	660.00	0.00		660.00
Technical Conference Pre	eparation		330		0.00		
Technical Conference Atte	endance		330		0.00		
Technical Conference Fol	low-up		330		0.00		
Subtotal of DISCOVERY		30.25	330	9,982.50	0.00	0.00	9,982.50
PROCEDURAL Preparation of Issues List	Submission		330		0.00		
Attendance at Issues List	Conference		330		0.00		
Preparation for a Confider	ntiality Request		330		0.00		
Prepare Submissions on	Confidentiality		330		0.00		
Preparation of Motion(s) Materials			330		0.00		
Prepare Submissions on t	the Motion(s)		330		0.00		
Attendance at Hearing on	Motion(s)		330		0.00		
Review Procedural Docur	nents		330		0.00		

CC\_Participant\_Combined.rpt - last Update 20230601

	Name	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
	Subtotal of PROCEDURAL	0.00	330	0.00	0.00	0.00	0.00
INTE	RVENOR EVIDENCE Preparation of Intervenor Evidence	59.00	330	19,470.00	0.00		19,470.00
	Interrogatory Responses	19.75	330	6,517.50	0.00		6,517.50
	Preparation of Witness(es) for Attendance at Hearing		330		0.00		
	Subtotal of INTERVENOR EVIDENCE	78.75	330	25,987.50	0.00	0.00	25,987.50
SETT	LEMENT CONFERENCE Preparation for Settlement Conference		330		0.00		
	Attendance at Settlement Conference		330		0.00		
	Preparation of Settlement Proposal		330		0.00		
	Attendance at Presentation to Panel		330		0.00		
	Subtotal of SETTLEMENT CONFERENCE	0.00	330	0.00	0.00	0.00	0.00
WRIT	TEN ARGUMENT Written Submissions	4.75	330	1,567.50	0.00		1,567.50
	Subtotal of WRITTEN ARGUMENT	4.75	330	1,567.50	0.00	0.00	1,567.50
ORAL	ARGUMENT						
	Preparation for Oral Hearing	12.75	330	4,207.50	0.00		4,207.50
	Attendance at Oral Hearing	22.75	330	7,507.50	0.00		7,507.50
	Oral Submissions		330		0.00		
	Attendance at Oral Submissions		330		0.00		
	Subtotal of ORAL ARGUMENT	35.50	330	11,715.00	0.00	0.00	11,715.00
DECI	SION Review Decision		330		0.00		
	Review Rate/Accounting Order		330		0.00		
	Prepare Submission on Rate Order		330		0.00		
	Subtotal of DECISION	0.00	330	0.00	0.00	0.00	0.00
OTHE	R Other Attendance (e.g., Intervenor Conferences)		330		0.00		
	Subtotal of OTHER	0.00	330	0.00	0.00	0.00	0.00
ΤΟΤΑ	L SERVICE PROVIDER FEES Total Service Provider Fees	149.25		49,252.50		0.00	49,252.50

## Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	CV
CostClaim_Synapse_Hopkins	
CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Invoice
CostClaim_Synapse_Hopkins_Invoices_202	
40429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Synapse_Hopkins_TimeDockets_	
20240429.pdf	

Import Message

DISBURSEMENTS										
Disbursement Subtotal(\$) 1,478.64		O	ther Taxe Total( 0.00	\$)	Tota	<b>sement</b> al(\$) 78.64				
<u>Name</u>	<u>ATT.</u> <u>REQ'D</u>	<u>ATT.</u> PROV	<u>Qty</u>	<u>\$/</u> <u>Unit</u>	<u>Net</u> Cost	<u>HST</u> Rate	<u>HST</u>	<u>Other</u> <u>Taxes/Tip</u>	<u>Total</u>	<u>Rationale/</u> Comment
Scanning/Photocopy (Internal)	No	No				0.00				
Scanning/Photocopy (External)	No	No				0.00				
Printing (Internal)	No	No				0.00				
Printing (External)	No	No				0.00				
Courier	No	No				0.00				
Teleconference	No	No				0.00				
Travel: Air	Yes	Yes	1.00	829.67	829.67	0.00			829.67	
Travel: Car Rental	No	No				0.00				
Travel: Gas	No	No				0.00				
Travel: Car Mileage –				0.40						
Southern Ontario Travel: Car Mileage – Northern Ontario				0.41						
Travel: Rail	Yes	Yes	1.00	19.56	19.56	0.00			19.56	
Travel (Other)	Yes	Yes	1.00	132.52	132.52	0.00			132.52	Meal Allowance
Parking	No	No				0.00				
Taxi	Yes	Yes	1.00	96.89	96.89	0.00			96.89	
Accommodation	Yes	Yes	2.00	200.00	400.00	0.00			400.00	
Other	No	No				0.00				
Total Disbursements:					,478.64		0.00	0.00	1,478.64	

## Attachments

IGUA\_EB-2022-0200\_Final CostClaim\_Synapse\_Hopkins\_Costs\_20240424.pdf

Import Message

## Hearings, Consultations, Disbursements Attachments

<u>Attachment</u> IGUA_EB-2022-0200_Final	<u>Document Type</u> CV	<u>Claim Type</u> Hearings	Import Message
CostClaim_Synapse_Hopkins CV 20240429.pdf			
IGUA_EB-2022-0200_Final	Invoice	Hearings	
CostClaim_Synapse_Hopkins_Invoices_20 240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_Hopkins_TimeDocket			
s_20240429.pdf IGUA_EB-2022-0200_Final		Disbursements	
CostClaim_Synapse_Hopkins_Costs_2024			
0424.pdf			

Attachment

# Invoice Support Detail Rpt Billed

As of 2023-01-11 15:15:35 Eastern Standard Time/EST • Generated by Michelle Marquis

Filtered By		
Show: All timecards		
Billable equals True		
Billed equals True		
Project: Invoicing equals ,Standard		
T&M,Fixed Fee Monthly,Fixed Fee		
Milestone,T&M Milestone		
Billing,Other Non-Standard		
Schedule, Upfront Payment then		
T&M,Multi-funder,Yet to be		
Determined		
Project: Active equals True		
Start Date greater or equal		
12/1/2022		
End Date less or equal 12/31/2022		
Total Billable Amount not equal to		
USD 0		
Project contains 22-130		
Invoiced equals True		

			Total		Total Billable	
Project: Project Name 1	Resource 个	End Date	Hours	Bill Rate	Amount	Week Notes

22-130 Screen Enbridge filing	Asa Hopkins	12/16/2022	3.75		begin review of EGI filing (Concentric study) review EGI filing (Concentric report, survey of other sections); coordinate review with Kenji	RAE
		12/23/2022	10.5		review/catalog filing documents review P2NZ report assumptions review coordination w/ Paul; set up notes document; analyze risk, depreciation Concentric report review Concentric report review EGI filing (ETO and safe bets); confer w/ Paul re: his takeaways from scenario analysis; call w/ IGUA + Ian	
		12/30/2022	1.5		prep for and attend call with IGUA and counsel	IEP

	Paul Rhodes	12/23/2022	10.25		Internal meeting on initial steps, begin review Reviewing forecast filings reviewing scenarios, two energy transition studies Finish review, review notes and relay findings to Asa	RAE
Total			26			

#### Booked Time by Milestone

	End Date -	•		January 2023		February 2023		March 2023		April 2023		May 2023		June 2023		July 2023		August 2023		September 202	3	Total	
				Sum of Total Su	m of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Tota	I Sum of Total Bill	able Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total Billable	Sum of Total	Sum of Total	Sum of Total	Sum of Total
/lilestone ↑	Resource 个			Hours Bi	lable Amount	Hours	Billable Amount	Hours	Billable Amount	Hours	Amount	Hours	Billable Amount	Hours	Billable Amount	Hours	Billable Amount	Hours	Amount	Hours	Billable Amount	Hours	Billable Amount
Attendance at oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.0	)	D \$0.0	00 00	0 \$	0.00	0 \$0	00	0 \$0.00	22.2	\$7,342.5	0 0	\$165.0	)	0 \$0.0	0 22.	75 \$7,507.
nterrogatory responses	Alice Napoleon	Analyst 20+	330	0	\$0.00		\$0.0	)	D \$0.0	00 00	0 \$	0.00 2.7	5 \$907	50	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 2.	75 \$907.
	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.0	0	D \$0.0	00 00	0 \$	0.00 19.7	\$6,517	50	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 19.	75 \$6,517.
	Sol Deleon	Analyst 20+	330	0	\$0.00		\$0.0	0	D \$0.0	00 00	0 \$	0.00	1 \$330	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0	1 \$330.
	Tim Woolf	Analyst 20+	330	0	\$0.00		\$0.0	0	D \$0.0	00 00	0 \$	0.00	5 \$165	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 0	).5 \$165.
Preparation for oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.0	2	D \$0.0	00 00	0 \$	0.00	0 \$0	00 0.	.25 \$82.50	1	2 \$3,960.0	0 0	.5 \$165.0	)	0 \$0.0	0 12.	75 \$4,207.
Preparation of interrogatories	Asa Hopkins	Analyst 20+	330	0.5	\$165.00	10.7	\$3,547.5	2	\$0.0	00	0 \$	0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 11.	25 \$3,712.
	Sol Deleon	Analyst 20+	330	0	\$0.00	2.	\$825.0	)	D \$0.0	00 00	0 \$	0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 2	2.5 \$825.
Preparation of intervenor evidence	Asa Hopkins	Analyst 20+	330	5.5	\$1,815.00		\$2,310.0	3 3	\$10,230.0	9.	5 \$3,13	5.00	6 \$1,980	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0	\$19,470.
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00		\$0.0	)	D \$0.0	00	7 \$1,61	0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0	7 \$1,610.
	Paul Rhodes	Analyst 0-5	170	0	\$0.00		\$0.0	4.	5 \$765.0	0 7.	5 \$1,27	5.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0	12 \$2,040.
	Sol Deleon	Analyst 20+	330	0	\$0.00	7.	\$2,475.0	46.2	\$15,262.5	50	2 \$66	0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 55.	75 \$18,397.
Read and Research Application and Evidence	Alice Napoleon	Analyst 20+	330	1	\$330.00		\$0.0		D \$0.0	00 00	0 \$	0.00	0 \$0		0 \$0.00		0 \$0.0	0	0 \$0.0		0 \$0.0		1 \$330.
	Asa Hopkins	Analyst 20+	330	1.25	\$412.50	1.	\$495.0	)	\$0.0	00		0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 2.	75 \$907.
	Paul Rhodes	Analyst 0-5	170	1.5	\$255.00		\$0.0	2	D \$0.0	00 00	0 \$	0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 1	L.5 \$255.
	Sol Deleon	Analyst 20+	330	0.75	\$247.50		\$0.0	2	D \$0.0	00 00	0 \$	0.00	0 \$0	00	0 \$0.00		0 \$0.0	0	0 \$0.0	)	0 \$0.0	0 0.	75 \$247.
	Tyler Fitch	Analyst 6-10	230	1	\$230.00		\$0.0	2	D \$0.0			0.00		00	0 \$0.00		0 \$0.0		0 \$0.0		0 \$0.0		1 \$230.
Review interrogatory responses	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.0		2 \$660.0			00.0	0 \$0		0 \$0.00		0 \$0.0		0 \$0.0		0 \$0.0		2 \$660
Written submissions	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.0	0	D \$0.0		0 \$	0.00	0 \$0	00	0 \$0.00		2 \$660.0	0.0	25 \$82.5	2	.5 \$825.0	0 4.	75 \$1,567.
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00		\$0.0	2	D \$0.0	00 00		0.00	0 \$0	00	0 \$0.00	( )	0 \$0.0	0 0	.5 \$115.0	)	0 \$0.0		).5 \$115.
otal				11.5	\$3,455.00	29.2	\$9,652.5	83.7	5 \$26,917.5	50 21	6 \$6.68	0.00	0 \$9.900	00 0.	.25 \$82.50	36.2	5 \$11,962.5	0 1.3	75 \$527.5	2	.5 \$825.0	0 221.	25 \$70,002.



## Asa S. Hopkins, Ph.D., Vice President

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-661-3248 ahopkins@synapse-energy.com

## **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics Inc**., Cambridge, MA. *Vice President*, April 2019 – present, *Principal Associate*, January 2017 – March 2019.

Conducts research and writes expert testimony and reports related to state energy policy and planning, energy efficiency, strategic electrification, deep decarbonization, and the present and future of electric and gas utility regulatory and business models.

**Vermont Public Service Department,** Montpelier, VT. *Director of Energy Policy and Planning,* October 2011 – December 2016

#### State energy planning and utility regulation

• Directed the year-long development of the 2016 Vermont Comprehensive Energy Plan, including stakeholder meetings, public forums, and coordination of contributions from other departments and the Governor's office. Primary author of the executive summary and five chapters.

- Led the Department's approach to establishing budgets and performance targets for energy efficiency utilities. Oversaw staff conducting program evaluation and savings verification.
- Submitted testimony and conducted analysis in support of public advocacy and negotiation in prominent litigated regulatory proceedings.

#### Policy development, analysis, and advocacy

• Developed the structure of Vermont's 2015 Renewable Energy Standard, including its novel "energy transformation" requirement. Worked with stakeholders to develop support for the policy and with the legislature to shepherd it to passage. This policy will result in more reduction of Vermont's GHG emissions than any others passed in the last 15 years.

• Led execution of Vermont's Total Energy Study, which examined technology and policy pathways for Vermont to meet GHG emission and renewable energy goals.

• Led cost-benefit analysis of Vermont's existing net metering structure and led the development of departmental proposals for a new structure.

• Prepared and delivered public, stakeholder, and interagency presentations, including to agency and business leaders, legislative committees, and the governor.

• Oversaw programs providing financing, technical, and process assistance to clean energy projects.

During tenure, Vermont rose in the rankings on national clean energy state scorecards: ACEEE State Energy Efficiency Scorecard from 5th to 3rd and U.S. Clean Tech Leadership Index from 10th to 3rd.

**U.S. Department of Energy**, Washington, DC. *Special Advisor to the Under Secretary for Science / AAAS Science and Technology Policy Fellow*, September 2010 – August 2011

Dr. Hopkins served as the assistant project director for the Department of Energy's first Quadrennial Technology Review. In this role, he coordinated a team that solicited input from Department of Energy and National Laboratory staff and scientists, ran a series of public workshops, facilitated coordination with the White House, developed a set of technology assessments, and ultimately drafted the Report on the First QTR, published Sept. 27, 2011.

Lawrence Berkeley National Laboratory, Berkeley, CA. *Environmental Energy Policy Postdoctoral Fellow*, January 2009 – August 2010

Conducted technical and economic analysis to support the Department of Energy in setting the energy efficiency standards that appliances must meet in order to be sold in the United States.

California Institute of Technology, Pasadena, CA. Graduate Research Fellow, 2002 – 2008

Los Alamos National Laboratory, Los Alamos, NM. Post-Baccalaureate Researcher, Theoretical Division, June 2001 – June 2002

## **EDUCATION**

**California Institute of Technology**, Pasadena, CA Doctor of Philosophy in Physics, 2008 Master of Science in Physics, 2007

#### Haverford College, Haverford, PA

Bachelor of Science *summa cum laude*, in Physics with minors in Computer Science and Growth and Structure of Cities, 2001

## SELECTED PROJECTS

**The Future of Gas Utilities** – Dr. Hopkins leads Synapse's work in the area of the future of gas utilities. He and his team are assisting a number of clients to understand the future of gas utilities in the context of deep building decarbonization objectives. This work includes assisting Conservation Law Foundation in Massachusetts Department of Public Utilities Docket 20-80 (an investigation into "the role of gas local distribution companies as the Commonwealth achieves its target 2050 climate goals"); Natural Resources Defense Council in New York and Nevada's regulatory proceedings regarding the future of gas; the Colorado Energy Office regarding approaches to decision-making in the face of uncertainty, in the context of Colorado's regulatory proceedings regarding gas utility Clean Heat plans and building decarbonization; the County of San Diego (with the University of California San Diego) in developing the buildings and utilities portion of its Regional Decarbonization Framework; the Maryland Office of People's Counsel in modeling the impact of the state's decarbonization objectives on utility sales and finances; and the District of Columbia Department of Energy and Environment in assessing Washington Gas Light's Climate Business Plan.

**Puerto Rico Energy Bureau** – Synapse has provided extensive support to Puerto Rico's electricity regulator since 2015. Dr. Hopkins has coordinated the engagement since 2018. Dr. Hopkins has led or substantially contributed to the development of Puerto Rico's first energy efficiency and demand response regulations; emergency microgrid regulations; and the review of the island's second Integrated Resource Plan and subsequent processes to optimize resilience using both transmission and distributed generation resources.

*Massachusetts Comprehensive Energy Plan* – On behalf of the Massachusetts Department of Energy Resources (the state energy office), Synapse and Sustainable Energy Advantage assisted DOER and its sister agencies in the development of Massachusetts's first Comprehensive Energy Plan. Dr. Hopkins assisted DOER leadership in defining the scope and approach for the CEP, to distinguish it from other state planning processes. He worked with Pat Knight to develop an approach to modeling energy transformations toward low-carbon alternatives in electricity, buildings, and transportation that are consistent with state policy and approaches while being grounded in stock turnover rates and feasible policies and programs.

**Northeastern Regional Assessment of Strategic Electrification** – On behalf of the Northeast Energy Efficiency Partnerships, Synapse and Meister Consultants Group identified the opportunity, costs, and benefits available if strategic electrification is adopted as a key strategy for decarbonization in New York and New England. Dr. Hopkins, Kenji Takahashi, and Pat Knight are primary authors of the resulting report, published in July 2017, which characterizes the current markets for efficiency electrification technologies (such as heat pumps and electric vehicles), identifies policies to overcome market barriers, assesses the state of electrification technologies, and models the extent of electrification both possible given market dynamics and required to meet regional greenhouse gas emission goals.

**2016 Vermont Comprehensive Energy Plan** – Directed the year-long development of the 2016 plan, including setting its strategic approach to current Vermont energy planning challenges and grounding it in quantitative analysis. Developed the public engagement process, then hosted expert stakeholder meetings and public forums. Adapted the results of the 2014 Total Energy Study to produce scenarios that illustrate the proposed pathways identified in the plan. Coordinated contributions from staff and leaders in other departments, and from the Governor's office. Wrote the executive summary and 5 of the 14 chapters.

**Total Energy Study** – Scoped and led a legislatively-mandated report on policy and technology pathways to meet Vermont's renewable energy and greenhouse gas emission goals. Designed and facilitated a focus-group-based stakeholder engagement process to identify technology and policy visions for analysis. Retained outside modeling consultant, then worked closely with them to build credible business-as-usual and policy case models of Vermont's energy economy to the year 2050 using the TIMES/FACETS integrated assessment model. Translated those model results to make REMI PI+

calculations of impact on Vermont GDP and jobs. Synthesized qualitative and quantitative results into intermediate and final reports identifying key outcomes for policy design.

**Demand Resources Plan Proceedings** – In each of three, three-year cycles, led the development of the Department of Public Service's positions regarding appropriate budgets, rate and bill impacts, and performance targets for Vermont's energy efficiency utilities. Analyzed current efficiency utility performance to calibrate expected future performance. Negotiated performance metrics that reflect policy priorities. Developed new regulatory and budget treatment of research and development for behavioral energy efficiency programs.

**Quadrennial Technology Review** – As Assistant Project Director, managed the project activities of the eight-person core team for the U.S. Department of Energy's first Quadrennial Technology Review. This review of DOE's energy technology activities established a robust framework and codified principles used to build DOE's energy technology portfolio (including identifying the appropriate and highest-leverage activities for DOE relative to the private sector and other government actors). Extensive collaboration and discussions within DOE, as well the public through a series of workshops with industry, government, national laboratory, and academic participation, culminated in the publication of the first DOE-QTR report in September 2011. Coordinated successful stakeholder workshops; facilitated focus groups. Drafted discussion papers that served as the basis for extensive intra- and inter-agency and White House coordination and negotiation. Primary author of the final report's section on building and industrial energy efficiency. Project was completed on schedule and on budget, and met its critical milestones.

## REPORTS

Hopkins, A. S., A. Napoleon, K. Schultz. 2023. *The High Cost of New York Gas Utilities' Leak- Prone Pipe Replacement Programs*. Synapse Energy Economics for Natural Resources Defense Council.

Carlson, E., P. Eash-Gates, B. Fagan, A. Hopkins. 2023. *Review of Northwest Natural Gas 2022 Integrated Resource Plan—Final Report: Assessing Compliance with the Oregon IRP Guidelines and the Greenhouse Gas Reduction Requirements from the Climate Protection Program.* Synapse Energy Economics for Staff of Oregon Public Utilities Commission.

Hopkins, A. S., A. Napoleon, J. Litynski, K. Takahashi, J. Frost, S. Kwok. 2022. *Climate Policy for Maryland's Gas Utilities: Financial Implications*. Synapse Energy Economics for Maryland Office of the People's Counsel.

Kwok, S., K. Takahashi, J. Litynski, A. S. Hopkins. 2022. Memo: Massachusetts DPU Docket-2080: Proposed "Common Regulatory Framework." Synapse Energy Economics for Conservation Law Foundation.

Hopkins, A. S. S. Kwok, J. Litynski, A. Napoleon, K. Takahashi. 2022. Memo: Evaluation of Draft Consultant Reports in Massachusetts DPU Docket 20-80. Synapse Energy Economics for Conservation Law Foundation. Hopkins, A. S., A. Napoleon, S. Kwok. 2022. *Factsheet: Hydrogen & Low-Carbon Gases in New York's Electricity Future*. Synapse Energy Economics for Sierra Club.

Hopkins A. S., P. Eash-Gates, J. Frost, S. Kwok, J. Litynski, K. Takahashi. 2022. "Decarbonization of Buildings." In *San Diego Regional Decarbonization Framework*, edited by SDG Policy Initiative, School of Global Policy and Strategy, University of California San Diego. San Diego.

Frost, J. S. Kwok, K. Takahashi, A.S. Hopkins, A. Napoleon. 2021. *New York Heat Pump Trajectory Analysis*. Synapse Energy Economics for NRDC.

Hopkins, A. S., A. Napoleon, K. Takahashi. 2021. *A Framework for Long-Term Gas Utility Planning in Colorado*. Synapse Energy Economics for the Colorado Energy Office.

Woolf, T., A. Napoleon, A. Hopkins, K. Takahashi. 2021. *Long-Term Planning to Support the Transition of New York's Gas Utility Industry*. Synapse Energy Economics for Natural Resources Defense Council.

Frost, J., J. Litynski, S. Letendre, A. S. Hopkins. 2021. *Economic Impacts of Climate Change on Cape Cod*. Synapse Energy Economics for Eastern Research Group and the Cape Cod Commission.

Hopkins, A.S., P. Knight, J. Frost. 2021. *Rhode Island Carbon Pricing Study*. Synapse Energy Economics and the Cadmus Group for the Rhode Island Office of Energy Resources.

Kallay, J., A.S. Hopkins, C. Odom, J. Ramey, J. Stevenson. R. Broderick, R. Jeffers, B. Garcia. 2021. *The Quest for Public Purpose Microgrids for Resilience: Considerations for Regulatory Approval.* Synapse Energy Economics for Sandia National Labs.

Takahashi, K., E. Sinclair, A. Napoleon, A. S. Hopkins, D. Goldberg. 2021. *Evaluation of EnergyWise Low-Income Energy Efficiency Program in Mississippi – Program Performance, Design, and Implications for Low-Income Efficiency Programs*. Synapse Energy Economics for Sierra Club and Gulf Coast Community Foundation.

Kallay, J., A. Napoleon, J. Hall, B. Havumaki, A. S. Hopkins, M. Whited, T. Woolf, J. Stevenson, R. Broderick, R. Jeffers, B. Garcia. 2021. *Regulatory Mechanisms to Enable Investments in Electric Utility Resilience*. Synapse Energy Economics for Sandia National Laboratories.

Kallay, J., A. Napoleon, B. Havumaki, J. Hall, C. Odom, A. S. Hopkins, M. Whited, T. Woolf, M. Chang, R. Broderick, R. Jeffers, B. Garcia. 2021. *Performance Metrics to Evaluate Utility Resilience Investments*. Synapse Energy Economics for Sandia National Laboratories.

Kallay, J., S. Letendre, T. Woolf, B. Havumaki, S. Kwok, A. S. Hopkins, R. Broderick, R. Jeffers, K. Jones, M. DeMenno. 2021. *Application of a Standard Approach to Benefit-Cost Analysis for Electric Grid Resilience Investments*. Synapse Energy Economics for Sandia National Laboratories.

Hopkins, A. S., S. Kwok, A. Napoleon, C. Roberto, K. Takahashi. 2021. *Scoping a Future of Gas Study.* Synapse Energy Economics for Conservation Law Foundation.

Kallay, J., A. S. Hopkins, A. Napoleon, B. Havumaki, J. Hall, M. Whited, M. Chang., R. Broderick, R. Jeffers,K. Jones, M. DeMenno. 2021. *The Resilience Planning Landscape for Communities and ElectricUtilities.* Synapse Energy Economics for Sandia National Laboratories.

Shipley, J., A. S Hopkins, K. Takahashi, D. Farnsworth, 2021. *Renovating Regulation to Electrify Buildings:* A Guide for the Handy Regulator. Regulatory Assistance Project.

Letendre, S., E. Camp, J. Hall, B. Havumaki, A. S. Hopkins, C. Odom, S. Hackel, M. Koolbeck, M. Lord, L. Shaver, X. Zhou. 2020. *Energy Storage in Iowa: Market Analysis and Potential Economic Impact.* Prepared by Synapse Energy Economics and Slipstream for Iowa Economic Development Authority.

Eash-Gates, P., K. Takahashi, D. Goldberg, A. S. Hopkins, S. Kwok. 2021. *Boston Building Emissions Performance Standard: Technical Methods Overview*. Synapse Energy Economics for the City of Boston.

Camp, E., C. Odom, A. S. Hopkins. 2020. *Cost-Effectiveness of Proposed New Mexico Environment Department Oil and Gas Emissions Reduction Rules: Impacts and Co-Benefits of Reduced Volatile Organic Compound Emissions from the Oil and Gas Industry.* Synapse Energy Economics for Environmental Defense Fund.

Camacho, J., K. Takahashi, A. S. Hopkins, D. White. 2020. *Assessment of Proposed Energize Eastside Project*. Synapse Energy Economics and MaxETA Energy for the City of Newcastle, WA.

Takahashi, K., J. Frost, D. Goldberg, A. S. Hopkins, K. Nishio, K. Nakano. 2020. *Survey of U.S. State and Local Building Decarbonization Policies and Programs*. Presented at the 2020 ACEEE Summer Study of Energy Efficiency in Buildings.

Hopkins, A. S., A. Napoleon, K. Takahashi. 2020. *Gas Regulation for a Decarbonized New York: Recommendations for Updating New York Gas Utility Regulation.* Synapse Energy Economics for Natural Resources Defense Council.

Takahashi, K., A. S. Hopkins, J. Rosenkrantz, D. White, S. Kwok, N. Garner. 2020. *Assessment of National Grid's Long-Term Capacity Report*. Synapse Energy Economics for the Eastern Environmental Law Center.

Camp, E., N. Garner, A. S. Hopkins. 2019. *Cost-Effectiveness of Comprehensive Oil and Gas Emissions Reduction Rules in New Mexico: Impacts of Reduced Methane and Volatile Organic Compound Emissions from the Oil and Gas Industry*. Synapse Energy Economics for the Environmental Defense Fund.

Camp, E., A. S. Hopkins, D. Bhandari, N. Garner, A. Allison, N. Peluso, B. Havumaki, D. Glick. 2019. *The Future of Energy Storage in Colorado: Opportunities, Barriers, Analysis, and Policy Recommendations.* Synapse Energy Office for the Colorado Energy Office.

Kallay, J., A. S. Hopkins, J. Frost, A. Napoleon, K. Takahashi, J. Slason, G. Freeman, D. Grover, B. Swanson. 2019. *Net Zero Energy Roadmap for the City of Burlington, Vermont*. Synapse Energy Economics and Resource Systems Group for Burlington Electric Department. Camp, E., B. Fagan, J. Frost, D. Glick, A. S. Hopkins, A. Napoleon, N. Peluso, K. Takahashi, D. White, R. Wilson, T. Woolf. 2018. *Phase 1 Findings on Muskrat Falls Project Rate Mitigation*. Synapse Energy Economics for Board of Commissioners of Public Utilities, Province of Newfoundland and Labrador.

Hopkins, A. S., P. Knight, N. Peluso. 2018. *Massachusetts Comprehensive Energy Plan: Commonwealth and Regional Demand Analysis.* Synapse Energy Economics, Sustainable Energy Advantage, and MA DOER for the Massachusetts Department of Energy Resources.

Knight, P., D. Goldberg, E. Malone, A. S. Hopkins, D. Hurley. 2018. *Getting SMART: Making sense of the Solar Massachusetts Renewable Target (SMART) program*. Synapse Energy Economics for Cape Light Compact.

Hopkins, A. S., K. Takahashi, D. Glick, M. Whited. 2018. *Decarbonization of Heating Energy Use in California Buildings: Technology, Markets, Impacts, and Policy Solutions*. Synapse Energy Economics for the Natural Resources Defense Council.

Woolf, T., A. S. Hopkins, M. Whited, K. Takahashi, A. Napoleon. 2018. *Review of New Brunswick Power's 2018/2019 Rate Case Application*. In the Matter of the New Brunswick Power Corporation and Section 103(1) of the Electricity Act Matter No. 375. Prepared by Synapse Energy Economics for the New Brunswick Energy and Utilities Board Staff.

Hopkins, A. S., K. Takahashi. 2017. *Alternatives to Building a New Mt. Vernon Substation in Washington, DC*. Synapse Energy Economics for the District of Columbia Department of Energy and Environment.

Hopkins, A. S., S. Fields, T. Vitolo. 2017. *Policies to Cost-Effectively Retain Existing Renewables in New York*. Synapse Energy Economics for the Alliance for Clean Energy New York.

Vitolo, T., A. S. Hopkins. 2017. *The Mounting Losses at CWLP's Dallman Station: A Study of the Relative Costs of Operating Each of the Four Dallman Units*. Synapse Energy Economics for the Sierra Club.

Hopkins, A. S., A. Horowitz, P. Knight, K. Takahashi, T. Comings, P. Kreycik, N. Veilleux, J. Koo. 2017. *Northeast Regional Assessment of Strategic Electrification*. Synapse Energy Economics and Meister Consultants Group for the Northeast Energy Efficiency Partnerships.

Vermont Public Service Department. 2016. Vermont Comprehensive Energy Plan.

Vermont Public Service Department. 2016. Act 199 Study on Manufacturing Competitiveness and Energy.

Vermont Public Service Department. 2014. *Total Energy Study: Final Report on a Total Energy Approach to Meeting the State's Greenhouse Gas and Renewable Energy Goals*.

Vermont Public Service Department. 2014. *Evaluation of Net Metering in Vermont Conducted Pursuant to Act 99 of 2014*.

Vermont Public Service Department. 2013. *Total Energy Study: Report to the Vermont General Assembly on Progress Toward a Total Energy Approach to Meeting the State's Greenhouse Gas and Renewable Energy Goals.* 

Vermont Public Service Department. 2013. *Evaluation of Net Metering in Vermont Conducted Pursuant to Act 125 of 2012*.

U.S. Department of Energy. 2011. Report on the First Quadrennial Technology Review. DOE/S-0001.

## ARTICLES

Hopkins, A. S., K. Takahashi, S. Nadel. 2020. "Keep warm and carry on: Electrification and efficiency meet the 'polar vortex'." Proceedings of the 2020 ACEEE Summer Study of Energy Efficiency in Buildings.

Hopkins, A. S., K. Takahashi, L. David. 2018. "Challenges and Opportunities for Deep Decarbonization through Strategic Electrification under the Utility Regulatory Structures of the Northeast". Proceedings of the 2018 ACEEE Summer Study on Energy Efficiency in Buildings, August 2018.

Hopkins, A. S. Review of *Burn Out*, by Dieter Helm, *Science* 356, Issue 6339 (May 2017): 709, https://doi.org/10.1126/science.aam8696

Dunsky, P., A. S. Hopkins, K. Vaillancourt, M. Fabbri. 2016. "Achieving an Ultra-Low Carbon Future: Technology and Policy Pathways to Meet Vermont's GHG Goals," *ACEEE Summer Study on Energy Efficiency in Buildings*.

Greenblatt, J., A. S. Hopkins, V. Letchert, M. Blasnik. 2012. "Energy Use of U.S. Residential Refrigerators and Freezers: Function Derivation Based on Household and Climate Characteristics," *Energy Efficiency*. 10.1007/s12053-012-9158-6.

Hopkins, A. S., L. Gu, A. Lekov, J. Lutz, G. Rosenquist. 2011. "Simulating a Nationally Representative Housing Sample Using EnergyPlus," Lawrence Berkeley National Laboratory Report, LBNL-4420E.

Lutz, J.D., A. S. Hopkins, V. Letschert, V.H. Franco, A. Sturges. 2011. "Using National Survey Data to Estimate Lifetimes of Residential Appliances," *HVAC&R Research*.

Alvarez, R.M., A. S. Hopkins, B. Sinclair. 2010. "Mobilizing Pasadena Democrats: Measuring the Effects of Partisan Campaign Contacts," *The Journal of Politics* 72, 31.

Nielsen, A.E.B., A. S. Hopkins, H. Mabuchi. 2009. "Quantum Filter Reduction for Measurement-Feedback Control Via Unsupervised Manifold Learning," *New Journal of Physics* 11, 105043.

Hopkins, A. S., B. Lev, H. Mabuchi. 2004. "Proposed Magnetoelectrostatic Ring Trap for Neutral Atoms," *Physical Review A* 70, 053616.

Hopkins, A. S., K. Jacobs, S. Habib, K. Schwab. 2003. "Feedback Cooling of a Nanomechanical Resonator," *Physical Review B* 68, 235328.

#### TESTIMONY

**Washington DC Public Service Commission (FC 1169):** Provided direct and rebuttal expert testimony regarding Washington Gas's application for an increase in rates, from the standpoint of the District of Columbia's climate and clean energy policies. On behalf of the District of Columbia Government, November 2022 and January 2023.

**New York Public Utilities Commission (Case No. 22-E-0064 and 22-G-0065):** Direct and Rebuttal Testimony of Alice Napoleon and Asa Hopkins regarding Con Edison's proposed gas-side investments as greenhouse gas mitigation strategies and gas extension allowance rule changes and the need for long-term planning for the gas system and adequacy of the company's non-pipe alternatives framework. On behalf of Natural Resources Defense Council, May 2022.

**Régie de l'énergie du Québec (R-4156-2021):** Testified as an expert on the business risk facing Quebec's natural gas utilities related to the energy transition, as part of a proceeding to set the utilities' cost of capital and capital structure. On behalf of the Industrial Gas Users Association.

**Vermont Public Utility Commission (Case No. 21-1107-PET and 21-1109-PET):** Addressed the impact of GlobalFoundries proposed "self-managed utility" on the general good of the state and Vermont's energy policy, with particular focus on the impact on environmental soundness and greenhouse gas emissions mitigation. On behalf of Conservation Law Foundation, June 2021.

**Public Service Commission of Wisconsin (Docket No. 5-CG-106):** Addressed the need for a pair of liquified natural gas facilities in light of the fossil fuel use reductions required to meet state and federal goals for mitigating climate change and the potential for cost-effective demand-side alternatives. On behalf of the Sierra Club, June 2021.

**Vermont Senate Finance Committee**: Provided expert testimony in the form of a presentation entitled "Updating Vermont's Renewable Energy Standard" to the Vermont Senate Finance Committee in January of 2020. Dr. Hopkins presented on the history of the standard, what has changed since 2015, and future potential.

**Vermont Public Utility Commission (Case No. 17-1247-NMP):** Addressed the consistency of a proposed solar generation facility with the Vermont Comprehensive Energy Plan. On behalf of Derby GLC Solar LLC, January 2018.

**Washington DC Public Service Commission (FC 1142):** Provided expert testimony regarding the merits of the proposed merger of Washington Gas and AltaGas, Ltd. with respect to the impact on environmental quality, with particular emphasis on the impact of utility management and its approach to climate change on the ability of the District to achieve its climate change mitigation goals. On behalf of the District of Columbia Government.

**Régie de l'énergie du Québec (R-3986-2016):** Provided an expert report and testimony regarding best practices in utility demand response programs, in the context of Hydro Québec Distribution's ten-year

Supply Plan. On behalf of the Regroupment national des conseils régionaux de l'environment du Québec (RNCREQ).

**Vermont Public Service Board (Dockets No. 8586 and 8685):** Addressed the need for a proposed solar PV generator and its associated contract under PURPA rates, its economic impact on the state, and its consistency with the Vermont Electric Plan. On behalf of the Vermont Department of Public Service, July 2016.

**Vermont Public Service Board (Docket No. 8684):** Proposed avoided energy and capacity cost rates for use in Rule 4.100, Vermont's implementation of PURPA. On behalf of the Vermont Department of Public Service, October 2015 and May 2016.

**Vermont Public Service Board (Docket No. 8600):** Addressed the need for a proposed solar PV generator, its economic impact on the state, and its consistency with the Vermont Electric Plan. On behalf of the Vermont Department of Public Service, March 2016.

**Vermont Public Service Board (Docket No. 8525):** Introduced a memorandum of understanding between the DPS and Green Mountain Power regarding a proposed rate design, with particular focus on new critical peak price rates to be available and marketed. On behalf of the Vermont Department of Public Service, November 2015.

**Vermont Public Service Board (Docket No. 7970):** Addressed whether increases in the expected cost of a gas pipeline expansion project were sufficient to warrant reopening the underlying proceeding, particularly with respect to the need for the project, the economic impact on the state, and consistency with the general good of the state and the Vermont Comprehensive Energy Plan. On behalf of the Vermont Department of Public Service, May 2015.

**Vermont Public Service Board (Docket No. 8311):** Addressed how statutory criteria for the use of electric energy efficiency funds for electrification measures (such as heat pumps) might be met. On behalf of the Vermont Department of Public Service, January 2015.

**Vermont Public Service Board (Docket No. 7862):** Presented the Department's positions regarding whether Entergy Vermont Yankee should be granted a continued certificate of public good, with particular focus on the need for the plant, the economic benefit of continued operation, consistency with the Vermont Electric Plan, and whether continued operation by Entergy was in the general good of the state. On behalf of the Vermont Department of Public Service, October 2012 and April 2013.

**Vermont Public Service Board (Docket No. 7833):** Addressed the need for a proposed biomass electric generator and its consistency with the Vermont Electric Plan. On behalf of the Vermont Department of Public Service, October and November 2012; February and September 2013.

**Vermont Public Service Board (Docket No. 7770):** Addressed a number of topics related to the merger of Green Mountain Power and Central Vermont Public Service, most particularly the disposition of a windfall repayment due to ratepayers. On behalf of the Vermont Department of Public Service, January and March 2012.

**Vermont Public Service Board (Docket No. 7815):** Addressed consistency of a proposed long-term PPA with the Vermont Electric Plan and the utility's integrated resource plan. On behalf of the Vermont Department of Public Service, January 2012.

## SELECTED PRESENTATIONS

Hopkins, A. S. "IIJA, IRA, and the Growing Federal Role in Transmission—and Why States Should Care," presented at the National Association of State Energy Officials Annual Meeting, October 2022.

Hopkins, A. S., J. Litynski, A. Takasugi. "Policy approaches to increasing electricity affordability in California," presented to various California stakeholders on behalf of Natural Resources Defense Council, February 2022.

Shipley, J., Hopkins, A. S., Takahashi, K., & Farnsworth, D. "Renovating regulation to electrify buildings: A guide for the handy regulator," presented with Regulatory Assistance Project, January 2021.

Hopkins, A. S. 2019. "Efficiency, Electrification, and Renewables in New England and Puerto Rico" at 2019 ACEEE Energy Efficiency as a Resource Conference, October 2019.

Hopkins, A. S. 2019. "Strategic electrification and winter cold snaps: A resource and a challenge" at 2019 ACEEE Energy Efficiency as a Resource Conference, October 2019.

Panelist on "Deep Dive Session on State and Local Electrification Roadmaps" at Electric Power Research Institute (EPRI)/Northeast Energy Efficiency Partnerships (NEEP) Electrification Summit, August 2019.

Hopkins. A. S., K. Takahashi, D. Lis. 2018. "Decarbonization through Strategic Electrification Meets Utilities and Regulation in the Northeast" at the 2018 ACEEE Summer Study on Energy Efficiency in Buildings, August 2018.

Hopkins, A. S. 2019. "Strategic Electrification: Impacts and approaches to meeting decarbonization goals in the northeastern states (and elsewhere)" at Lawrence Berkeley National Laboratory, Energy Technologies Area, August 2018.

Hopkins, A. S. 2017. "Utility Performance Regulation" at the Western States Regional Meeting of the National Association of State Energy Officials, April 2017.

Panelist on "A Regulatory Perspective of Grid Transformation" at the IEEE Innovative Smart Grid Technologies Conference, September 2016.

Panelist on the "Comprehensive Energy Plan Update" at the Renewable Energy Vermont Conference, October 2015.

Hopkins, A. S. 2015. "Vermont's Total Energy Study." Presentation at the National Association of State Energy Officials Energy Policy Outlook Conference, February 2015.

Panelist on "The Role of Energy Efficiency in Mitigating Winter Peak Issues" at the Association of Energy Services Professionals (Northeast Chapter) & Northeast Energy Efficiency Council, November 2014.

Hopkins, A. S. 2014. "Total Energy Study." Presentation at the Renewable Energy Vermont Conference, October 2014.

Panelist on "State Energy & Economic Policy Impacts on Industry Transformation" at the Power Industry Transformation Summit, April 2014.

Hopkins, A. S. 2008. "Mobilizing Pasadena Democrats: Measuring the Effects of Partisan Campaign Contacts." Presentation at the American Political Science Association Annual Meeting, August 2008.

#### HONORS, AWARDS, AND FELLOWSHIPS

Certified Public Manager, 2014 AAAS Science and Technology Policy Fellowship, 2010 – 2011 Dean's Award for Community Service, 2009 Delegate to the 2004 Democratic National Convention NSF Graduate Research Fellow, 2002 – 2005 Los Alamos National Laboratory Student Distinguished Performance Award, 2002 Two-time first-team Academic All American, 2000 and 2001 Barry M. Goldwater Scholar, 1999 – 2001

#### **OTHER ACTIVITIES**

NASEO - Electricity Committee: Affiliate Co-Chair, 2020-present Newton, MA Citizens Commission on Energy, Member 2017-present Guest on Synapse Energy Economics, Inc.'s *Energy Nerd Show,* Aug 6, 2020 Board Member, National Association of State Energy Officials, 2015-16 Industrial Advisory Board for ARPA-E-funded project "Packetized Energy Management," 2016 Burlington, VT Public Works Commission: Member 2012 –2014, Chair 2015

Resume updated May 2023



**BILL TO** 851 Industrial Avenue PO Box 30 Ottawa, ON K1G 4L3

## **INVOICE 23-003-01-REVISED**

**DATE** 06/12/2023 **TERMS** Net 30

DUE DATE 07/12/2023

DESCRIPTION	QTY	RATE	AMOUNT
interrogatory responses on the evidence are filed	1	18,950.00	18,950.00
Please Remit to: Synapse Energy Economics 485 Massachusetts Ave, Suite 3 Cambridge, MA 02139			
		TOTAL DUE	\$18,950.00

Questions about this invoice? Contact: The finance department E-mail: finance@synapse-energy.com Phone: 617-661-3248

Fed ID# 04-3316408



**BILL TO** 851 Industrial Avenue PO Box 30 Ottawa, ON K1G 4L3

## **INVOICE 23-003-02**

**DATE** 09/20/2023 **TERMS** Net 30

**DUE DATE** 10/20/2023

DESCRIPTION	QTY	RATE	AMOUNT
Filing of final argument	1	18,950.00	18,950.00
Please Remit to: Synapse Energy Economics 485 Massachusetts Ave, Suite 3 Cambridge, MA 02139			
		TOTAL DUE	\$18,950.00

The present invoice corresponds to the signed contract and the invoiced tasks have been realized according to the contractual terms. I authorize the payment of this invoice without reservations.

Nazim Sebaa

Questions about this invoice? Contact: The finance department E-mail: finance@synapse-energy.com Phone: 617-661-3248

Fed ID# 04-3316408

#### OK



**BILL TO** 851 Industrial Avenue PO Box 30 Ottawa, ON K1G 4L3

## **INVOICE 23-003-03**

**DATE** 10/17/2023 **TERMS** Net 30

DUE DATE 11/16/2023

DESCRIPTION	QTY	RATE	AMOUNT
Final invoice	1	37,528.97	37,528.97

Please Remit to: Synapse Energy Economics 485 Massachusetts Ave, Suite 3 Cambridge, MA 02139

TOTAL DUE \$37,528.97

Questions about this invoice? Contact: The finance department E-mail: finance@synapse-energy.com Phone: 617-661-3248

Fed ID# 04-3316408

porter	Booking Receipt	
Thank you for booking with Porter. Your payment has been received.	Booking date Jul 17, 2023	Confirmation number L1PF5L
Asa Hopkins		\$418.03 USD
Flights		\$418.03
PD 2948   Boston (BOS) to Toro at 8:05 PM   Flexible Fare	onto (YTZ)   Jul 17, 20	923 \$375.00
Taxes, Fees and Charges		\$43.03
US Passenger Facility Charge		\$4.50
US September 11th Security Cha	rge	\$5.60
US Segment Tax		\$4.80
US Transportation Tax		\$28.13
Seat Selection		\$ 0.00
PD 2948   Boston (BOS) to Toro	onto (YTZ)   Jul 17, 20	023 at 8:05 PM   Flexible Fare
Seats: 16C		\$0.00

Total cost	\$418.03 USD
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# Payment summary

Transaction Date	Method of Pa	yment	Payment Status	Payment Amount
Jul 17, 2023	MasterCard xxxx-xxxx-xxx	(x-5944	Approved 07917P	\$418.03
Total paid				\$418.03 USD
Total owing				\$0.00 USD
		GST/HST N 7707589021		QST Number 1229971740TQ0001



**Booking Confirmation** 



## Booking Reference: **3YWP6A**

Date of issue: 14 Jul, 2023

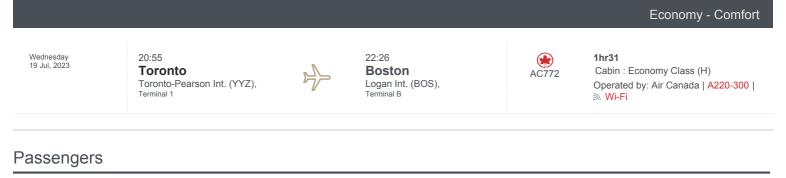
This is your official itinerary/receipt. You must bring it with you to the airport for check-in and we recommend you keep a copy for your records. Please also take the time to review it as it contains the general conditions of carriage and applicable tariffs that apply to the tickets, bookings and air services detailed below, as well as baggage, dangerous goods and other important information related to your trip.

Data Protection Notice: Your personal data will be processed in accordance with the applicable carrier's privacy policy and, if your booking is made via a reservation system provider ("GDS"), with its privacy policy. These are available at the IATA Travel Centre website or from the carrier or GDS directly. You should read this documentation, which applies to your booking and specifies, for example, how your personal data is collected, stored, used, disclosed and transferred. We also invite you to view Air Canada's Privacy Policy directly.

Ensure you are in compliance with the entry requirements of your destination. For the latest information on entry requirements, our flexible booking policy, or our health and safety measures visit our Travel Ready hub.

5

Depart



ho Asa Sies Hopkins	Seats
	AC772 20F
Ticket number	
0142176338393	

#### MasterCard

\*\*\*\*\*\*\*\*\*\*\*\***5944** Amount paid: \$411.64

	1 adult
Flights	
Air transportation charges	
Base fare Economy - Comfort	311.00
Taxes, fees and charges	
Transportation International/Domestic Tax - United States	23.33
Animal and Plant Health Inspection Service (APHIS) User Fee – United States	3.83
Immigration User Fee - United States	7.00
Customs User Fee - United States	6.52
Air Travellers Security Charge - Canada	9.20
Goods and Services Tax - Canada - 100092287 RT0001	16.01
Harmonized Sales Tax - Canada - 100092287 RT0001	3.45
Airport Improvement Fee - Canada	26.50
Flight Segment Tax - United States	4.80
Total before options (per passenger)	<sup>\$</sup> 411 <sup>64</sup>
GRAND TOTAL (US dollars)	<sup>\$</sup> 411 <sup>64</sup>

## Check-in and boarding gate deadlines

Within Canada	To/From the U.S.	
<b>90</b>	120	When to arrive at the airport
minutes	minutes <sup>1</sup>	You should arrive no later than the times indicated at left. This will ensure you have plenty of time to check in, drop off your checked bags and pass through security.
<b>45</b> minutes <sup>2</sup>	60 minutes <sup>3</sup>	Check-in and baggage drop-off deadline You must have checked in, obtained your boarding pass and deposited all checked bags at the baggage drop-off counter before the end of the check-in period for your flight.
<b>30</b>	<b>30</b>	Boarding gate deadline
minutes	minutes	This is the latest you should be at the departure gate, ready for boarding.
15	15	Boarding gate closes
minutes	minutes	Arriving after this time will result in reassignment of any reserved seats, the cancellation of reservations, and/or ineligibility for denied boarding compensation.

From Toronto-Pearson Airport (YYZ) or Montreal-Trudeau Airport (YUL) - Recommended arrival time: 180 minutes. From Toronto City Airport (YTZ) - Check-in and baggage drop-off deadline: 20 minutes. From Toronto-Pearson Airport (YYZ) - Check-in and baggage drop-off deadline: 90 minutes.

#### Carry-on baggage

On flights operated by Air Canada, Air Canada Rouge or Air Canada Express, you may carry with you in the cabin 1 standard item (max. size: 23 x 40 x 55 cm [9 x 15.5 x 21.5 in]) and 1 personal item (max. size: 16 x 33 x 43 cm [6 x 13 x 17 in]). Your carry-on baggage must be light enough that you can store it in the overhead bin unassisted. See our complete carry-on baggage policy.

#### Checked baggage

Please see below for details on the bags you plan on checking at the baggage counter.

 Toronto (YYZ) > Boston (BOS)

 <sup>1</sup>st bag
 Complimentary

 <sup>2nd</sup> bag
 <sup>3</sup> 39.80 USD
 Including taxes

 Max. weight per bag:
 23 kg (50 lb)
 Max. dimensions per bag:
 158 cm (62 in)

\* For travel within Canada or between Canada and the United States, a Canadian tax of \$3.00 CAD may apply to baggage fees. For travel between Canada or the United States and Mexico, the Dominican Republic and Barbados, an applicable local sales tax of \$4.00 CAD may apply to baggage fees. For all other itineraries to/from Mexico, the Dominican Republic and Barbados as well as itineraries to/from South America, an applicable local sales tax of \$21.00 CAD may apply to baggage fees. For all other itineraries fees. All above tax amounts are based on the maximum applicable tax amounts per itinerary type. Actual amounts may vary and will be charged in the currency used in your departure airport. Tax amounts are subject to change without notice by local government.

#### Currency

Fee amounts are displayed in the currency of the first departure city on your ticket. On the day of travel, applicable fees will be assessed in the local currency of the country/region you are travelling from. Certain exceptions may apply where the departure airport does not charge in local currency. The currency exchange rate will be determined by the date of travel.

#### Stopovers

Checked baggage fees may be reassessed when itineraries include an enroute stopover of more than 24 hours.

Note: If you exceed your baggage allowance (in number, size and/or weight), additional checked baggage charges will apply. The policy and fees will be those of the carrier identified in the checked baggage information section.

· View Air Canada's additional checked baggage policy.

· View the additional checked baggage policy of Air Canada's codeshare and interline partners.

#### Economy - Comfort

Changes	Departing flight
	<ul> <li>Before departure of first flight         <ul> <li>Ticket reissue is allowed but may be subject to certain restrictions. Please refer to the link above for complete fare rules.</li> <li>Changes are permitted without a fee, subject to availability. Any taxes and fare difference may apply.</li> <li>New travel dates must be prior to Sunday, 14 Jul, 2024</li> <li>The maximum change fee applied is \$0 USD per direction, per passenger, plus any applicable taxes and fare difference. Child/Infant discounts may apply.</li> </ul> </li> </ul>
	After departure of first flight     Ticket reissue is not allowed.
	Flights can only be used in sequence from the place of departure specified on the itinerary.
	Failure to show up for your flight (No Show) may result in a penalty. Please see the complete fare rules for details.
Cancellations	<ul> <li>Tickets are fully refundable but are non-transferable.</li> <li>Partially used tickets may be submitted for a refund assessment. The refund will be calculated as follows: Actual fare paid minus the value of the portion of the journey that has been flown and minus the applicable fee.</li> <li>Cancellations can be made up to 45 minutes prior to departure. Exception: Aeroplan flight rewards must be cancelled no later than 2 hours before departure.</li> <li>Find out more about Air Canada's refund services.</li> </ul>
Minimum stay	There is no maximum or minimum day stay associated with this fare.
Maximum stay	There is no maximum or minimum day stay associated with this fare.
Aeroplan	<ul> <li>115% Aeroplan points</li> <li>The equivalent in Status Qualifying Miles</li> <li>For all flights operated by Air Canada, Air Canada Express and Air Canada Rouge</li> </ul>

Please notify us immediately if you do not plan on taking your scheduled flight(s). If you are unable to change or cancel your booking online, you can reach Air Canada Reservations at 1-888-247-2262 (view international and other numbers). If you do not show up for your flight, the rest of your itinerary will automatically be cancelled.

Disclaimer: The fare rules displayed above are for adult passengers only. Different rules may apply for children and infant passengers.

- 1. You must obtain your boarding pass and check in any baggage by the check-in deadline. Additionally, you must be available for boarding at the boarding gate by the boarding gate deadline. Failure to respect check-in and boarding gate deadlines may result in the reassignment of any pre-reserved seats, the cancellation of reservations, and/or ineligibility for denied boarding compensation.
- 2. Although reconfirmation of flights is not required, we strongly recommend that you check your flight status online at aircanada.com or by calling our flight information system at 1-888-422-7533 prior to your departure.
- 3. Advance seat assignments are not guaranteed and may change without notice. If your pre-assigned seat is unavailable, we will try to accommodate you in a comparable seat in the same class of service and will refund any applicable fees.
- 4. Any travel credit banked for unused tickets is non-transferable: when the credit is redeemed, it must be used by the same person whose name appears on the original ticket.
- 5. Air Canada will cancel any purchased ticket and provide a full refund without penalty up to 24 hours after purchase. Beyond 24 hours, voluntary changes to your itinerary may require the payment of additional fees and fare upgrades. If you are travelling on a non-refundable ticket, Air Canada will be unable to make exceptions in the event of an unexpected trip cancellation or medical emergency. We recommend the purchase of travel insurance.

#### 6. Dangerous goods

For safety reasons, dangerous goods must not be packed in checked or carry-on baggage, except as specifically permitted. Dangerous goods include, but are not limited to: compressed gases, corrosives, explosives, flammable liquids and solids, radioactive materials, oxidizing materials, poisons, infectious substances, and briefcases with installed alarm devices. For security reasons, other restrictions may apply. Please refer to the Restricted and Prohibited Items page on our website for more information.

7. Subject to the provisions of the Montreal Convention and the Warsaw Convention, as well as the provisions of its applicable tariffs, Air Canada may refuse carriage of property in checked luggage that is not suitable for transportation, such as fragile or perishable items and may refuse to carry valuable items (a valuable is deemed to be any item whose value is \$1,000 CAD or more, per Kilogram or \$1 CAD per gram). Air Canada may refuse claims based on the inherent nature of an item (e.g. its perishable nature), or for loss or delay of unsuitably or inadequately packed items, to the extent that the destruction, loss or damages resulted from the inherent defect, quality or vice of the baggage, or, in the case of delay, that the carrier, its agents, and servants took all measures that could reasonably be required to avoid the damage, or that it was impossible to take such measures.

#### 8. International travel

Governments may require your carrier to provide information on or permit access to passenger data. You cannot travel if you do not have all required travel documents, such as a passport and visa (where applicable), to enter in or transit through each country/region on your itinerary. Please refer to the Travel Documents page on our website for more information.

#### 9. In-flight health

Most people are fit to travel by air, but special attention is required for passengers whose health problems may be exacerbated by altitude, travel stress, hypoxia and other travel related difficulties. Our website offers important health tips and information for customers with special needs who may require medical approval before flying.

Please also note that aircraft disinsection is carried out on certain routes, in compliance with the requirements of the World Health Organization (WHO), the International Civil Aviation Organization, Transport Canada and applicable foreign regulatory authorities. More information is available on our website.

#### 10. Schedules and timetables

Time and aircraft type shown in timetables or elsewhere are approximate and not guaranteed, and form no part of the contract. Schedules are subject to change without notice and carrier assumes no responsibility for passenger making connections not included as part of the itinerary set out in the ticket. Carrier is not responsible for changes, errors or omissions either in timetables or other representations of schedules.

#### 11. Overbooking notice

Airline flights may be overbooked, and there is a slight chance that a seat will not be available on a flight for which a person has a confirmed reservation. If the flight is overbooked, no one will be denied a seat until airline personnel first ask for volunteers willing to give up their reservation in exchange for a payment of the airline's choosing. If there are not enough volunteers, the airline will deny boarding to other persons in accordance with its particular boarding priority. With few exceptions, persons denied boarding involuntarily are entitled to compensation. The complete rules for the payment of compensation and boarding priorities are available at all airport ticket counters and boarding locations.

NOTICE - SOLD SUBJECT TO APPLICABLE TARIFFS

## **!** Air Passenger Protection Regulations Notice:

If you are denied boarding, your flight is cancelled or delayed for at least three hours, or your baggage is lost or damaged, you may be entitled to certain standards of treatment and compensation under the *Air Passenger Protection Regulation*. For more information about your passenger rights please contact your air carrier or visit the Canadian Transportation Agency's website.

General terms and conditions pertaining to flight delays, cancellations, denied boarding, seating of children and lost or damaged baggage can be found in Air Canada's General Conditions of Carriage and Tariffs.

🔍 Canada, U.S.: 1 (888) 247-2262 Other numbers



A STAR ALLIANCE MEMBER MEMBRE DU RÉSEAU STAR ALLIANCE





## Thank you, asahopkins@gmail.com We look forward to welcoming you on board.

## Merci, asahopkins@gmail.com Nous nous souhaitons de vous faire la bienvenue à bord.

ORDER #   COMMANDE N°	UPX4314944-413	
PURCHASE DATE   DATE D'ACHAT	19/07/2023 04:58 PM EDT	
PAYMENT   PAIEMENT	Visa **** **** **** 4279	\$ 12.35 CAD

#	DESCRIPTION	PRICE   PRIX	TOTAL
1	Adult One-Way	\$12.35 CAD	\$12.35 CAD
	Adulte Aller simple		
	$\textbf{UNION}\leftrightarrow \textbf{PEARSON}$		
		TOTAL	\$12.35 CAD

**NOTE:** THIS IS NOT YOUR TICKET - PLEASE SEE EMAIL ATTACHMENT(S) **PRENEZ NOTE:** ÇECI N'EST PAS VOTRE BILLET - VOYEZ LE(S) DOCUMENT(S) CI-JOINT(S)





To add this pass to Wallet, open this email on your iPhone or iPod

eticket\_UPX431 eticket\_UPX431 4944-...pkpass 4944-...of2.pdf UE

Hairmont ROYAL YORK	Room Folio # Cashier #	: : :	02147 294603
100 Front Street W Toronto, ON, Canada M5J 1E3 T (416) 368-2511 F (416) 368-2884 H.S.T. Registration # 825739584	Page #	:	1 of 1
	Invoice No.		
Dr Asa Hopkins 485 Massachusetts Sve Cambridge MA 02139	Arrival Departure	:	07-17-23 07-19-23

Date	Description		Additional Information		Charges	Credits
07-17-23	Room Charge	9			423.00	
07-17-23	HST - Rooms	3			54.99	
07-17-23	Municipal Acc	commodation T	ax -		25.38	
07-17-23	HST 13% on	MAT			3.30	
07-18-23	Room Charge	e			729.00	
07-18-23	HST - Rooms	3			94.77	
07-18-23	Municipal Acc	commodation T	ax -		43.74	
07-18-23	HST 13% on	MAT			5.69	
07-19-23	Visa		XXXXXXXXXXXXX4279	XX/XX		1,379.87
			Total		1,379.87	1,379.87
			Balance Due		0.00	
GST Sum	nmary	HST Summa	ary			
Room :	0.00	Room :	149.76			
F&B :	0.00	F&B :	0.00			
Other :	0.00	Other :	8.99			
Total :	0.00	Total :	158.75			

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For information or reservations, visit us at **www.fairmont.com** or call Fairmont Hotels & Resorts from : United States or Canada 1 800 441 1414

**United States** 

I agree that my liability for this bill is not waived and I agree to be held personally liable in the event that the indicated person, company or association fails to pay for any part of or the full amount of these charges. Overdue balance subject to a surcharge at the rate of 1.5% per month after one month. (I8.00% per annum.)

\* Destination Marketing Program Fee

## FIGO 295 Adelaide Street Toronto, Ontario Tel: (647) 748-3446

1 VIEUX CARRE 2023       20.00         SUBTOTAL:       20.00         HST:       2.60         TOTAL:       22.60         Hopkins, Asa       100         Point Balance:       0         *********       After This Purchase	Server: Nadia Table : 305 Guests: 1 Seat : 1	Check: 37874 Date : 7/18 Time : 8:34	/2023
HST: 2.60 TOTAL: 22.60 Hopkins, Asa Phts on this purchase: 0 Point Balance: 0	1 VIEUX CARRE	2023	20.00
Hopkins, Asa Pnts on this purchase: 0 Point Balance: 0			
Pnts on this purchase: 0 Point Balance: 0		TOTAL :	22.60
Point Balance: 0	6 <u></u>	Hopkins, Asa	
	Point	Balance:	Ő

Ob-- 1. 070740

#### CIAO! Thank you for dining with us!

HST# 823517990RT

#### TRANSACTION RECORD FIGO 44 UPJOHN RD TORONTO ON

#### Purchase

Jul 18,2023	20:35:41
VISA	***********************
TID: 14032929	Entry: Tap EMV (H)
Sequence: 001 973 Auth#: 06265D Batch: 001	Response: 01-027
Amount	\$ 22.60
Tip	\$ 4.52
Total	\$ 27.12

A0000000031010 VISA CREDIT

Approved Signature Not Required

Important:Retain this copy for your record

Cardholder copy

Alcohol: USD 20.60

## FIGO

295 Adelaide Street Toronto, Ontario Tel: (647) 748-3446

Server: Nadia Check: 3 Table : 305 Date : 7 Guests: 1 Time : 8	
1 SUMMERLICIOUS DINNER	55.00
SUBTOTAL : HST :	55.00 7.15
TOTAL :	62.15
Hopkins, Asa	
Pnts on this purchase: Point Balance:	0
******** After This Purchase	*****
	7

CIAO! Thank you for dining with us!

HST# 823517990RT

TRANSACTION RECORD FIGO 44 UPJOHN RD TORONTO ON Purchase 20:35:19 Jul 18,2023 VISA TID. 14032929 Sequence: 001 972 Auth#: 05590D \*\*\*\*4279 Entry: Tap EMV (H) Response: 01-027 Batch: 001 \$ 62.15 Amount \$ 12.43

Total

Tip

\$ 74.58

A0000000031010 VISA CREDIT

Approved Signature Not Required

Important:Retain this copy for your record

Cardholder copy

Food: USD 56.65

# Ĩ

CALIFORNIA THAI #S107 - 2300 YONGE M4P1E4 Toronto on 24028878 GZ2402887801

# \*\*\*\* PURCHASE \*\*\*\*

07-19-2023	12:2	7:41
	****6136	RF
Card Type VI		
A000000031010	VISA CR	EDIT

#### Trace # 23660 Inv. # 25841

Auth # 02235D RRN 001550068

# Total \$15.23 (001) APPROVED-THANK YOU

Retain this copy for your records Customer copy

## USD 11.57

CALIFORNIA THAI Y & E YONGE EGLINTON HST# 774300115RT0001 HAVE A NICE DAY!	
REG 07-19-2023 C01 MC#01	
1 MEDLET 1 1 CAN ICE TEA 1 CAN ICE TEA 1 ON 1 CAN ICE TEA 2 No HST 5% 1.08 TL 15.23 CASH 15.25	

#### BAGEL & CO 120 ADELAIDE UNIT MOHITTI TORONTO ON 23869781 QC2386978401

#### SALE

07-18-2023 07:55:27 Acct # \*\*\*\*\*\*\*4279 RF Exp Date \*\*/\*\* Card Type VI A0000000031010 VISA CREDIT

Trace # 940020		
Inv. # 66838 Auth # 05838D	RRN	001576020

Sale

\$11.54

\$1154

TOTAL

## USD 8.77

001 APPROVED-THANK YOU

Retain this copy for your records Customer copy

AND THE OWNER OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER	
B.Good Burger Delaware North Tr Boston Logan Internatio ORDER: 311 HOPKINS/ASA S 7/17/2023 5:38 PM 7/17/2023 5:38 PM	avel onal Airport Grab:25138147 Ref:22311 14.00
The Beyond Bar No Pickles Add Avocado Subtotal Sales Tax	14.00 0.98 USD\$ 14.98
Sales ter Total Charged to MASTERCARD Tell us about your exp DelawareNorthListens. Your order was power Next time, avoid the mobile ordering! www	Colli
mobile oruer may	

· É.

SSP America Boccone Pronto T1 Lester B. Pearson Intl Airport GST # 825875560RT001 416-776-2477

#### 3753 Ichchha

 Chk 884	Jul19'23 06:29P	Gst 	0 
TO GO 1 Vegetariano		19.53	
Panini 1 Pringles Ori	ig L	3.69	
Subtotal HST Tax 06:29PM Total		23.22 3.02 .24	

LOCATION: 7102125

Customer Care Service a la Clientele 1-877-325-8777

#### USD 19.95



#### USD 5.09 (times two)

PRESTO

FOR USE ON: Utilisation sur:

> SSP TORONTO BOCCONE PEARSON AIRPORTO Lester B 25875560RT001 1-888-310-0583 \*\* TRANSACTION RECORD \*\* Lookup #: 0507861362624 RVC: Y BOCCONE PRONTO Check #: 884 Employee #: 3753 Employee: Ichchha

Type: Purchase Acct: Visa Card #: xxxxxxxxxxxx6136

Amount CAD\$26.24

Reference #: 66589052 0013691170 H Auth. #: 00365D YZ30CS12/C66589052 005 07/19/2023 6:30:12 PM

VISA CREDIT A0000000031010

APPROVED - THANK YOU 01-027

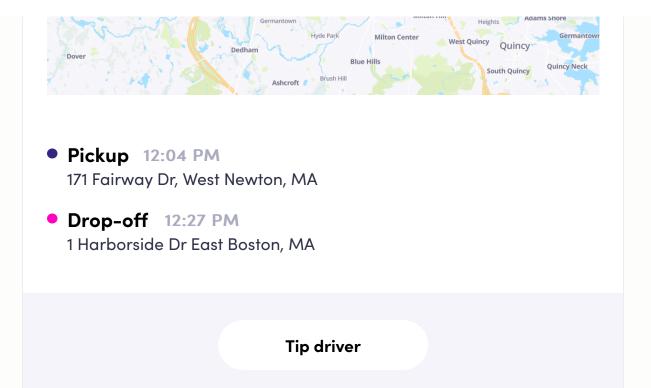
Retain this copy for your records

\*\*\* CARDHOLDER COPY \*\*\*

THANK YOU Come Again Subject: Your ride with Roque on July 17Date:Monday, July 17, 2023 at 12:39:30 PM Eastern Daylight TimeFrom:Lyft ReceiptsTo:Asa Hopkins

#### lyA JULY 17, 2023 AT 12:04 PM **Thanks for riding with Roque!** Lyft fare (13.81mi, 23m 15s) \$42.99 Tip \$8.60 \$51.59 MasterCard \*5944 Wyoma © OpenStreetMap Lindenwood Merrimad . Greenwood Terrace Woburn Woods Corner Melrose 3 Lynnhurst Winchester Highlands Highlands Ly North Lexington Raddin Station **Pleasant Hills** Shaker Glen Wyoming Winchester Fuller Heights 14 28 Windsor at Franklin Park Oak Grove Linden Idylwilde Malden East Lexington Centre Oak Island Glenwood Arlington Glendale Kingst Revere Lake East Arlington Hendersonville Mill Hill Ball Square Belmont Beachmont Kings Grant Piety Cor 99 Chelsea Waverley Somerville Oriont Hai Huron Village **Kendal Green** Union Square Charlestown Waltham The Flats Winthrop Coolidge Hill South Side Cambridge Watertown North End Boston Allston Heights Coolidge Lasell Villag Aberdeen Corner Newton South Bo Brookline Che Nubian Square Waban Welles er Falls Highland eirce Estates Upham 9 Corne Village Estates Linden Stree Mount Bowdoin Oak Hill Nellesley Babson Park Forest Hills Dorcheste Center Olin We Highland Mount Hope Cedar Grov North Quincy Birds Hill don Hill Needham Riverdale Junction

Milt



Find lost item

## **Request review**

## **Help Center**

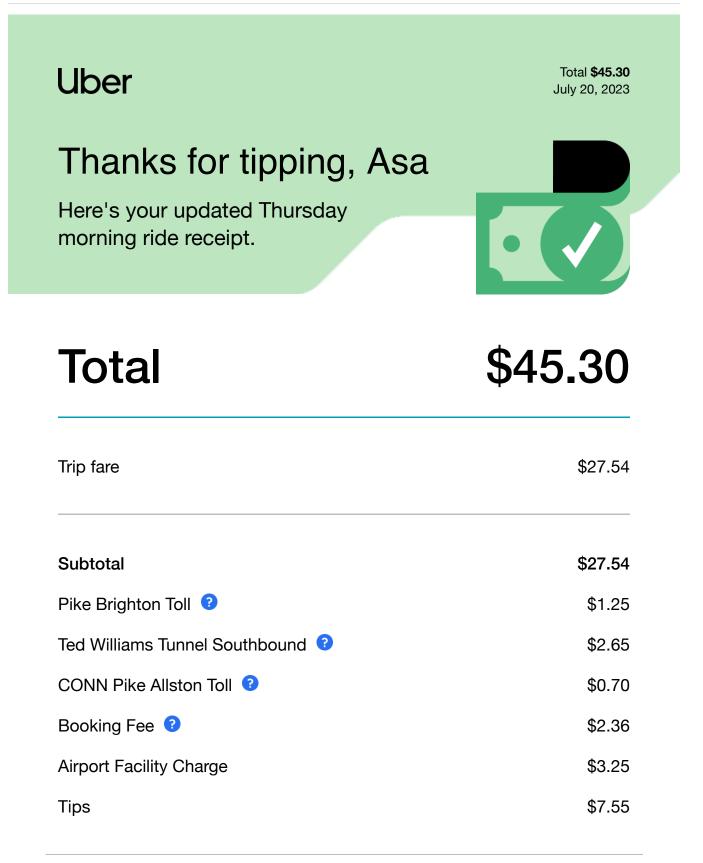
Receipt #1835257154872016424

We never share your address with your driver after a ride. <u>Learn more</u> about our commitment to safety.

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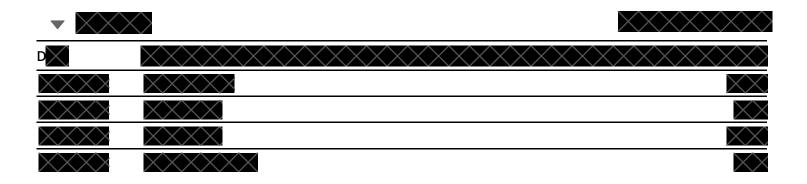
© 2023 Lyft, Inc. 548 Market St., P.O. Box 68514 San Francisco, CA 94104 CPUC ID No. TCP0032513 - P

> Work at Lyft Become a Driver



### CREDIT CARD (...4279)





# Account activity

SHOWING Search

Filtered by: Jul 18, 2023 to Jul 21, 2023

Date 🔻	Description 🔻	Category 🔻	Amount 🔻
Jul 20, 2023	ROYAL YORK HOTEL		\$1,051.97
-		Travel 🗸	
Jul 20, 2023	UBER TRIP		\$45.05
		Travel 🗸	
$\times$	$\times$		$\times \times$
		$\sim$	
Jul 19, 2023	YYZ BOCCONE PRONTO		\$19.95
-		Food & drink 🗸	
Jul 19, 2023	CALIFORNIA THAI		\$11.57
-		Food & drink 🗸	
Jul 19, 2023	PRESTO UNION STN STN		\$5.09
-		Travel 🗸	

Jul 19, 2023	UPEXPRESS.COM		\$9.38
		Travel 🗸	
$\times$	$\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!\times\!\!$		$\times \times$
	······	$\times$	
Jul 18, 2023	FIGO		\$56.65
		Food & drink 🗸	
Jul 18, 2023	BAGEL & CO		\$8.77
		Food & drink 🗸	
Jul 18, 2023	PRESTO UNION STN STN		\$5.09
		Travel 🗸	
Jul 18, 2023	FIGO		\$20.60
		Food & drink 🗸	
$\times \times \times \times$	$\times\!\!\times\!\!\times\!\!\times\!\!\times$		$\times$
		$\times$	

You've reached the end of your account activity.

#### Disclosures

JPMorgan Chase Bank, N.A. and its affiliates (collectively "JPMCB") offer investment products, which may include bank managed accounts and custody, as part of its trust and fiduciary services. Other investment products and services, such as brokerage and advisory accounts, are offered through J.P. Morgan Securities LLC (JPMS), a member of <u>FINRA</u> and <u>SIPC</u> . Insurance products are made available through Chase Insurance Agency, Inc. (CIA), a licensed insurance agency, doing business as Chase Insurance Agency Services, Inc. in Florida. JPMCB, JPMS and CIA are affiliated companies under the common control of JPMorgan Chase & Co. Products not available in all states.

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### **Payments**



VISA

Uber Cash 7/20/23 1:08 AM

Visa ••••4279 7/20/23 6:18 AM \$45.05

\$0.25

**Switch Payment Method** 

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4.97 ★ Rating

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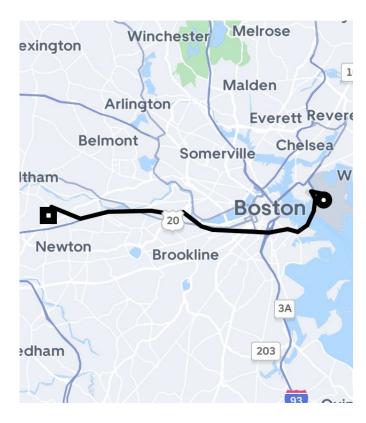
12.86 miles | 21 min

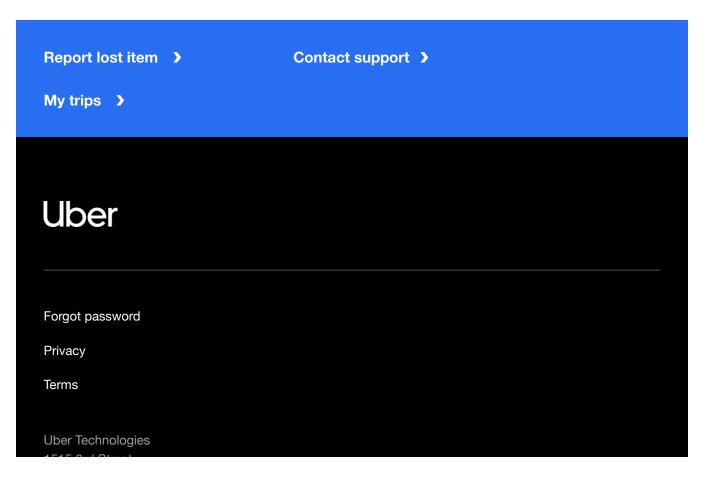
# 12:46 AM

Terminal B, Boston Logan International Airport (BOS), Boston, MA 02128, US

# 1:08 AM

171 Fairway Dr, West Newton, MA 02465-1714, US





1515 3rd Street

San Francisco, CA 94158

No

# Sol Deleon

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Sol	NON-FILING PARTICIPANT L. NAME Deleon
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 20	HOURLY RATE 330
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

Yes

# HEARINGS

89659 3323 RT0001

Неа	arings Hours 60.00	Hearings Subtotal (\$) 19,800.00		Hearings Total <sup>-</sup> 0.00	Гах (\$)		n <b>gs Total (\$)</b> 800.00
	<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISC	OVERY						
	Read and Research Application a Evidence	nd 0.75	330	247.50	0.00		247.50
	Preparation of Interrogatories	2.50	330	825.00	0.00		825.00
	Review Interrogatory Responses		330		0.00		
	Technical Conference Preparation	I	330		0.00		
	Technical Conference Attendance		330		0.00		
	Technical Conference Follow-up		330		0.00		
	Subtotal of DISCOVERY	3.25		1,072.50		0.00	1,072.50
PROC	<b>EDURAL</b> Preparation of Issues List Submis	sion	330		0.00		
	Attendance at Issues List Conference	nce	330		0.00		
	Preparation for a Confidentiality R	equest	330		0.00		
	Prepare Submissions on Confider	ntiality	330		0.00		
	Preparation of Motion(s) Materials	;	330		0.00		
	Prepare Submissions on the Moti	on(s)	330		0.00		
	Attendance at Hearing on Motion(	s)	330		0.00		
	Review Procedural Documents		330		0.00		

CC\_Participant\_Combined.rpt - last Update 20230601

<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Tota</u>
Subtotal of PROCEDURAL	0.00		0.00		0.00	0.0
NTERVENOR EVIDENCE Preparation of Intervenor Evidence	55.75	330	18,397.50	0.00		18,397.50
Interrogatory Responses	1.00	330	330.00	0.00		330.0
Preparation of Witness(es) for Attendance at Hearing Subtotal of INTERVENOR EVIDENCE	56.75	330	18,727.50	0.00	0.00	18,727.5
ETTLEMENT CONFERENCE Preparation for Settlement Conference		330		0.00		,
Attendance at Settlement Conference		330		0.00		
Preparation of Settlement Proposal		330		0.00		
Attendance at Presentation to Panel		330		0.00		
Subtotal of SETTLEMENT CONFERENCE VRITTEN ARGUMENT	0.00		0.00		0.00	0.0
Written Submissions		330		0.00		
Subtotal of WRITTEN ARGUMENT	0.00		0.00		0.00	0.0
RAL ARGUMENT Preparation for Oral Hearing		330		0.00		
Attendance at Oral Hearing		330		0.00		
Oral Submissions		330		0.00		
Attendance at Oral Submissions		330		0.00		
Subtotal of ORAL ARGUMENT	0.00		0.00		0.00	0.0
ECISION Review Decision		330		0.00		
Review Rate/Accounting Order		330		0.00		
Prepare Submission on Rate Order		330		0.00		
Subtotal of DECISION	0.00		0.00		0.00	0.0
THER Other Attendance (e.g., Intervenor Conferences)		330		0.00		
Subtotal of OTHER	0.00		0.00		0.00	0.0
OTAL SERVICE PROVIDER FEES Total Service Provider Fees	60.00		19,800.00		0.00	19,800.0

# Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	CV
CostClaim_Synapse_deleon	
CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Synapse_deleon_TimeDockets_2	
0290429.pdf	

Import Message

# Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Synapse_deleon			
CV_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_deleon_TimeDockets_			
20290429.pdf			

Booked Time by Milestone

	End Date →	$\uparrow$	я.	January 2023	Febr	February 2023	Marc	March 2023	Apri	April 2023	May 2023		June 2023		July 2023		August 2023		September 2023	~	Total	
			ŝ	Sum of Total Sum of Total		Sum of Total Su	Sum of Total Sum	Sum of Total Sum of Total		n of Total Sum of T.	Sum of Total Sum of Total Billable Sum of Total	al Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total Billable Sum of Total		Sum of Total	Sum of Total	Sum of Total
Milestone ↑	Resource 🕆		£	Hours Billat	Billable Amount Hours		Billable Amount Hours		Billable Amount Hours	Jrs Amount	Hours	Billable Amount	nt Hours	Billable Amount	Hours	Billable Amount	Hours	Amount	Hours	Billable Amount	Hours	Billable Amount
Attendance at oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0 22.25	\$7,342.50	0.5	\$165.00	0		2	
Interrogatory responses	Alice Napoleon	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2.75 \$5	\$907.50	0 \$0.00	0	\$0.00	0	\$0.05	0	00.02	0 2.75	
	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	19.75 \$6,5	\$6,517.50	0 \$0.00	0	\$0.00	0	\$0.05	0	0.05	1	
	Sol Deleon	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1 S.	\$3.30.00	0 \$0.00	0	\$0.00	0	00.02	0	00'0\$	0	1 \$330.00
	Tim Woolf	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.5 \$1	\$165.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00		0.5 \$165
Preparation for oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.25 \$82.50	12	\$3,960.00	0.5	\$1	0	\$0.00	0 12.75	
Preparation of interrogatories	Asa Hopkins	Analyst 20+	330	0.5	\$ 165.00	10.75	\$3,547.50	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0		0 0	1 \$0.0.	0 11.25	
	Sol Deleon	Analyst 20+	330	0	\$0.00	2.5	\$825.00	0	<u>\$0.00</u>	0	<u>\$0.00</u>	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	00'05		
Preparation of intervenor evidence	Asa Hopkins	Analyst 20+	330	5.5	\$1,815.00	7	\$2,310.00	31	\$10,230.00	9.5	\$3,135.00	6 \$1,9	\$1,980.00	0 \$0.00	0	\$0.00	0		0	\$0.00		59 \$19,470
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00	0	\$0.00	0	\$0.00	7	\$1,610.00	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	7 \$1,61
	Paul Rhodes	Analyst 0-5	170	0	\$0.00	0	\$0.00	4.5	\$765.00	7.5	\$1,275.00	0	\$0.00	0 \$0.00	0	\$0.00	0		0			
	Sol Deleon	Analyst 20+	330	0	\$0.00	7.5	\$2,475.00	46.25	\$15,262.50	2	\$660.00	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	00:05	0 55.75	
Read and Research Application and Evidence	<ul> <li>Alice Na poleon</li> </ul>	Analyst 20+	330	1	\$330.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0		0	0.05	0	1 \$33
	Asa Hopkins	Analyst 20+	330	1.25	\$412.50	1.5	\$495.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	0.05		2.75 \$907
	Paul Rhodes	Analyst 0-5	170	1.5	\$255.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0		0			
	Sol Deleon	Analyst 20+	330	0.75	\$247.50	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	0.02		0.75 \$247
	Tyler Fitch	Analyst 6-10	230	1	\$ 230.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0		0		0		0	1 \$23
Review interrogatory responses	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	2	\$ 660.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	2 \$660.00
Written submissions	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	2	\$660.00	0.25	\$82.50	0 2.5	\$825.00		4.75 \$1,567.50
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0.5	\$115.00	0	\$0.00		0.5 \$115.00
Total				115	63 AEE OD	30.00	CO 657 EU	03 75	C 76 017 ED	36	CE 600 00	30 69 69		0.75 697 50	36.36	¢1106750	1 75	¢637 E.O	30	\$875.00	ar trr	5

### Dr. Maria Soledad (Sol) deLeon, D.L.S., Principal Associate

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-453-7023 sdeleon@synapse-energy.com

### **PROFESSIONAL EXPERIENCE**

Synapse Energy Economics, Inc., Cambridge, MA. Principal Associate, January 2023 – Present

 Analyzes gas utility applications, as well as studies, reports and other evidence regarding gas utility investments, business models, ratemaking, depreciation, revenue requirements, and business risk.

**WGL Holdings (Washington Gas)** Washington D.C. *Manager, Strategy & Innovation,* December 2019 – December 2022, *Manager, Strategy & Business Development,* March 2017 – December 2019

- Defined and successfully proposed GHG emission reduction targets. Project managed development and completion of regulator-required climate strategy reports, involving external consultants and internal subject matter experts.
- Established and implemented a governance process for strategic initiatives. Created templates for business plans, project charters, and status updates for proposed strategic projects.
- Established information capture process for regulatory and executive reporting of emission reduction initiatives, including status of budget, scope, schedule, and projected benefits.

**AES Corporation,** Arlington, VA. *Risk Manager*, January 2009 – January 2016, *Project Manager, Wind Development*, April 2008 – December 2008, *Risk Analyst*, March 2006 – March 2008

- Managed global Hydrology Risk Committee quantifying risks and reporting to executive leaders on hydrology and climate mitigation strategy to reduce impact on initiatives and earnings projections.
- Streamlined process for derivatives valuation and audit support, reducing quarterly reporting preparation by 400% and saving 10,000+ labor hours. Managed derivative approval process for projects in Latin America, and Asia.
- Supported business development and negotiations for greenfield wind farms and project pipelines by building and maintaining financial models.
- Mapped South American and Asian subsidiaries' structures and cash flows to identify material risks and develop interest rate and foreign exchange hedging strategies protecting enterprise value.
- Developed valuation models for futures, forwards and options for power, commodity, FX, and interest rate; identified and evaluated transaction risks, and performed ad hoc market risk analysis.

Energy and Environment Analysis, Inc., Arlington, VA. Energy Analysis, August 2002- March 2006

• Built first-ever demand forecasting model of U.S. propane industry, fundamentally changing strategic decision-making across the propane industry.

PG&E National Energy Group, Bethesda, MD. Intern, Asset Management, June 2001– December 2001

• Fixed financial models for power plant valuations and financial models for 5,000-megawatt contract portfolio; corrected errors in 5 critical models which were reinstituted for internal forecasting and reporting.

Trans Asia Power, Manila, Philippines, Senior Project Analyst, Business Development, March 1997 – August 2000

• Employee #4 of energy start-up. Identified projects for development. Company representative in nationwide launch of electricity spot market, implemented in company and trained other users.

### EDUCATION

Georgetown University, Washington, D.C.

Doctorate in Liberal Studies, Energy Transition and Energy Justice

Master of Business Administration, McDonough School of Business

Ateneo de Manila University, Quezon City, Philippines

Bachelor of Science, Management Engineering, AB Economics

Resume updated March 2023

No

# **Tyler Fitch**

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	<b>NON-FILING PARTICIPANT F. NAME</b> Tyler	<b>NON-FILING PARTICIPANT L. NAME</b> Fitch
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 10	HOURLY RATE 230
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

# HEARINGS

89659 3323 RT0001

Yes

Hearings Hours 1.00	Hearings Subtotal (\$) 230.00		Hearings Total 0.00	Tax (\$)		<b>gs Total (\$)</b> 230.00
<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY Read and Research Application an Evidence	nd 1.00	230	230.00	0.00		230.00
Preparation of Interrogatories		230		0.00		
Review Interrogatory Responses		230		0.00		
Technical Conference Preparation		230		0.00		
Technical Conference Attendance		230		0.00		
Technical Conference Follow-up		230		0.00		
Subtotal of DISCOVERY	1.00		230.00		0.00	230.00
PROCEDURAL Preparation of Issues List Submis	sion	230		0.00		
Attendance at Issues List Confere	nce	230		0.00		
Preparation for a Confidentiality R	equest	230		0.00		
Prepare Submissions on Confider	tiality	230		0.00		
Preparation of Motion(s) Materials		230		0.00		
Prepare Submissions on the Motio	on(s)	230		0.00		
Attendance at Hearing on Motion(	s)	230		0.00		
Review Procedural Documents		230		0.00		

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<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	Sub Total	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
Subtotal of PROCEDURAL	0.00		0.00		0.00	0.00
INTERVENOR EVIDENCE Preparation of Intervenor Evidence		230		0.00		
Interrogatory Responses		230		0.00		
Preparation of Witness(es) for Attendance at Hearing		230		0.00		
Subtotal of INTERVENOR EVIDENCE	0.00		0.00		0.00	0.00
SETTLEMENT CONFERENCE Preparation for Settlement Conference		230		0.00		
Attendance at Settlement Conference		230		0.00		
Preparation of Settlement Proposal		230		0.00		
Attendance at Presentation to Panel		230		0.00		
Subtotal of SETTLEMENT CONFERENCE WRITTEN ARGUMENT	0.00		0.00		0.00	0.00
Written Submissions		230		0.00		
Subtotal of WRITTEN ARGUMENT	0.00		0.00		0.00	0.00
ORAL ARGUMENT Preparation for Oral Hearing		230		0.00		
Attendance at Oral Hearing		230		0.00		
Oral Submissions		230		0.00		
Attendance at Oral Submissions		230		0.00		
Subtotal of ORAL ARGUMENT	0.00		0.00		0.00	0.00
DECISION Review Decision		230		0.00		
Review Rate/Accounting Order		230		0.00		
Prepare Submission on Rate Order		230		0.00		
Subtotal of DECISION	0.00		0.00		0.00	0.00
OTHER Other Attendance (e.g., Intervenor Conferences)		230		0.00		
Subtotal of OTHER	0.00		0.00		0.00	0.00
TOTAL SERVICE PROVIDER FEES Total Service Provider Fees	1.00		230.00		0.00	230.00

# Attachments

AttachmentDocument TypeIGUA\_EB-2022-0200\_FinalCVCostClaim\_Synapse\_Fitch CV\_20230429.pdfTime DocketIGUA\_EB-2022-0200\_FinalTime DocketCostClaim\_Synapse\_Fitch\_TimeDockets\_20240429.pdf

Import Message

# Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Synapse_Fitch			
CV_20230429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_Fitch_TimeDockets_2			
0240429.pdf			

Booked Time by Milestone

	End Date 🌙	1		Ianuary 2023	10.2	February 2023	Ma	March 2023	Anril 2023	223	May 2023		1110 a 00 3		hith 2023		Austral 2023		Sentember 2023		Total	
	FIIN DOW			NT & IDNIIDT	070					070	CZUZ Y BINI		C707 5110/						3		IOUGI	
				Sum of Tot	Sum of Total Sum of Total	Sum of Total 5	Sum of Total Sun	Sum of Total Sum of Tota	_	f Total Sum of Tot	Sum of Total Sum of Total Billable Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total St	Sum of Total Billable Sum of Total		Sum of Total	Sum of Total	Sum of Total
Milestone $\uparrow$	Resource 🕈			Hours	Billable Amount Hours		Billable Amount Hours	urs Billable Amount	Amount Hours	Amount	Hours	Billable Amount	t Hours	Billable Amount	Hours	Billable Amount	Hours Ar	Amount	Hours	Billable Amount	Hours	Billable Amount
Attendance at oral hearing	Asa Hopkins	Analyst 20+	+ 330		00.02	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0 22.25	\$7,342.50	0.5	\$165.00	0	\$0.00		5 \$7,507.50
Interrogatory responses	Alice Napoleon	Analyst 20+	+ 330		00.02	0	\$0.00	0	\$0.00	0	\$0.00	2.75 \$90	\$907.50	0 \$0.00	0	\$0.00	0	\$0.01	0	\$0.00	0 2.75	
	Asa Hopkins	Analyst 20+	+ 330		00.02	0	\$0.00	0	\$0.00	0	\$0.00	19.75 \$6,517.50	7.50	0 \$0.00	0 0	\$0.00	0	\$0.00	0 0	\$0.00	0 19.75	
	Sol Deleon	Analyst 20+	+ 330		00:0\$	0	\$0.00	0	\$0.00	0	\$0.00	1 \$33	\$3.30.00	0 \$0.00	0	\$0.00	0	\$0.0	0 0	\$0.00	0	1 \$3
	Tim Woolf	Analyst 20+	+ 330		00:0\$	0	\$0.00	0	\$0.00	0	\$0.00	0.5 \$16	\$165.00	0 \$0.00	0	\$0.00	0	\$0.0	0 0	\$0.00	0.5	
Preparation for oral hearing	Asa Hopkins	Analyst 20+	+ 330		00.02	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.25 \$82.50	0 12	\$3,960.00	0.5	\$165.00	0	\$0.00	0 12.75	
Preparation of interrogatories	Asa Hopkins	Analyst 20+	+ 330		0.5 \$165.00	10.75	\$3,547.50	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0 0	\$0.00	0	\$0.00	0 0	\$0.00		5 \$3,712.50
	Sol Deleon	Analyst 20+	+ 330		0 \$0.00	2.5	\$825.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0 0	\$0.00	0	\$0.00	0 0	\$0.00	0 2.5	
Preparation of intervenor evidence	Asa Hopkins	Analyst 20+	+ 330		5.5 \$1,815.00	7	\$2,310.00	31 \$	\$10,230.00	9.5	\$3,135.00	6 \$1,980.00	0.00	0 \$0.00	0 0	\$0.00	0	\$0.01	0 0	\$0.00		59 \$19,470.00
	Jenny Marusiak	A nalyst 6-10	0 230		0 \$0.00	0	\$0.00	0	\$0.00	7	\$1,610.00	0	\$0.00	0 \$0.00	0 0	\$0.00	0	\$0.01	0 0	\$0.00	0	7 \$1,6
	Paul Rhodes	Analyst 0-5	170		0 \$0.00	0	\$0.00	4.5	\$765.00	7.5	\$1,275.00	0	\$0.00	0 \$0.00	0 0	\$0.00	0	\$0.01	0 0	\$0.00	0 12	
	Sol Deleon	Analyst 20+	+ 330		00.02	7.5	\$2,475.00	46.25 \$	\$15,262.50	2	\$660.00	0	\$0.00	0 \$0.00	0 0	\$0.00	0	\$0.01	0 0	\$0.00	0 55.75	
Read and Research Application and Evidence	<ul> <li>Alice Na poleon</li> </ul>	Analyst 20+	+ 330		1 \$330.00	0	\$0.00	0	\$0.00	0	\$0.00	0	0.00	0 \$0.00	0 0	\$0.00	0	\$0.01	0 0	\$0.00	0	1 \$3
	Asa Hopkins	Analyst 20+	+ 330		1.25 \$412.50	1.5	\$495.00	0	\$0.00	0	\$0.00	0	0.00	0 \$0.00	0 0	\$0.00	0	\$0.01	0 0	\$0.00	0 2.75	
	Paul Rhodes	Analyst 0-5	170		1.5 \$255.00	0	\$0.00	0	\$0.00	0	\$0.00	0	0.00	0 \$0.00	0	\$0.00	0	\$0.0	0 0	\$0.0\$		
	Sol Deleon	Analyst 20+	+ 330		0.75 \$247.50	0	\$0.00	0	\$0.00	0	\$0.00	0	00.00	0 \$0.00	0	\$0.00	0	\$0.01	0	\$0.01		
	Tyler Fitch	Analyst 6-10	0 230		1 \$230.00	0	\$0.00	0	\$0.00	0	\$0.00	<b>0</b>	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	1 \$230.00
Review interrogatory responses	Asa Hopkins	Analyst 20+	+ 330		00:0\$	0	\$0.00	2	\$660.00	0	\$0.00	°	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	2 \$6
Written submissions	Asa Hopkins	Analyst 20+	+ 330		00:0\$	0	\$0.00	0	\$0.00	0	\$0.00	°	\$0.00	0 \$0.00	0 2	\$660.00	0.25	\$82.50	0 2.5	\$825.00	0 4.75	
	Jenny Marusiak	Analyst 6-10	0 230		00.02	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	0 0	\$0.00			0 0	\$0.00	0.5	
Total					11.5 \$3.455.00	29.25	\$9,652.50	83.75	\$26.917.50	26 2	\$6.680.00	30.000.05		0.25 \$82.50	0 36.25	\$11.962.50	1.75		2.5	\$825.00	22	



### Tyler Fitch, Senior Associate

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-453-3890 tfitch@synapse-energy.com

### **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics Inc.**, Washington, DC. *Senior Associate*, November 2021 – Present.

Conducts regulatory analysis and provides expert testimony on energy & climate issues. Examples include:

- Evaluating utility proposals for additional generation infrastructure against more economic and less carbon-intensive alternatives;
- Assessing the economic viability and prudence of continued operations of legacy coal plants as opposed to alternative resources and market purchases.

**Vote Solar,** Washington, DC. *Regulatory Director*, February – November 2021; *Regulatory Manager*, August 2018 – February 2021.

#### Regulatory Director:

- Directed Vote Solar's climate and clean energy regulatory advocacy in the Carolinas, including
  public-facing reports and webinars; directing regulatory litigation; managing professional services
  and consultants; and developing advocacy in coalition with clean energy, environmental, and
  environmental justice stakeholders.
- Authored a technical report assessing stranded asset risk of electric generation infrastructure as a result of corporate carbon neutrality commitments. Results quoted in *Bloomberg, S&P*, and *GreenTechMedia*.
- Implemented a settlement with Duke Energy to conduct a region-leading investigation into physical climate-related impacts to electricity infrastructure in the Carolinas.
- Provided expert testimony in utility integrated resource planning proceedings identifying emergent climate-related risks and implications for utility planning, then providing recommendations for utility resource planning moving forward.

#### Regulatory Manager:

- Developed nation-leading quantitative assessment and regulatory direction for responding to the increase in residential utility debts as a result of COVID-19.
- Provided expert testimony on best practices in grid modernization in the context of climate-related physical risks to the North Carolina Utilities Commission.
- Provided expert testimony on utility rate design to the Virginia State Corporation Commission and Georgia Public Service Commission.

• Developed a flexible spreadsheet-based tool for assessing solar value proposition across several different rate design and project cost sensitivities.

**The University of Michigan,** Ann Arbor, MI. *Research Assistant, Urban Energy Justice Lab*, September 2016 – May 2018.

ICF International, Fairfax, VA. Analyst, October 2013 – June 2016.

- Developed energy efficiency scores for *ENERGY STAR* buildings using large data sets and multiple linear regression.
- As data lead for the multifamily sector of the *Better Buildings Challenge* wrote data policy and managed data submission for 100+ partners, spanning hundreds of buildings across the country.

### **EDUCATION**

**The University of Michigan**, Ann Arbor, MI Master of Science, School of Natural Resources and the Environment, 2018 Masters Project: *Fueling a Transition: Evaluating the Feasibility for a Hybrid Renewable Microgrid in Beni, Democratic Republic of Congo* 

University of North Carolina, Chapel Hill, NC

Bachelor of Science, 2013 Environmental Science, Focus: Energy and Sustainability; Minor: Computer Science

### PUBLICATIONS

Fitch, T., J. Tabernero, D. Bhandari. 2022. *Carbon-Free by 2050: Pathways to Achieving North Carolina's Power Sector Carbon Requirements at Least Cost to Ratepayers*. Synapse Energy Economics for North Carolina Sustainable Energy Association, Southern Alliance for Clean Energy, Natural Resources Defense Council, and the Sierra Club.

Fitch, T., Kwok, S., Kalley, J., & Chang, M. 2022. *Designing Effective Electric Grid Resiliency Plans: Brief for Decisionmakers in Entergy New Orleans' Resiliency Planning Process.* 

Fitch, T. 2021. Carbon Stranding Briefing: Risks of Carbon Stranding in Duke Energy's Modified 2020 Integrated Resource Plan. Vote Solar.

Fitch, T. 2021. Initial Comments to South Carolina Public Service Commission on Measures to Be Taken to Mitigate Impact of Threats to Safe and Reliable Utility Service. Vote Solar.

Fitch, T. 2021. Partial Proposed Order to South Carolina Public Service Commission, related to Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's 2020 Integrated Resource Plans. Vote Solar.

Fitch, T. 2021. Initial Comments to North Carolina Utilities Commission in the Matter of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's 2020 Integrated Resource Plans. Vote Solar.

Fitch, T. 2021. Carbon Stranding: Climate Risk and Stranded Assets in Duke Energy's Integrated Resource Plans. Vote Solar.

Fitch, T. 2020. 10 Principles for Duke's Integrated Resource Plans in the Public Interest. Vote Solar.

Fitch, T., & Ottenweller, K. 2020. The State of Rooftop Solar in Florida. Vote Solar.

Fitch, T. 2020. *Principles for Protecting Electric Utility Customers in the Regulatory Response to COVID-*19. Vote Solar.

Fitch, T., & Ottenweller, K. 2020. The Costs & Risks of Florida's Dependence on Natural Gas. Vote Solar.

Fitch, T. 2020. COVID-19 and the Utility Bill Debt Crisis. Vote Solar.

Culley, T., & Fitch, T. 2019. *Comments to the North Carolina Department of Environmental Quality on Draft Clean Energy Plan.* 

Fitch, T. 2018. Islands of Light: Microgrids and the Public Good. Agora Planning Journal, 12, 74-80.

Vanderwilde, C., & Fitch, T. 2018. *Fueling the Energy Transition: Can a Congolese community affordably electrify with renewable resources?* University of Michigan Sustainability Cases.

Fitch, T., Lenhart, A., Buchanan, C., & Jeong, B. 2018. *Get Free: Understanding the Potential for Community Solar Power in Highland Park.* Dow Sustainability Report Series.

### TESTIMONY

**North Carolina Utilities Commission (Docket No. E-100 Sub 179):** Direct Testimony of Tyler Fitch in the matter of Duke Energy Progress and Duke Energy Carolinas' 2022 Carbon Plan. September 2, 2022.

**Georgia Public Service Commission (Docket No. 44160):** Direct Testimony of Tyler Fitch in the matter of Georgia Power Company's 2021 Integrated Resources Plan. May 4, 2022.

**South Carolina Public Service Commission (Docket Nos. 2019-224-E and 2019-225-E):** Surrebuttal Testimony of Tyler Fitch in the matter of the 2020 Integrated Resource Plans for Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. April 15, 2021.

**South Carolina Public Service Commission (Docket Nos. 2019-224-E and 2019-225-E):** Direct Testimony of Tyler Fitch in the matter of the 2020 Integrated Resource Plans for Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. February 5, 2021.

**North Carolina Utilities Commission (Docket No. E-2, Sub 1219):** Direct Testimony of James Van Nostrand and Tyler Fitch in the Matter of Application of Duke Energy Progress, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina. April 13, 2020.

**Virginia State Corporation Commission (Docket No. PUR-2019-00214):** Direct Testimony of Tyler Fitch in the matter of the Application of Virginia Electric and Power Company for approval to establish an experimental residential rate. March 31, 2020.

**North Carolina Utilities Commission (Docket No. E-7, Sub 1214):** Direct Testimony of James Van Nostrand and Tyler Fitch in the Matter of Application of Duke Energy Carolinas, LLC for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina. February 18, 2020.

**Georgia Public Service Commission (Docket No. 42516):** Direct Testimony of Tyler Fitch and Rick Gilliam in the Matter of Georgia Power Company's 2019 Base Rate Case. October 17, 2019.

Resume updated January 2023

# <u>Jenny Marusiak</u>

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Jenny	<b>NON-FILING PARTICIPANT L. NAME</b> Marusiak
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 10	HOURLY RATE 230
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No
HST NUMBER 89659 3323 RT0001	<b>HEARINGS</b> Yes	CONSULTATIONS No	DISBURSEMENTS No

# **HEARINGS**

Hearings HoursHearings Subtotal (\$)Hearings Total Tax (\$)Hearings Total7.501,725.000.001,725.00	• (Ψ)
<u>Name Hours Hourly Sub Total HST HST</u> <u>Rate Rate</u>	<u>Total</u>
DISCOVERY Read and Research Application and 230 0.00 Evidence	
Preparation of Interrogatories 230 0.00	
Review Interrogatory Responses2300.00	
Technical Conference Preparation2300.00	
Technical Conference Attendance2300.00	
Technical Conference Follow-up2300.00	
Subtotal of DISCOVERY 0.00 0.00 0.00 0.00	0.00
PROCEDURALPreparation of Issues List Submission2300.00	
Attendance at Issues List Conference2300.00	
Preparation for a Confidentiality Request 230 0.00	
Prepare Submissions on Confidentiality 230 0.00	
Preparation of Motion(s) Materials 230 0.00	
Prepare Submissions on the Motion(s) 230 0.00	
Attendance at Hearing on Motion(s) 230 0.00	
Review Procedural Documents2300.00	

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<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	Sub Total	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
Subtotal of PROCEDURAL	0.00		0.00	0.00	0.00	0.00
INTERVENOR EVIDENCE Preparation of Intervenor Evidence	7.00	230	1,610.00	0.00		1,610.00
Interrogatory Responses		230		0.00		
Preparation of Witness(es) for Attendance		230		0.00		
at Hearing Subtotal of INTERVENOR EVIDENCE	7.00		1,610.00	0.00	0.00	1,610.00
SETTLEMENT CONFERENCE Preparation for Settlement Conference		230		0.00		
Attendance at Settlement Conference		230		0.00		
Preparation of Settlement Proposal		230		0.00		
Attendance at Presentation to Panel		230		0.00		
Subtotal of SETTLEMENT	0.00		0.00	0.00	0.00	0.00
CONFERENCE WRITTEN ARGUMENT Written Submissions	0.50	230	115.00	0.00		115.00
		230			0.00	
	0.50		115.00	0.00	0.00	115.00
ORAL ARGUMENT Preparation for Oral Hearing		230		0.00		
Attendance at Oral Hearing		230		0.00		
Oral Submissions		230		0.00		
Attendance at Oral Submissions		230		0.00		
Subtotal of ORAL ARGUMENT	0.00		0.00	0.00	0.00	0.00
DECISION Review Decision		230		0.00		
Review Rate/Accounting Order		230		0.00		
Prepare Submission on Rate Order		230		0.00		
Subtotal of DECISION	0.00		0.00	0.00	0.00	0.00
OTHER Other Attendance (e.g., Intervenor Conferences)		230		0.00		
Subtotal of OTHER	0.00		0.00	0.00	0.00	0.00
TOTAL SERVICE PROVIDER FEES Total Service Provider Fees	7.50		1,725.00		0.00	1,725.00

# Attachments

<u>Attachment</u>	Document Type
IGUA_EB-2022-0200_Final	CV
CostClaim_Synapse_Marusiak	
CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Synapse_Marusiak_TimeDockets _20240429.pdf	

Import Message

# Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Synapse_Marusiak			
CV_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_Marusiak_TimeDocket			
s_20240429.pdf			

Booked Time by Milestone

	End Date →	$\uparrow$	Jan	January 2023	February 2023	2023	March 2023		April 2023		May 2023		June 2023		July 2023	4	August 2023		September 2023		Total	
			Sur	Sum of Total Sum of Total	mofTotal SumofTotal	otal Sum of Total		Sum of Total Sum of Total	Sum of Tot	al Sum of Total Bil	Sum of Total Sum of Total Billable Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total S	Sum of Total S	Sum of Total St	Sum of Total Billable Sum of Total		Sum of Total	Sum of Total	Sum of Total
Milestone ↑	Resource $\uparrow$		Ho	Hours Bills	Billable Amount Hours	Billable An	Billable Amount Hours	Billable Amount	int Hours	Amount	Hours	<b>Billable Amount</b>	Hours	Billable Amount	Hours	Billable Amount F	Hours A	Amount	Hours	Billable Amount	Hours	Billable Amount
Attendance at oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.00	22.25	\$7,342.50	0.5	\$165.00	0 0.	\$0.00		75 \$7,507.50
Interrogatory responses	Alice Na poleon	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00 2.7	2.75 \$907.50	.50	0 \$0.00	0	\$0.00	0	\$0.0	0 0.	\$0.00		2.75 \$907.50
	Asa Hopkins	A nalyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	19.75 \$6,517.50	.50	0 \$0.00	0	\$0.00	0	\$0.05	0	\$0.00		
	Sol Deleon	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1 \$330.00	00;	0 \$0.00	0	\$0.00	0	\$0.00	0 0.	\$0.00	0	1
	Tim Woolf	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.5 \$165.00	00.	0 \$0.00	0	\$0.00	0	\$0.0	0 0.	\$0.00		0.5
Preparation for oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00 0.25	25 \$82.50	0 12	\$3,960.00	0.5	\$165.00	0 0.	\$0.00		12.75 \$
Preparation of interrogatories	Asa Hopkins	Analyst 20+	330	0.5	\$165.00	10.75 \$3.	\$3,547.50	0	\$0.00	0	\$0.00	0 \$0.	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0 0.	\$0.00		11.25 \$3,712.50
	Sol Deleon	A nalyst 20+	330	0	\$0.00	2.5 \$	\$825.00	0	\$0.00	0	\$0.00	0 \$0.	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0 0.	\$0.00		2.5 \$825.00
Preparation of intervenor evidence	Asa Hopkins	A nalyst 20+	330	5.5	\$1,815.00	7 \$2	\$2,310.00 3	31 \$10,230.00		9.5 \$3,13	\$3,135.00	6 \$1,980.00	00	0 \$0.00	0	\$0.00	0	\$0.00	0 0.	\$0.01	0	59 \$1
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00	0	\$0.00	0	\$0.00	7 \$1,61	51,610.00	0	00	0 \$0.00	0	<u>\$0.00</u>	0	\$0.00	0	\$0.00	0	7 5
	Paul Rhodes	A nalyst 0-5	170	0	\$0.00	0	\$0.00	4.5 \$76	\$765.00 7	7.5 \$1,27	\$1,275.00	0 \$0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.01	0	\$0.01		12 S
	Sol Deleon	A nalyst 20+	330	0	\$0.00	7.5 \$2.	\$2,475.00 46.25	25 \$15,262.50	52.50	2 \$66	\$660.00	0 \$0.	00;	0 \$0.00	0	\$0.00	0	\$0.05	0	\$0.00		55.75 \$1
Read and Research Application and Evidence	e Alice Na poleon	A nalyst 20+	330	-1	\$330.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.05	0	\$0.00	0	1
	Asa Hopkins	A nalyst 20+	330	1.25	\$412.50	1.5 \$	\$495.00	0	\$0.00	0	\$0.00	0 \$0	00;	0 \$0.00	0	\$0.00	0	\$0.05	0	\$0.00		2.75
	Paul Rhodes	Analyst 0-5	170	1.5	\$ 255.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0 0.	\$0.00		
	Sol Deleon	Analyst 20+	330	0.75	\$247.50	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.0	0 0.	\$0.00		0.75
	Tyler Fitch	Analyst 6-10	230	1	\$ 230.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0	00;00	0 \$0.00	0	\$0.00	0	\$0.0	0	\$0.00	0	1
Review interrogatory responses	Asa Hopkins	A nalyst 20+	330	0	\$0.00	0	\$0.00	2 \$6	660.00	0	\$0.00	0 \$0	00.0	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	2
Written submissions	Asa Hopkins	A nalyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0 \$0.	\$0.00	0 \$0.00	2	\$660.00	0.25	\$82.50	50 2.5	\$825.00		4.75 \$
	Jenny Marusiak	A nalyst 6-10	230	0	<u>\$0.00</u>	0	\$0.00	0	\$0.00	0 0	\$0.00	0	\$0.00	0 \$0.00	0	\$0.00	0.5	\$115.00	0	20.00		0.5 \$115.00
Total				115	C3 AEE OD	70.75 60	CO 657 ED 02 75	\$ 76 G		76 60		20 00 00	30.00	v	36.36	C11067 ED	1 76	\$577 E	30	ç	22	



### Jenny Marusiak, Communications Director

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617 453-7037 jmarusiak@synapse-energy.com

### PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. Communications Director, 2021–present. *Marketing and Proposal Manager*, 2014–2021.

- Oversees proposal process from lead identification to proposal development and contracting
- Edit Synapse reports, presentations, and work products to ensure that materials are accurate, clear, concise, written in plain language, and free of typographical and grammatical errors
- Manages marketing projects and activities

Eco-Business, Singapore. Deputy Editor, 2010 – 2012.

- Sole full-time editor for Asia Pacific's first online media platform for sustainable business and policy news and views
- Meticulously edited copy from journalists and contributing writers from a wide range of industry sectors and cultural backgrounds
- Wrote and published 110+ news and feature articles for general and B2B audiences on topics such as cleantech, energy policy, urban management, and corporate social responsibility
- Planned editorial calendar for 11 unique industry topics and fielded pitches from public relations firms, NGOs, corporations and government agencies
- Managed website content through online content management system (CMS) and social media interaction on LinkedIn, Facebook and Twitter
- Represented Eco-Business at global events and interviewed thought leaders, policy makers and experts from around the world

#### Freelance Writer and Editor, Singapore. 2010.

- Wrote, edited and proofread marketing and communications materials including newsletters, press releases, advertising brochures, flyers, web text and articles
- Wrote an in-depth yet highly readable impact report for a Canadian International Development Agency environmental economics program in Southeast Asia

**The Trust for Public Land**, New York, NY. *New York City Program Assistant*, 1997 – 1999.

- Provided administrative support to program director, including meeting logistics, event planning and tracking revenues and expenses for urban programs
- Wrote grant proposals and reports for funding from foundations and corporations
- Liaised with outside consultants providing environmental education programs in public schools and community gardens

The Trust for Public Land, Boston, MA. Development Assistant, 1999 – 2000.

- Coordinated the annual appeal for the Major Donors Officer, including donor mailings and responding to donor requests
- Maintained regional database and created a system for tracking donor activity

The Environment Council, London, England. Project and Training Coordinator, 1995 – 1996.

- Coordinated with developers, businesses, farmers, regulatory agencies, and NGOs as they negotiated best practice guidelines for an emerging biomass industry
- Researched and wrote reports and project briefs, and tracked project budget
- Provided logistical support and marketing materials for conflict resolution training courses
- Selected for management of the Environmental Resolve team during the manager's three-month leave of absence; recruited new staff and developed staff job descriptions

### EDUCATION

**Columbia College, Columbia University**, New York, NY Bachelor of Arts in Environmental Science, 1994

Resume dated April 2024

# Alice Napoleon

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	NON-FILING PARTICIPANT F. NAME Alice	NON-FILING PARTICIPANT L. NAME Napoleon
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 20	HOURLY RATE 330
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

No

# HEARINGS

89659 3323 RT0001

Yes

Hearings Hours 3.75	Hearings Subtotal (\$) 1,237.50		Hearings Total 0.00	Tax (\$)		<b>gs Total (\$)</b> 237.50
<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
DISCOVERY Read and Research Application an Evidence	nd 1.00	330	330.00	0.00		330.00
Preparation of Interrogatories		330		0.00		
Review Interrogatory Responses		330		0.00		
Technical Conference Preparation		330		0.00		
Technical Conference Attendance		330		0.00		
Technical Conference Follow-up		330		0.00		
Subtotal of DISCOVERY	1.00		330.00	0.00	0.00	330.00
PROCEDURAL Preparation of Issues List Submiss	sion	330		0.00		
Attendance at Issues List Confere	nce	330		0.00		
Preparation for a Confidentiality R	equest	330		0.00		
Prepare Submissions on Confider	tiality	330		0.00		
Preparation of Motion(s) Materials		330		0.00		
Prepare Submissions on the Motio	on(s)	330		0.00		
Attendance at Hearing on Motion	s)	330		0.00		
Review Procedural Documents		330		0.00		

CC\_Participant\_Combined.rpt - last Update 20230601

Name	<u>Hours</u>	Hourly Rate	Sub Total	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
Subtotal of PROCEDURAL	0.00		0.00	0.00	0.00	0.00
NTERVENOR EVIDENCE Preparation of Intervenor Evidence		330		0.00		
Interrogatory Responses	2.75	330	907.50	0.00		907.50
Preparation of Witness(es) for Attendance at Hearing	0.75	330	007 50	0.00	0.00	007 50
	2.75		907.50	0.00	0.00	907.50
SETTLEMENT CONFERENCE Preparation for Settlement Conference		330		0.00		
Attendance at Settlement Conference		330		0.00		
Preparation of Settlement Proposal		330		0.00		
Attendance at Presentation to Panel		330		0.00		
Subtotal of SETTLEMENT CONFERENCE	0.00		0.00	0.00	0.00	0.00
VRITTEN ARGUMENT Written Submissions		330		0.00		
Subtotal of WRITTEN ARGUMENT	0.00		0.00	0.00	0.00	0.00
DRAL ARGUMENT Preparation for Oral Hearing		330		0.00		
Attendance at Oral Hearing		330		0.00		
Oral Submissions		330		0.00		
Attendance at Oral Submissions		330		0.00		
Subtotal of ORAL ARGUMENT	0.00		0.00	0.00	0.00	0.00
DECISION Review Decision		330		0.00		
Review Rate/Accounting Order		330		0.00		
Prepare Submission on Rate Order		330		0.00		
Subtotal of DECISION	0.00		0.00	0.00	0.00	0.00
THER						
Other Attendance (e.g., Intervenor Conferences)		330		0.00		
Subtotal of OTHER	0.00		0.00	0.00	0.00	0.00
OTAL SERVICE PROVIDER FEES Total Service Provider Fees	3.75		1,237.50		0.00	1,237.50

# Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	CV
CostClaim_Synapse_Napoleon	
CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Synapse_Napoleon_TimeDocket	
s_20240429.pdf	

Import Message

# Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Synapse_Napoleon			
CV_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_Napoleon_TimeDocke			
ts_20240429.pdf			

Booked Time by Milestone

	End Date →	$\uparrow$		January 2023		February 2023	Ma	March 2023	A	April 2023	May 2023	2023	June	June 2023	Ju	July 2023		August 2023		September 2023		Total	
	-			Sum of Total	Sum of Total Sum of Total Su	Sum of Total Sun	Sum of Total Sum of	Total	1	Sum of Total Sum of	Sum of Total Sum of Total Billable Sum of Total		Sum of Total Sum o	f Total	Sum of Total Sur	Sum of Total S	Sum of Total	Sum of Total	Sum of Total Billable Sum of Total		Sum of Total	Sum of Total	Sum of Total
.l. auota	L. ADINGAN			SINDL						unouily sino								SINCH	IIIIIII	SINCL		Sinou	IN ALL PILLO
Attendance at oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	22.25	\$7,342.50	0.5	\$165.00	0	\$0:00		75 \$7,507.50
Interrogatory responses	Alice Na poleon	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2.75	\$907.50	0	\$0.00	0	\$0.00		\$0.00	0	\$0,		2.75
	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	19.75	\$6,517.50	0	\$0.00	0	\$0.00		\$0.00	0	\$0.00		
	Sol Deleon	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	-1	\$330.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	00	1 \$330.00
	Tim Woolf	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.5	\$165.00	0	\$0.00	0	\$0.00	0		0	\$0.00		0.5
Preparation for oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.25	\$82.50	12	\$3,960.00	0.5	s	0	ŝ		12.75 \$
Preparation of interrogatories	Asa Hopkins	Analyst 20+	330	0.5	\$ \$165.00	10.75	\$3,547.50	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0	\$0.00		
	Sol Deleon	Analyst 20+	330	0	\$0.00	2.5	\$825.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0	\$0.00		2.5
Preparation of intervenor evidence	Asa Hopkins	Analyst 20+	330	5.5	\$1,815.00	7	\$2,310.00	31	\$10,230.00	9.5	\$3,135.00	9	\$1,980.00	0	\$0.00	0	\$0.00	0		0		00	59 \$1
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00	0	\$0.00	0	\$0.00	7	\$1,610.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0		00	7 \$1,610.00
	Paul Rhodes	Analyst 0-5	170	0	\$0.00	0	\$0.00	4.5	\$765.00	7.5	\$1,275.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0	\$0.00	00	12 \$
	Sol Deleon	Analyst 20+	330	0	\$0.00	7.5	\$2,475.00	46.25	\$15,262.50	2	\$660.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0	\$0.00		
Read and Research Application and Evidence	Alice Na poleon	Analyst 20+	330	1	\$330.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00		\$0.00	0	\$0.00	00	1 \$330.00
	Asa Hopkins	Analyst 20+	330	1.25	\$412.50	1.5	\$495.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0			2.75
	Paul Rhodes	Analyst 0-5	170	1.5	\$ \$255.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0			
	Sol Deleon	Analyst 20+	330	0.75	\$ \$247.50	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0	\$0.00		0.75
	Tyler Fitch	Analyst 6-10	230	1	\$230.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0		00	1
Review interrogatory responses	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	2	\$660.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0		0		00	2
Written submissions	Asa Hopkins	Analyst 20+	330	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2	\$660.00	0.25	\$82.50	2.5	\$825.00		4.75 \$
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00		\$115.00	0	\$0.00		0.5
[otal				115	5 455 M	20 25	<b>49 657 50</b>	83.75	\$26 917 50	26	\$6.680.00	30		0.75	\$87 ED	36.25	\$11967 ED	1 75	\$527 50	25	\$875.00	30 1 00	25 \$70.002 50



### Alice Napoleon, Principal Associate

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-453-7041 anapoleon@synapse-energy.com

### **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics, Inc.**, Cambridge, MA. *Principal Associate*, June 2021 – Present; *Senior Associate*, June 2013 – June 2021; *Associate*, July 2008 – June 2013; *Research Associate*, April 2005 – July 2008.

- Provides expert analysis, ongoing stakeholder support, and consulting services in regulatory
  proceedings regarding energy efficiency program design and performance, funding and
  incentive mechanisms, cost-effectiveness screening, potential studies, and plans. Develops and
  sponsors testimony on electric and natural gas energy efficiency plans, advanced metering
  infrastructure (AMI) proposals, innovative programs, and regulatory structures.
- Researches policies and practices regarding ratemaking for energy efficiency, power procurement, risk management, and fuel diversity.
- Managed efforts by Synapse and subcontractors to conduct a sweeping study of the disparate impacts of electric and natural gas infrastructure on economic, social, and health outcomes, and options for improving energy equity. Conducted interviews and oversaw research, including a literature review, web meetings, and several case studies.
- Conducted extensive research on low-income energy efficiency efforts in U.S. states. Analyzed energy burden differences by income level and across factors that can impact participation in and efficacy of energy efficiency programs in order to inform program design and targeting efforts. Provided consulting services and testimony on low-income energy efficiency programs and proposals.
- Led development of a cost-effectiveness tool, program designs, and case studies to facilitate incorporating strategic energy management programs into energy efficiency program portfolios for commercial and industrial customers.
- Designed research approach and managed team that conducted a sweeping analysis of energy efficiency potential studies from utilities, states, and regions across the U.S.
- Conducted research and co-authored reports on efforts to increase resilience of the electric system, including emerging regulatory mechanisms. Designed survey instrument and oversaw interviews.
- Facilitated residential, commercial, and industrial policy working groups and managed technical analysis of working group recommendations to reduce greenhouse gas (GHG) emissions in Colorado, South Carolina, and Maryland.

### Resource Insight, Inc., Arlington, MA. Research Assistant, 2003-2005.

Responsible for conducting research and analysis of electric, gas, steam, and water resource issues. Conducted discounted cash flow analysis for asset valuation. Developed market-price benchmarks for analysis of power-supply bids including energy, capacity, ancillary services, transmission, ISO services, losses, and adjustment for load shape. Prepared discovery responses, formal objections, comments, and testimony; collaboratively wrote and edited reports; created and formatted exhibits. Participated in drafting an Energy Plan for New York City. Edited solicitation for competitive power supply to serve aggregated municipal load.

### University of Massachusetts, Amherst, MA. Teaching Assistant, 2001-2002.

Developed and taught lessons on applied math to a diverse group of incoming graduates; tutored students in microeconomic theory and cost benefit analysis; graded problem sets and memoranda.

**International Council for Local Environmental Initiatives**, Berkeley, CA. *Cities for Climate Protection Intern for the City of Northampton, MA*, 2001.

Compiled primary and secondary source data on energy consumption and solid waste generation by the municipal government, city residents, and businesses; applied emissions coefficients to calculate total GHG emissions; identified current and planned municipal policies that impact GHG emissions; researched the predicted local effects of global warming; gathered public feedback to provide acceptable and proactive policy alternatives. Composed a GHG emissions inventory describing research findings; wrote and distributed a policy report and press releases; gave newspaper and radio interviews; addressed public officials and the public during a televised meeting.

#### University of Massachusetts, Amherst, MA. Research Assistant, 2000-2001.

Located federal data sources, identified changes, and updated a research database to evaluate the Habitat Conservation Program; proofread articles and white papers; composed a literature review on land use modelling. Collaboratively administered, tested, and proposed interface enhancements for a web-based data warehouse of regional habitat change research; formally presented the system to an independent research group.

# **Court Square Data Group, Inc**., Springfield, MA. *Administration Manager*, 1998-2000; *Project Administrator*, 1996-1998.

As Administration Manager, analysed profitability and diversity of income sources; managed cash flow, expense, and income data; created budgets; devised and implemented procedures to increase administrative efficiency; implemented new accounting system with minimal disruption to workflow.

As Project Administrator, coordinated implementation of software features; identified opportunities for future development; monitored problem resolution; wrote and coordinated production of a user's manual and questionnaires; edited technical proposals and a business plan.

### **EDUCATION**

**University of Massachusetts**, Amherst, MA Master of Public Administration, 2002

**Rutgers University**, New Brunswick, NJ Bachelor of Arts in Economics, 1995

Syracuse University, Syracuse, NY, 1994

### PUBLICATIONS

Hopkins, A. S., A. Napoleon, K. Schultz. 2023. *The High Cost of New York Gas Utilities' Leak- Prone Pipe Replacement Programs*. Synapse Energy Economics for Natural Resources Defense Council.

Hopkins, A. S., A. Napoleon, J. Litynski, K. Takahashi, J. Frost, S. Kwok. 2022. *Climate Policy for Maryland's Gas Utilities: Financial Implications*. Synapse Energy Economics for Maryland Office of the People's Counsel.

Hopkins, A. S., S. Kwok, J. Litynski, A. Napoleon, K. Takahashi. 2022. Memo: Evaluation of Draft Consultant Reports in Massachusetts DPU Docket 20-80. Synapse Energy Economics for Conservation Law Foundation.

Frost, J. S. Kwok, K. Takahashi, A.S. Hopkins, A. Napoleon. 2021. *New York Heat Pump Trajectory Analysis*. Synapse Energy Economics for NRDC.

Hopkins, A. S., A. Napoleon, K. Takahashi. 2021. *A Framework for Long-Term Gas Utility Planning in Colorado*. Synapse Energy Economics for the Colorado Energy Office.

Kallay, J., A. Napoleon, K. Takahashi, E. Sinclair, T. Woolf. 2021. *Opportunities for Evergy Kansas to Address Energy Equity Within its Integrated Resource Plan and Other Planning Processes*. Synapse Energy Economics for Union of Concerned Scientists.

Takahashi, K., E. Sinclair, A. Napoleon, A. Hopkins, D. Goldberg. 2021. *Evaluation of EnergyWise Low-Income Energy Efficiency Program in Mississippi – Program Performance, Design, and Implications for Low-Income Efficiency Programs*. Synapse Energy Economics for Sierra Club and Gulf Coast Community Foundation.

Kallay, J., A. Napoleon, J. Hall, B. Havumaki, A. Hopkins, M. Whited, T. Woolf, J. Stevenson, R. Broderick, R. Jeffers, B. Garcia. 2021. *Regulatory Mechanisms to Enable Investments in Electric Utility Resilience*. Synapse Energy Economics for Sandia National Laboratories.

Kallay, J., A. Napoleon, B. Havumaki, J. Hall, C. Odom, A. Hopkins, M. Whited, T. Woolf, M. Chang, R. Broderick, R. Jeffers, B. Garcia. 2021. *Performance Metrics to Evaluate Utility Resilience Investments.* Synapse Energy Economics for Sandia National Laboratories.

Hopkins, A., S. Kwok, A. Napoleon, C. Roberto, K. Takahashi. 2021. *Scoping a Future of Gas Study*. Synapse Energy Economics for Conservation Law Foundation.

Kallay, J., A. Hopkins, A. Napoleon, B. Havumaki, J. Hall, M. Whited, M. Chang., R. Broderick, R. Jeffers, K. Jones, M. DeMenno. 2021. *The Resilience Planning Landscape for Communities and Electric Utilities.* Synapse Energy Economics for Sandia National Laboratories.

Napoleon, A., E. Camp, S. Letendre, E. Sinclair. 2021. *Synapse Comments on the Pennsylvania Public Utility Commission on the Utilization of Storage Resources as Electric Distribution Assets - Docket No. M-2020-3022877*. Synapse Energy for the National Resources Defense Council.

Hopkins, A. S., A. Napoleon, K. Takahashi. 2020. *Gas Regulation for a Decarbonized New York: Recommendations for Updating New York Gas Utility Regulation.* Synapse Energy Economics for Natural Resources Defense Council.

Takahashi, K., A. Napoleon. 2020. *Synapse Comments on EfficiencyOne Performance Alignment Study - M09096*. Questions and comments regarding the EfficiencyOne Performance Alignment Study filed on April 21, 2020. Synapse Energy Economics for the Nova Scotia Utility and Review Board.

Napoleon, A., J. Hall, J. Kallay, M. Chang, P. Eash-Gates, N. L. Seidman, C. James, D. Torre, D. Brutkoski, J. Migden-Ostrander, K. Colburn, K. Maddux, D. Harlow, M. Power. 2020. *Energy Infrastructure: Sources of Inequities and Policy Solutions for Improving Community Health and Wellbeing*. Synapse Energy Economics, Regulatory Assistance Project, and Community Action Partnership for the Robert Wood Johnson Foundation.

Napoleon, A., J. Kallay, K. Takahashi. 2020. *Utility Energy Efficiency and Building Electrification Portfolios Through 2025: A Brief on the New York Public Service Commission's Recent Order.* Synapse Energy Economics for the Natural Resources Defense Council.

Takahashi, K., A. Napoleon. 2019. *Synapse Comments on EfficiencyOne's 2019 Rate and Bill Impact Analysis and Model - M09471.* Comments regarding the revised 2019 Rate and Bill Impact Analysis filed by EfficiencyOne on November 1, 2019. Synapse Energy Economics for the Nova Scotia Utility and Review Board.

Napoleon, A., B. Havumaki, D. Bhandari, T. Woolf. 2019. *Review of New Brunswick Power's Application for Approval of an Advanced Metering Infrastructure Capital Project: In the Matter of the New Brunswick Power Corporation and Section 107 of the Electricity Act; Matter No. 452.* Synapse Energy Economics for the New Brunswick Energy and Utilities Board Staff.

Kallay, J., A. Hopkins, J. Frost, A. Napoleon, K. Takahashi, J. Slason, G. Freeman, D. Grover, B. Swanson. 2019. *Net Zero Energy Roadmap for the City of Burlington, Vermont*. Synapse Energy Economics and Resource Systems Group for Burlington Electric Department.

Napoleon, A., T. Woolf, K. Takahashi, J. Kallay, B. Havumaki. 2019. *Comments in the New York Public Service Commission Case 18-M-0084: In the Matter of a Comprehensive Energy Efficiency Initiative.* Comments related to NY Utilities report regarding energy efficiency budgets and targets, collaboration, heat pump technology, and low- and moderate-income customers and requests for approval. Prepared by Synapse Energy Economics on behalf of Natural Resources Defense Council.

Allison, A., A. Napoleon, J. Kallay. 2019. *Maine Low-Income Home Energy Burden Study*. Synapse Energy Economics for the Maine Office of the Public Advocate.

Napoleon, A., D. Goldberg, K. Takahashi, T. Woolf. 2019. *An Assessment of Prince Edward Island Energy Corporations' 2018 - 2021 Energy Efficiency and Conservation Plan.* Synapse Energy Economics for Carr, Stevenson and MacKay as Counsel to the Island Regulatory and Appeals Commission.

Takahashi, K., A. Napoleon. 2018. *Synapse Comments on EfficiencyOne's 2019 Rate and Bill Impact Analysis and Model - M09471.* Comments regarding the revised 2019 Rate and Bill Impact Analysis filed by EfficiencyOne on November 1, 2019. Synapse Energy Economics for the Nova Scotia Utility and Review Board.

Camp, E., B. Fagan, J. Frost, D. Glick, A. Hopkins, A. Napoleon, N. Peluso, K. Takahashi, D. White, R. Wilson, T. Woolf. 2018. *Phase 1 Findings on Muskrat Falls Project Rate Mitigation*. Synapse Energy Economics for Board of Commissioners of Public Utilities, Province of Newfoundland and Labrador.

Hall, J., J. Kallay, A. Napoleon, K. Takahashi, M. Whited. 2018. *Locational and Temporal Values of Energy Efficiency and other DERs to Transmission and Distribution Systems*. Synapse Energy Economics.

Ackerman, F., S. Fields, A. Napoleon, D. Bhandari. 2018. *Can Clean Energy Replace California Oil Production: Petroleum cutbacks and the California economy*. Synapse Energy Economics for the 11th Hour Project.

White, D., K. Takahashi, A. Napoleon, T. Woolf. 2018. *Value of Energy Efficiency in New York: Assessment of the Range of Benefits of Energy Efficiency Programs*. Synapse Energy Economics for Natural Resources Defense Council.

Woolf, T., A. Hopkins, M. Whited, K. Takahashi, A. Napoleon. 2018. *Review of New Brunswick Power's 2018/2019 Rate Case Application*. In the Matter of the New Brunswick Power Corporation and Section 103(1) of the Electricity Act Matter No. 375. Prepared by Synapse Energy Economics for the New Brunswick Energy and Utilities Board Staff.

Fagan, B., A. Napoleon, S. Fields, P. Luckow. 2017. *Clean Energy for New York: Replacement Energy and Capacity Resources for the Indian Point Energy Center Under New York Clean Energy Standard (CES).* Synapse Energy Economics for Riverkeeper and Natural Resources Defense Council.

Kallay, J., A. Napoleon, M. Chang. 2016. *Opportunities to Ramp Up Low-Income Energy Efficiency to Meet States and National Climate Policy Goals*. Synapse Energy Economics.

Woolf, T., A. Napoleon, P. Luckow, W. Ong, K. Takahashi. 2016. *Aiming Higher: Realizing the Full Potential of Cost-Effective Energy Efficiency in New York.* Synapse Energy Economics for Natural Resources Defense Council, E4TheFuture, CLEAResult, Lime Energy, Association for Energy Affordability, and Alliance for Clean Energy New York. Napoleon, A., K. Takahashi, J. Kallay, T. Woolf. 2016. "Evaluation, Measurement, and Verification in Virginia." Memorandum prepared by Synapse Energy Economics for Clean Energy Solutions Inc., Virginia Energy Efficiency Council, and Virginia Department of Mines, Minerals and Energy.

Woolf, T., A. Napoleon, M. Whited. 2015-2016. *Comments and Reply Comments in the New York Public Service Commission Case 14-M-0101: Reforming the Energy Vision*. Comments related to Staff's (a) a benefit-costs analysis framework white paper, (b) ratemaking and utility business models white paper, and (c) Distributed System Implementation Plan guide. Prepared by Synapse Energy Economics on behalf of Natural Resources Defense Council and Pace Energy and Climate Center.

Kallay, J., K. Takahashi, A. Napoleon, T. Woolf. 2015. *Fair, Abundant, and Low-Cost: A Handbook for Using Energy Efficiency in Clean Power Plan Compliance.* Synapse Energy Economics for the Energy Foundation.

Woolf, T., K. Takahashi, E. Malone, A. Napoleon, J. Kallay. 2015. *Ontario Gas Demand-Side Management 2016-2020 Plan Review*. Synapse Energy Economics for the Ontario Energy Board.

Biewald, B., J. Daniel, J. Fisher, P. Luckow, A. Napoleon, N. R. Santen, K. Takahashi. 2015. *Air Emissions Displacement by Energy Efficiency and Renewable Energy.* Synapse Energy Economics.

Takahashi, K., A. Napoleon. 2015. "Pursue Behavioral Efficiency Programs." Ed. John Shenot. In *Implementing EPA's Clean Power Plan: A Menu of Options*. National Associate of Clean Air Agencies.

Daniel, J. A. Napoleon, T. Comings, S. Fields. 2015. *Comments on Entergy Louisiana's 2015 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.

Whited, M., T. Woolf, A. Napoleon. 2015. *Utility Performance Incentive Mechanisms: A Handbook for Regulators*. Synapse Energy Economics for the Western Interstate Energy Board.

Takahashi, K., T. Comings, A. Napoleon. 2014. *Maximizing Public Benefit through Energy Efficiency Investments.* Synapse Energy Economics for Sierra Club.

Keith, G., S. Jackson, A. Napoleon, T. Comings, J. Ramey. 2012. *The Hidden Costs of Electricity: Comparing the Hidden Costs of Power Generation Fuels.* Synapse Energy Economics for Civil Society Institute.

Keith, G., B. Biewald, K. Takahashi, A. Napoleon, N. Hughes, L. Mancinelli, E. Brandt. 2010. *Beyond Business as Usual: Investigating a Future without Coal and Nuclear Power in the US.* Synapse Energy Economics for Civil Society Institute.

Napoleon, A., W. Steinhurst, M. Chang, K. Takahashi, R. Fagan. 2010. *Assessing the Multiple Benefits of Clean Energy: A Resource for States*. US Environmental Protection Agency with research and editorial support from Stratus Consulting, Synapse Energy Economics, Summit Blue, Energy and Environmental Economics, Inc., Demand Research LLC, Abt Associates, Inc., and ICF International.

Napoleon, A., D. Schlissel. 2009. *Economic Impacts of Restricting Mountaintop/Valley Fill Coal Mining in Central Appalachia*. Synapse Energy Economics for Sierra Club, and Appalachian Center for the Economy and the Environment.

Napoleon, A., J. Fisher, W. Steinhurst, M. Wilson, F. Ackerman, M. Resnikoff. 2008. *The Real Costs of Cleaning Up Nuclear Waste: A Full Cost Accounting of Cleanup Options for the West Valley Nuclear Waste Site*. Synapse Energy Economics for Citizens' Environmental Coalition.

Napoleon, A., G. Keith, C. Komanoff, D. Gutman, P. Silva, D. Schlissel, A. Sommer, C. Chen, A. Roschelle, J. Levy, P. Kinney. 2007. *Quantifying and Controlling Fine Particulate Matter in New York City*. Synapse Energy Economics for Coalition Helping Organize a Kleaner Environment, Natural Resources Defense Council (NRDC), Reliant Energy.

Drunsic, M., A. Napoleon, E. Hausman, R. Hornby. 2007. *Arkansas Electric Generation Fuel Diversity: Implementation of EPAct 2005 Amendments to PURPA Section 111 (d)*. Synapse Energy Economics for Arkansas Public Service Commission Staff.

Hausman, E., R. Fagan, D. White, K. Takahashi, A. Napoleon. 2007. *LMP Electricity Markets: Market Operations, Market Power, and Value for Consumers*. Synapse Energy Economics for American Public Power Association.

Synapse Energy Economics. 2006. *Portfolio Management: Tools and Practices for Regulators*. Prepared for National Association of Regulatory Utility Commissioners.

Steinhurst, W., A. Napoleon, K. Takahashi. 2006. *Energy in the Northern Forest Region: A Situation Analysis*. Synapse Energy Economics for Northern Forest Center and The North Country Council.

Synapse Energy Economics. 2006. *Ensuring Delaware's Energy Future: A Response to Executive Order Number 82*. Synapse Energy Economics for Delaware Public Service Commission Staff by the Delaware Cabinet Committee on Energy and others.

Fagan, R., A. Napoleon, A. Rochelle, A. Sommer, W. Steinhurst, D. White. K. Takahashi. 2006. *Mohave Alternatives and Complements Study: Assessment of Carbon Sequestration Feasibility and Markets.* Sargent & Lundy and Synapse Energy Economics, Inc. for Southern California Edison.

### TESTIMONY

**New York Public Utilities Commission (Case No. 22-E-0064 and 22-G-0065):** Direct and Rebuttal Testimony of Alice Napoleon and Asa Hopkins regarding Con Edison's proposed gas-side investments as greenhouse gas mitigation strategies and gas extension allowance rule changes and the need for long-term planning for the gas system and adequacy of the company's non-pipe alternatives framework. On behalf of Natural Resources Defense Council, May 2022.

**Nova Scotia Utility and Review Board (M10473):** Evidence of Alice Napoleon and Kenji Takahashi regarding EfficiencyOne's 2023-2025 DSM Resource Plan, with a focus on the Settlement Plan. On behalf of Counsel to Nova Scotia Utility and Review Board, May 2022.

**Pennsylvania Public Utility Commission (Docket No. M-2020-3020824)**: Revised Direct Testimony of Alice Napoleon and Kenji Takahashi regarding PPL Electric Utilities' proposed Act 129 Phase IV Energy Efficiency and Conservation. On behalf of the Natural Resources Defense Council. January 19, 2021.

**Pennsylvania Public Utility Commission (Docket No. M-2020-3020830):** Direct testimony of Alice Napoleon and Courtney Lane regarding PECO Energy Company's proposed Act 129 Phase IV Energy Efficiency and Conservation Plan. On behalf of the natural Resources Defense Council. January 14, 2021.

**Nova Scotia Utility and Review Board (Matter No. M09519)**: Evidence of Alice Napoleon regarding Nova Scotia Power's Smart Grid Nova Scotia Project proposal. On behalf of Counsel to the Nova Scotia Utility and Review Board. February 19, 2020.

**New York Public Service Commission (Cases 20-E-0380 and 20-G-0381):** Direct testimony of Alice Napoleon and Kenji Takahashi regarding proposed earnings adjustment mechanisms in a proceeding on Rates, Charges, Rules, and Regulations related to Niagara Mohawk Power Corporation d/b/a National Grid for Electric Service and National Grid for Gas Service. On behalf of the Natural Resources Defense Council. November 25, 2020.

**California Public Utilities Commission (Application Nos. 19-11-003, 19-11-004, 19-11-005, 19-11-006):** Prepared Testimony of Alice Napoleon addressing proposals of Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, and Southern California Gas Company related to the Energy Savings Assistance (ESA) Program and Budgets for Program Years 2021-2026. On behalf of The Utility Reform Network. September 4, 2020.

**California Public Utilities Commission (Application Nos. 19-11-003, 19-11-004, 19-11-005, 19-11-006, 19-11-007):** Comments of The Utility Reform Network on the Energy Division Staff Proposal and Utility Applications. On behalf of The Utility Reform Network. July 24, 2020.

**Nova Scotia Utility and Review Board (Matter No. M09096):** Evidence of Alice Napoleon regarding EfficiencyOne's 2020-2022 DSM Plan. On behalf of Counsel to the Nova Scotia Utility and Review Board. May 28, 2019.

**New York Public Service Commission (Cases 19-E-0065 and 19-G-0066):** Direct testimony of Tim Woolf and Alice Napoleon regarding energy efficiency targets and incentives in Con Edison rate case. On behalf of the Natural Resources Defense Council. May 24, 2019.

**Nova Scotia Utility and Review Board (Matter No. M08604):** Evidence of Alice Napoleon regarding the 2019 Demand Side Management Resource Plan. On behalf of Counsel to the Nova Scotia Utility and Review Board. June 13, 2018.

**Nova Scotia Utility and Review Board (Matter No. M08349):** Evidence of Alice Napoleon regarding Nova Scotia Power's Advanced Meter Infrastructure Proposal. On behalf of Counsel to the Nova Scotia Utility and Review Board. January 18, 2018.

**Nova Scotia Utility and Review Board (Case No. M07767):** Direct evidence in the matter of the Nova Scotia Power Advanced Meter Infrastructure Pilot. On behalf of Counsel to the Nova Scotia Utility and Review Board. February 16, 2017.

**Public Service Commission of South Carolina (Docket No. 2016-223-E):** Direct Testimony of Alice Napoleon regarding South Carolina Electric and Gas Energy Efficiency Efforts. On behalf of South Carolina Coastal Conservation League. September 1, 2016.

Nova Scotia Utility and Review Board (Case No. M06247): Direct evidence in the matter of an application by Efficiency Nova Scotia Corporation for approval of its electricity demand-side management plan for 2015. On behalf of Counsel to the Nova Scotia Utility and Review Board. July 14, 2014.

### **TESTIMONY ASSISTANCE**

**Public Service Commission of South Carolina (Docket No. 2017-2-E):** Direct Testimony of Thomas Vitolo, PhD regarding Avoided Cost Calculations and the Costs and Benefits of Solar Net Energy Metering for South Carolina Electric & Gas Company. On behalf of South Carolina Coastal Conservation League and Southern Alliance for Clean Energy. March 22, 2017.

**State of New Jersey Board of Public Utilities (Docket No. ER16060524):** Direct testimony of Tim Woolf regarding the Petition of Rockland Electric Company for Approval of an Advanced Metering Program, and for Other Relief. On behalf of New Jersey Division of the Ratepayer Advocate. September 9, 2016.

**Nova Scotia Utility and Review Board (Matter No. M06733):** Direct testimony of Tim Woolf regarding EfficiencyOne's 2016-2018 demand-side management plan. On behalf of the Nova Scotia Utility and Review Board. June 2, 2015.

**Missouri Public Service Commission (File No. EO-2015-0055):** Rebuttal and surrebuttal of Tim Woof on the topic of Ameren Missouri's 2016-2018 Energy Efficiency Plan. On behalf of Sierra Club. March 20, 2015 and April 27, 2015.

**State of New Jersey Board of Public Utilities (Docket No. EO14080897):** Direct testimony of Kenji Takahashi regarding the Petition of Public Service Electric & Gas Company to continue its Energy Efficiency Economic Extension Program on a Regulated Basis (EEE Extension II). On behalf of New Jersey Division of the Ratepayer Advocate. November 7, 2014.

**Kentucky Public Service Commission (Case No. 2014-00003):** Direct testimony of Tim Woof regarding Louisville Gas and Electric Company and Kentucky Utilities Company's proposed 2015-2018 demand-side

management and energy efficiency program plan. On behalf of Wallace McMullen and the Sierra Club. April 14, 2014.

**State of New Jersey Board of Public Utilities (Docket No. GO12050363):** Direct testimony of Maximilian Chang regarding South Jersey Gas Company's proposal to extend and modify its energy-efficiency programs. On behalf of New Jersey Division of the Ratepayer Advocate. November 9, 2012.

**State of New Jersey Board of Public Utilities (Docket No. GO12070640):** Direct testimony of Robert Fagan regarding New Jersey Natural Gas Company's petition for approval of the extension of the SAVEGREEN energy efficiency programs. On behalf of the New Jersey Division of the Ratepayer Advocate. October 26, 2012.

**State of New Jersey Board of Public Utilities (Docket No. GO11070399):** Direct testimony of Robert Fagan regarding Elizabethtown Gas Company's Proposed Energy Efficiency Program. On behalf of New Jersey Division of the Ratepayer Advocate. December 16, 2011.

**State of New Jersey Board of Public Utilities (Docket No. GR11070425):** Direct testimony of Robert Fagan regarding New Jersey Natural Gas Company's petition for approval of the extension of the SAVEGREEN energy efficiency programs. On behalf of the New Jersey Division of the Ratepayer Advocate. November 16, 2011.

**State of New Jersey Board of Public Utilities (Docket No. GR10030225):** Direct testimony of David Nichols regarding New Jersey Natural Gas Company's Proposed Energy Efficiency Program. On behalf of New Jersey Division of the Ratepayer Advocate. July 9, 2010.

**Virginia State Corporation Commission (Case No. PUE-2009-00097):** Direct testimony of William Steinhurst regarding Appalachian Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq. On behalf of the Southern Environmental Law Center, Chesapeake Climate Action Network, Appalachian Voices, and the Virginia Chapter of The Sierra Club. March 23, 2010.

**Delaware Public Service Commission (Docket No. 07-20):** Jointly authored an expert report, with Robert Fagan, William Steinhurst, David White, and Kenji Takahashi, In the Matter of Integrated Resource Planning for the Provision of Standard Offer Service by Delmarva Power & Light Company Under 26 DEL. C. §1007 (c) & (d). On behalf of the Staff of Delaware Public Service Commission. April 2, 2009.

**State of New Jersey Board of Public Utilities (BPU Docket EM05020106):** Direct and surrebuttal testimony of Bruce Biewald, Robert Fagan, and David Schlissel regarding the Joint Petition Of Public Service Electric and Gas Company And Exelon Corporation For Approval of a Change in Control Of Public Service Electric and Gas Company And Related Authorizations. On behalf of New Jersey Division of the Ratepayer Advocate. November 14, 2005 and December 27, 2005.

**Illinois Commerce Commission (Dockets 05-0160, 05-0161, 05-0162):** Direct testimony of William Steinhurst regarding Ameren's proposed competitive procurement auction (CPA). On behalf of Illinois Citizens Utility Board. June 15, 2005 and August 10, 2005.

**Illinois Commerce Commission (Docket 05-0159):** Direct testimony of William Steinhurst regarding Commonwealth Edison's Proposal to implement a competitive procurement process. On behalf of Illinois Citizens Utility Board and Cook County State's Attorney's Office. June 8, 2005 and August 3, 2005.

Resume updated March 2023

No

### Paul Rhodes

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	<b>NON-FILING PARTICIPANT F. NAME</b> Paul	NON-FILING PARTICIPANT L. NAME Rhodes
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 5	HOURLY RATE 170
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 26, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

Yes

### HEARINGS

89659 3323 RT0001

Hearings Hours 23.75	Hearings Subtotal (\$) 4,037.50		Hearings Total 0.00	Tax (\$)	Hearings Total (\$) 4,037.50			
<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>		
DISCOVERY Read and Research Application a	nd 11.75	170	1,997.50	0.00		1,997.50		
Evidence Preparation of Interrogatories		170		0.00				
Review Interrogatory Responses		170		0.00				
Technical Conference Preparation	ı	170		0.00				
Technical Conference Attendance	•	170		0.00				
Technical Conference Follow-up		170		0.00				
Subtotal of DISCOVERY	11.75		1,997.50		0.00	1,997.50		
PROCEDURAL Preparation of Issues List Submis	sion	170		0.00				
Attendance at Issues List Conference	ence	170		0.00				
Preparation for a Confidentiality F	Request	170		0.00				
Prepare Submissions on Confide	ntiality	170		0.00				
Preparation of Motion(s) Materials	8	170		0.00				
Prepare Submissions on the Moti	on(s)	170		0.00				
Attendance at Hearing on Motion	(s)	170		0.00				
Review Procedural Documents		170		0.00				

CC\_Participant\_Combined.rpt - last Update 20230601

<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Tota</u>
Subtotal of PROCEDURAL	0.00		0.00		0.00	0.00
TERVENOR EVIDENCE Preparation of Intervenor Evidence	12.00	170	2,040.00	0.00		2,040.00
Interrogatory Responses		170		0.00		
Preparation of Witness(es) for Attendanc at Hearing		170	0.040.00	0.00	0.00	0.040.0
Subtotal of INTERVENOR EVIDENCE	12.00		2,040.00		0.00	2,040.00
ETTLEMENT CONFERENCE Preparation for Settlement Conference		170		0.00		
Attendance at Settlement Conference		170		0.00		
Preparation of Settlement Proposal		170		0.00		
Attendance at Presentation to Panel		170		0.00		
Subtotal of SETTLEMENT CONFERENCE	0.00		0.00		0.00	0.0
<b>/RITTEN ARGUMENT</b> Written Submissions		170		0.00		
Subtotal of WRITTEN ARGUMENT	0.00		0.00		0.00	0.0
RAL ARGUMENT		170		0.00		
Preparation for Oral Hearing		170				
Attendance at Oral Hearing				0.00		
Oral Submissions		170		0.00		
Attendance at Oral Submissions	0.00	170	0.00	0.00	0.00	0.0
	0.00		0.00		0.00	0.0
ECISION Review Decision		170		0.00		
Review Rate/Accounting Order		170		0.00		
Prepare Submission on Rate Order		170		0.00		
Subtotal of DECISION	0.00		0.00		0.00	0.0
THER Other Attendance (e.g., Intervenor Conferences)		170		0.00		
Subtotal of OTHER	0.00		0.00		0.00	0.0
OTAL SERVICE PROVIDER FEES Total Service Provider Fees	23.75		4,037.50		0.00	4,037.5

#### Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	CV
CostClaim_Synapse_Rhodes	
CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Synapse_Rhodes_TimeDockets_	
20240429.pdf	

Import Message

### Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Synapse_Rhodes			
CV_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_Rhodes_TimeDockets			
_20240429.pdf			

# Invoice Support Detail Rpt Billed

As of 2023-01-11 15:15:35 Eastern Standard Time/EST • Generated by Michelle Marquis

Filtered By		
Show: All timecards		
Billable equals True		
Billed equals True		
Project: Invoicing equals ,Standard		
T&M,Fixed Fee Monthly,Fixed Fee		
Milestone,T&M Milestone		
Billing,Other Non-Standard		
Schedule, Upfront Payment then		
T&M,Multi-funder,Yet to be		
Determined		
Project: Active equals True		
Start Date greater or equal		
12/1/2022		
End Date less or equal 12/31/2022		
Total Billable Amount not equal to		
USD 0		
Project contains 22-130		
Invoiced equals True		

			Total		Total Billable	
Project: Project Name 1	Resource 个	End Date	Hours	Bill Rate	Amount	Week Notes

22-130 Screen Enbridge filing	Asa Hopkins	12/16/2022	3.75		begin review of EGI filing (Concentric study) review EGI filing (Concentric report, survey of other sections); coordinate review with Kenji	RAE
		12/23/2022	10.5		review/catalog filing documents review P2NZ report assumptions review coordination w/ Paul; set up notes document; analyze risk, depreciation Concentric report review Concentric report review EGI filing (ETO and safe bets); confer w/ Paul re: his takeaways from scenario analysis; call w/ IGUA + Ian	RAE
		12/30/2022	1.5		prep for and attend call with IGUA and counsel	IEP

	Paul Rhodes	12/23/2022	10.25		Internal meeting on initial steps, begin review Reviewing forecast filings reviewing scenarios, two energy transition studies Finish review, review notes and relay findings to Asa	RAE
Total			26			

#### Booked Time by Milestone

	End Date -	>		January 2023		February 2023		March 2023		April 2023		May 2023		1	une 2023		July 2023		August 2023		September 20	23	Total	
				Sum of Total S	um of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Tota	al Sum of Tot	al Billable Sum of Total	Sum of To	tal 1	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Total	Sum of Tota	Billable Sum of Total	Sum of Total	Sum of Total	Sum of Total
Wilestone ↑	Resource ↑			Hours E	illable Amount	Hours	Billable Amount	Hours	Billable Amount	Hours	Amount	Hours	Billable An	nount l	Hours	Billable Amoun	Hours	Billable Amount	Hours	Amount	Hours	Billable Amount	Hours	Billable Amount
Attendance at oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00		D \$0.00	l l	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	22.	25 \$7,342.5	0	0.5	\$165.00	0 \$0.0	0 22.	75 \$7,507.
Interrogatory responses	Alice Napoleon	Analyst 20+	330	0	\$0.00		D \$0.00	l l	D \$0.0	10	0	\$0.00	2.75	\$907.50		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 2.3	75 \$907.
	Asa Hopkins	Analyst 20+	330	0	\$0.00		D \$0.00	l l	D \$0.0	10	0	\$0.00 1	9.75	\$6,517.50		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 19.	75 \$6,517.
	Sol Deleon	Analyst 20+	330	0	\$0.00		\$0.00		D \$0.0	10	0	\$0.00	1	\$330.00		0 \$0.	00	0 \$0.0	0	0	\$0.00	0 \$0.0	0	1 \$330.0
	Tim Woolf	Analyst 20+	330	0	\$0.00		D \$0.00	l l	D \$0.0	10	0	\$0.00	0.5	\$165.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 0	).5 \$165.0
Preparation for oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.00	1	D \$0.0	10	0	\$0.00	0	\$0.00	0.1	25 \$82.	50	12 \$3,960.0	0	0.5	\$165.00	0 \$0.0	0 12.3	75 \$4,207.
Preparation of interrogatories	Asa Hopkins	Analyst 20+	330	0.5	\$165.00	10.7	5 \$3,547.50	1	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 11.3	25 \$3,712.
-	Sol Deleon	Analyst 20+	330	0	\$0.00	2.	5 \$825.00	1	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 2	2.5 \$825.0
Preparation of intervenor evidence	Asa Hopkins	Analyst 20+	330	5.5	\$1,815.00		7 \$2,310.00	3	1 \$10,230.	10 9.	.5 5	3,135.00	6	\$1,980.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0	59 \$19,470.
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00		\$0.00	1	D \$0.0	10	7 5	1,610.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0	7 \$1,610.
	Paul Rhodes	Analyst 0-5	170	0	\$0.00		\$0.00	4.	\$765.	10 7.	.5 5	1,275.00	0	\$0.00		0 \$0.	00	0 \$0.0	0	0	\$0.00	0 \$0.0	0	12 \$2,040.0
	Sol Deleon	Analyst 20+	330	0	\$0.00	7.	5 \$2,475.00	46.2	\$15,262.	0	2	\$660.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 55.	75 \$18,397.
Read and Research Application and Evidence	Alice Napoleon	Analyst 20+	330	1	\$330.00		\$0.00	1	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0	1 \$330.
	Asa Hopkins	Analyst 20+	330	1.25	\$412.50	1.	\$495.00	1	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0 2.3	75 \$907.
	Paul Rhodes	Analyst 0-5	170	1.5	\$255.00		\$0.00		\$0.0	0	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	0	0	\$0.00	0 \$0.0	0 1	\$255.0
	Sol Deleon	Analyst 20+	330	0.75	\$247.50		\$0.00	i i	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0.0.0	75 \$247.
	Tyler Fitch	Analyst 6-10	230	1	\$230.00		\$0.00	1	D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0	1 \$230.
Review interrogatory responses	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.00	1	2 \$660.	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	10	0	\$0.00	0 \$0.0	0	2 \$660.
Written submissions	Asa Hopkins	Analyst 20+	330	0	\$0.00		\$0.00		\$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	2 \$660.0	0 0	25	\$82.50	2.5 \$825.0	0 4.	75 \$1,567.
	Jenny Marusiak	Analyst 6-10	230	0	\$0.00		\$0.00		D \$0.0	10	0	\$0.00	0	\$0.00		0 \$0.	00	0 \$0.0	0	0.5	\$115.00	0 \$0.0	0 0	).5 \$115.0
Total				11.5	\$3,455.00	29.2	\$9,652.50	83.7	\$26,917.	0 2	6	6.680.00	30	\$9,900.00	0.3	25 \$82.	50 36.	25 \$11,962.5	0 1	75	\$527.50	2.5 \$825.0		



### Paul Rhodes III, Associate

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-849-8017 prhodes@synapse-energy.com

#### PROFESSIONAL EXPERIENCE

**Synapse Energy Economics, Inc.**, Cambridge, MA. *Associate,* April 2023 – Present; *Research Associate,* May 2022 – April 2023

- Performs quantitative and qualitative research and analysis on energy-sector issues including energy efficiency and building decarbonization, the future of natural gas, energy justice, electric vehicles, and rate design and utility regulation.
- Analyzes the emissions, peak load, and economic impacts of building and transportation electrification on the electric distribution grid.
- Conducts analysis with capacity expansion and production cost models to simulate future electric grid scenarios.
- Evaluates gas utility climate and energy transition plans for consistency with jurisdictional requirements and carbon reductions targets.
- Co-developed utility Strategic Transition Model to quickly assess the utility and ratepayer implications of large-scale strategic transition in the gas utility business model.
- Assists in expert testimony development and reports related to rate design and utility regulation.

**kW Engineering**, Salt Lake City, UT. *Engineer*, May 2021 – April 2022, *Consultant*, September 2019 – May 2021, *Intern*, May 2019 – September 2019

- Provided energy efficiency and peak shaving solutions to commercial customers across the Intermountain West within the PacifiCorp Demand-Side Management program.
- Assisted customers with meeting their electrification and decarbonization goals by analyzing feasibility of variable refrigerant flow heat pumps in buildings.
- Identified and modelled various energy efficiency measures relating to building heating, ventilation, air-conditioning, and refrigeration systems.
- Measured and verified energy efficiency measures to ensure proper installation and operation that would achieve projected energy and cost savings.

### **EDUCATION**

Southern Utah University, Cedar City, UT: B.S. in Engineering (emphasis in Civil Engineering), 2021

- Senior Project: Complete Streets of Cedar City
- Engineer-in-Training Certification

### SKILLS

- EnCompass power sector planning software
- Benefit-Cost Analysis
- Rate and Bill Impact Analysis
- Microsoft Office Suite
- SkySpark Analytics

### PUBLICATIONS

Metz, L., M. Whited, P. Rhodes, E. Carlson. 2023. *Distribution System Investments to Enable Mediumand Heavy-Duty Vehicle Electrification.* Synapse Energy Economics for the Environmental Defense Fund.

Forthcoming. Takahashi, K., A. Hopkins, J. Smith, P. Rhodes. 2023. *Analysis of the Impacts of Electrification on Electric Distribution System Peak Loads in Maryland: Toward Net Zero Emissions from Maryland's Building and Transportation Sectors*. Synapse Energy Economics for Maryland Office of People's Counsel.

Napoleon, A., O. Griot, P. Rhodes, M. Whited. 2023. *Options for Providing Low Income Customer Support.* Synapse Energy Economics for New Mexico Office of the Attorney General.

Woolf, T., D. Goldberg, E. Borden, P. Rhodes. 2022. *Distributed Generation Successor Program in Maine*. Synapse Energy Economics for the Maine Governor's Energy Office and the Distributed Generation Stakeholder Group.

Takahashi, K., E. Sinclair, S. Chavin, E. Carlson, S. Sharaf, P. Rhodes, A. Hopkins. 2023. *Decarbonization Initiatives by Governments, Utilities, and Other Entities in the United States and Europe.* Synapse Energy Economics for the Central Research Institute of Electric Power Industry.

Kwok, S., P. Knight, J. Frost, S. Chavin, P. Rhodes. 2023. *Modeling the Benefits of Energy Storage in Maryland*. Synapse Energy Economics for American Clean Power Association.

Havumaki, B., A. Lawton, P. Rhodes, M. Whited. 2023. *Expert Report of Synapse Energy Economics, Inc. In Response to the Proposals of New Brunswick Power in Matter 529.* Synapse Energy Economics for New Brunswick Energy and Utilities Board.

Havumaki, B., E. Sinclair, P. Rhodes. 2022. *Alameda Solar*. Synapse Energy Economics for Alameda Solar I, LLC.

Tabernero, J., S. Chavin, T. Fitch, D. Glick, S. Kwok, P. Rhodes. 2023. A Clean Energy Portfolio Is Still the Best Option for TVA. Synapse Response to TVA's Environmental Impact Statement and Concentrics's Appendix Q. Synapse Energy Economics for Sierra Club.

Resume updated June 2023

No

## Tim Woolf

<b>CASE</b> EB-2022-0200 - Phase 1: Rates: Distribution: Enbridge Gas Inc.	<b>COST CLAIM</b> EB-2022-0200 : 1 : Cathy Galler	INTERVENOR NAME Galler, Cathy ; +1 (416) 369-4570 cathy.galler@gowlingwlg.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT	<b>NEW PARTICIPANT</b> Yes	<b>NON-FILING PARTICIPANT F. NAME</b> Tim	NON-FILING PARTICIPANT L. NAME Woolf
SERVICE PROVIDER TYPE* Analyst	YEAR CALLED TO BAR*	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 20	HOURLY RATE 330
HST RATE CHARGED* 0.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE April 29, 2024	OVERRIDE HOURLY RATE No
HST NUMBER	HEARINGS	CONSULTATIONS	DISBURSEMENTS

No

### HEARINGS

89659 3323 RT0001

Yes

Hearings Hours 0.50	Hearings Subtotal (\$) 165.00		Hearings Total 0.00	Hearings Total (\$) 165.00			
<u>Name</u>	Hours	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>	
DISCOVERY Read and Research Application an Evidence	nd	330		0.00			
Preparation of Interrogatories		330		0.00			
Review Interrogatory Responses		330		0.00			
Technical Conference Preparation		330		0.00			
Technical Conference Attendance		330		0.00			
Technical Conference Follow-up		330		0.00			
Subtotal of DISCOVERY	0.00		0.00	0.00	0.00	0.00	
PROCEDURAL Preparation of Issues List Submiss	sion	330		0.00			
Attendance at Issues List Confere	nce	330		0.00			
Preparation for a Confidentiality R	equest	330		0.00			
Prepare Submissions on Confider	tiality	330		0.00			
Preparation of Motion(s) Materials		330		0.00			
Prepare Submissions on the Motio	on(s)	330		0.00			
Attendance at Hearing on Motion	s)	330		0.00			
Review Procedural Documents		330		0.00			

CC\_Participant\_Combined.rpt - last Update 20230601

Preparation of Witness(es) for Attendance at Hearing         330         0.00         100           Subtotal of INTERVENOR EVIDENCE         0.50         165.00         0.00         100           SETTLEMENT CONFERENCE Preparation for Settlement Conference         330         0.00         100           Attendance at Settlement Conference         330         0.00         100           Preparation of Settlement Proposal         330         0.00         100           Attendance at Presentation to Panel         330         0.00         0.00         0.00           Subtotal of SETTLEMENT CONFERENCE         0.00         0.00         0.00         0.00         0.00           Written Submissions         330         0.00         0.00         0.00         0.00         0.00           Subtotal of SETTLEMENT Written Submissions         330         0.00         0.00         0.00         0.00           Subtotal of WRITTEN ARGUMENT Preparation for Oral Hearing         330         0.00         0.00         0.00         0.00           Oral Submissions         330         0.00         0.00         0.00         0.00         0.00           Subtotal of ORAL ARGUMENT         0.00         0.00         0.00         0.00         0.00         0.00         0.00 </th <th><u>Name</u></th> <th><u>Hours</u></th> <th><u>Hourly</u> <u>Rate</u></th> <th><u>Sub Total</u></th> <th><u>HST</u> Rate</th> <th><u>HST</u></th> <th><u>Total</u></th>	<u>Name</u>	<u>Hours</u>	<u>Hourly</u> <u>Rate</u>	<u>Sub Total</u>	<u>HST</u> Rate	<u>HST</u>	<u>Total</u>
Preparation of Intervenor Evidence         330         0.00           Interrogatory Responses         0.50         330         165.00         0.00         16           Preparation of Witness(es) for Attendance at Hearing.         330         0.00         0.00         16           Subtotal of INTERVENOR EVIDENCE         0.50         165.00         0.00         0.00         16           SetTILEMENT CONFERENCE         330         0.00         0.00         0.00         16           Preparation of Settiment Conference         330         0.00         0.00         16           Attendance at Settement Proposal         330         0.00         0.00         0.00         16           Subtotal of SETILEMENT CONFERENCE         330         0.00         0.00         0.00         0.00         16           WRITEN ARGUMENT         0.00         0.00         0.00         0.00         0.00         0.00         0.00         16           Veritten Submissions         330         0.00         0.00         0.00         0.00         16           Subtotal of WRITEN ARGUMENT         0.00         0.00         0.00         0.00         16           Oral Submissions         330         0.00         0.00         0.00 </td <td>Subtotal of PROCEDURAL</td> <td>0.00</td> <td></td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	Subtotal of PROCEDURAL	0.00		0.00	0.00	0.00	0.00
Preparation of Witness(es) for Attendance at Hearing         330         0.00         165.00         0.00         0.00         10           Subtotal of INTERVENOR EVIDENCE         0.50         165.00         0.00         0.00         10           SETTLEMENT CONFERENCE Preparation for Settlement Conference         330         0.00         0.00         10           Attendance at Settlement Conference         330         0.00         0.00         0.00         0.00           Attendance at Presentation to Panel         330         0.00         0.00         0.00         0.00           Subtotal of SETTLEMENT CONFERENCE         0.00         0.00         0.00         0.00         0.00         0.00           WRITTEN ARGUMENT Written Submissions         330         0.00         0.00         0.00         0.00         0.00           Subtotal of VRITTEN ARGUMENT Preparation for Oral Hearing         330         0.00 <td></td> <td></td> <td>330</td> <td></td> <td>0.00</td> <td></td> <td></td>			330		0.00		
at Hearing           Subtotal of INTERVENCE EVIDENCE         0.50         165.00         0.00         0.00         10           SETTLEMENT CONFERENCE         330         0.00	Interrogatory Responses	0.50	330	165.00	0.00		165.00
Subtotal of INTERVENOR EVIDENCE         0.50         165.00         0.00         0.00         11           SETTLEMENT CONFERENCE Preparation for Settlement Conference         330         0.00	,		330		0.00		
Preparation for Settlement Conference         330         0.00           Attendance at Settlement Conference         330         0.00           Preparation of Settlement Proposal         330         0.00           Attendance at Presentation to Panel         330         0.00           Subtotal of SETTLEMENT CONFERENCE         0.00         0.00         0.00           WRITTEN ARGUMENT Written Submissions         330         0.00         0.00           Subtotal of WRITTEN ARGUMENT         0.00         0.00         0.00           ORAL ARGUMENT Preparation for Oral Hearing         330         0.00         0.00           ORAL ARGUMENT Preparation for Oral Hearing         330         0.00         0.00           Oral Submissions         330         0.00         0.00           Oral Submissions         330         0.00         0.00           Subtotal of ORAL ARGUMENT         0.00         0.00         0.00           Subtotal of ORAL ARGUMENT         0.00         0.00         0.00           Review Decision         330         0.00         0.00           Review Rate/Accounting Order         330         0.00         0.00           Subtotal of DECISION         0.00         0.00         0.00           Confere	5	0.50		165.00	0.00	0.00	165.00
Preparation of Settlement Proposal       330       0.00         Attendance at Presentation to Panel       330       0.00         Subtotal of SETTLEMENT       0.00       0.00       0.00         CONFERENCE       330       0.00       0.00         WRITTEN ARGUMENT       330       0.00       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         Subtotal of Oral Hearing       330       0.00       0.00         ORAL ARGUMENT       900       0.00       0.00       0.00         Preparation for Oral Hearing       330       0.00       0.00       0.00         Oral Submissions       330       0.00       0.00       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00       0.00       0.00       0.00         Oral Submissions       330       0.00			330		0.00		
Attendance at Presentation to Panel       330       0.00         Subtotal of SETTLEMENT       0.00       0.00       0.00         CONFERENCE       330       0.00       0.00         WRITTEN ARGUMENT       330       0.00       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         Preparation for Oral Hearing       330       0.00       0.00         Oral ARGUMENT       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Review Decision       330       0.00       0.00         Review Rate/Accounting Order       330       0.00       0.00         Subtotal of DECISION       0.00       0.00       0.00       0.00         Other Attendance (e.g., Intervenor	Attendance at Settlement Conference		330		0.00		
Subtotal of SETTLEMENT CONFERENCE       0.00       0.00       0.00         WRITTEN ARGUMENT Written Submissions       330       0.00       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         Preparation for Oral Hearing       330       0.00       0.00         Attendance at Oral Hearing       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Oral Submissions       330       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Review Decision       330       0.00       0.00       0.00         Review Rate/Accounting Order       330       0.00       0.00       0.00         Subtotal of DECISION       0.00       0.00       0.00       0.00       0.00         Subtotal of DECISION       0.00       0.00       0.00       0.00       0.00 <tr< td=""><td>Preparation of Settlement Proposal</td><td></td><td>330</td><td></td><td>0.00</td><td></td><td></td></tr<>	Preparation of Settlement Proposal		330		0.00		
CONFERENCE         WRITTEN ARGUMENT         Written Submissions       330       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         ORAL ARGUMENT       330       0.00       0.00         Preparation for Oral Hearing       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Attendance at Oral Hearing       0.00       0.00       0.00         Oral Submissions       330       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Review Rate/Accounting Order       330       0.00       0.00         Review Rate/Accounting Order       330       0.00       0.00         Subtotal of DECISION       0.00       0.00       0.00       0.00         Other Attendance (e.g., Intervenor Conferences)       330       0.00       0.00       0.00       0.00	Attendance at Presentation to Panel		330		0.00		
WRITTEN ARGUMENT       330       0.00         Subtotal of WRITTEN ARGUMENT       0.00       0.00       0.00         ORAL ARGUMENT       330       0.00       0.00         Preparation for Oral Hearing       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Attendance at Oral Hearing       330       0.00       0.00         Oral Submissions       330       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         Review Decision       330       0.00       0.00         Review Rate/Accounting Order       330       0.00       0.00         Prepare Submission on Rate Order       330       0.00       0.00         Subtotal of DECISION       0.00       0.00       0.00       0.00         OTHER       Subtotal of OTHER       0.00       0.00       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00       0.00       0.00       0.00         Subtotal of OTHER       0.00       0.00	Subtotal of SETTLEMENT	0.00		0.00	0.00	0.00	0.00
ORAL ARGUMENT       330       0.00         Preparation for Oral Hearing       330       0.00         Attendance at Oral Hearing       330       0.00         Oral Submissions       330       0.00         Attendance at Oral Submissions       330       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00         BECISION       0.00       0.00         Review Decision       330       0.00         Prepare Submission on Rate Order       330       0.00         Subtotal of DECISION       0.00       0.00         Review Rate/Accounting Order       330       0.00         Prepare Submission on Rate Order       330       0.00         Subtotal of DECISION       0.00       0.00       0.00         Other Attendance (e.g., Intervenor Conferences)       330       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00       0.00         TOTAL SERVICE PROVIDER FEES       U       0.00       0.00       0.00	WRITTEN ARGUMENT		330		0.00		
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Attendance at Oral Submissions       330       0.00         Subtotal of ORAL ARGUMENT       0.00       0.00       0.00         DECISION Review Decision       330       0.00       0.00         Review Rate/Accounting Order       330       0.00       0.00         Prepare Submission on Rate Order       330       0.00       0.00         Subtotal of DECISION       0.00       0.00       0.00         Other Attendance (e.g., Intervenor Conferences)       330       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00       0.00         TOTAL SERVICE PROVIDER FEES       U       U       U       U	Attendance at Oral Hearing		330		0.00		
Subtotal of ORAL ARGUMENT0.000.000.000.00DECISION Review Decision3300.000.00Review Rate/Accounting Order3300.000.00Prepare Submission on Rate Order3300.000.00Subtotal of DECISION0.000.000.000.00Other Attendance (e.g., Intervenor Conferences) Subtotal of OTHER3300.000.00Other Attendance (e.g., Intervenor Conferences)0.000.000.00Subtotal of OTHER0.000.000.000.00TOTAL SERVICE PROVIDER FEESUUUU	Oral Submissions		330		0.00		
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Review Decision3300.00Review Rate/Accounting Order3300.00Prepare Submission on Rate Order3300.00Subtotal of DECISION0.000.00Other Attendance (e.g., Intervenor Conferences)3300.00Subtotal of OTHER0.000.000.00TOTAL SERVICE PROVIDER FEES3300.00	Subtotal of ORAL ARGUMENT	0.00		0.00	0.00	0.00	0.00
Prepare Submission on Rate Order       330       0.00         Subtotal of DECISION       0.00       0.00       0.00         OTHER       330       0.00       0.00         Other Attendance (e.g., Intervenor Conferences)       330       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00         TOTAL SERVICE PROVIDER FEES       U       U       U			330		0.00		
Subtotal of DECISION       0.00       0.00       0.00       0.00         OTHER       330       0.00       0.00       0.00         Other Attendance (e.g., Intervenor Conferences)       330       0.00       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00       0.00       0.00         TOTAL SERVICE PROVIDER FEES       U       U       U       U       U	Review Rate/Accounting Order		330		0.00		
OTHER       330       0.00         Other Attendance (e.g., Intervenor       330       0.00         Conferences)       0.00       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00         TOTAL SERVICE PROVIDER FEES       U       U       U	Prepare Submission on Rate Order		330		0.00		
Other Attendance (e.g., Intervenor       330       0.00         Conferences)       0.00       0.00       0.00         Subtotal of OTHER       0.00       0.00       0.00         TOTAL SERVICE PROVIDER FEES       V       V       V	Subtotal of DECISION	0.00		0.00	0.00	0.00	0.00
Subtotal of OTHER0.000.000.00TOTAL SERVICE PROVIDER FEES	Other Attendance (e.g., Intervenor		330		0.00		
		0.00		0.00	0.00	0.00	0.00
I otal Service Provider Fees 0.50 165.00 0.00 10	TOTAL SERVICE PROVIDER FEES Total Service Provider Fees	0.50		165.00		0.00	165.00

### Attachments

Attachment	Document Type
IGUA_EB-2022-0200_Final	CV
CostClaim_Synapse_Woolf	
CV_20240429.pdf	
IGUA_EB-2022-0200_Final	Time Docket
CostClaim_Synapse_Woolf_TimeDockets_2	
0240429.pdf	

Import Message

### Hearings, Consultations, Disbursements Attachments

Attachment	Document Type	Claim Type	Import Message
IGUA_EB-2022-0200_Final	CV	Hearings	
CostClaim_Synapse_Woolf			
CV_20240429.pdf			
IGUA_EB-2022-0200_Final	Time Docket	Hearings	
CostClaim_Synapse_Woolf_TimeDockets_			
20240429.pdf			

Booked Time by Milestone

	End Date →	1	4	January 2023	February 2023		March 2023		April 2023	W	May 2023	June 2023	023	July 2023	723	Augus	August 2023	Septen	September 2023	-	Total	
			Ś	Sum of Total Sum of Total	al Sum of Total	Sum of Total	Sum of Total Sum of Total	Sum of Total	Sum of Total Su	Sum of Total Sum of Total Billable Sum of Total		Sum of Total Sum of	Sum of Total Sum o	Sum of Total Sum o	Sum of Total Sum o	Sum of Total Sum o	Sum of Total Sun	Sum of Total Billable Sum of Total		Sum of Total S	Sum of Total	Sum of Total
Milestone ↑	Resource 🕈		×	Hours Billable Amount	ount Hours	Billable Amount F	Hours	Billable Amount	Hours An	Amount Ho	Hours Billa	Billable Amount Hours		Billable Amount Hours	Billabh	Billable Amount Hours		Amount Hours		Billable Amount H	Hours	Billable Amount
Attendance at oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	22.25	\$7,342.50	0.5	\$165.00	0	\$0.00	22.75	\$7,507.50
Interrogatory responses	Alice Napoleon	Analyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	2.75	\$907.50	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2.75	\$907.50
	Asa Hopkins	A nalyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	19.75	\$6,517.50	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	19.75	\$6,517.
	Sol Deleon	Analyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	1	\$330.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$330.
	Tim Woolf	Analyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0.5	\$165.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.5	\$165.00
Preparation for oral hearing	Asa Hopkins	Analyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.25	\$82.50	12	\$3,960.00	0.5	\$165.00	0	\$0.00	12.75	\$4,207.
Preparation of interrogatories	Asa Hopkins	Analyst 20+	330	0.5 \$10	\$165.00 10.75	.75 \$3,547.50	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	11.25	\$3,712.
	Sol Deleon	A nalyst 20+	330	0	\$0.00 2.	2.5 \$825.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2.5	\$825.
Preparation of intervenor evidence	Asa Hopkins	A nalyst 20+	330	5.5 \$1,8:	\$1,815.00	7 \$2,310.00	31	\$10,230.00	9.5	\$3,135.00	9	\$1,980.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	59	\$ 19,470.
	Jenny Marusiak	A nalyst 6-10	230	0	\$0.00	0 \$0.00	0	\$0.00	7	\$1,610.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	7	\$1,610.00
	Paul Rhodes	A nalyst 0-5	170	0	\$0.00	0 \$0.00	4.5	\$765.00	7.5	\$1,275.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	12	\$2,040.
	Sol Deleon	A nalyst 20+	330	0	\$0.00	7.5 \$2,475.00	46.25	\$15,262.50	2	\$660.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	55.75	\$ 18,397.
Read and Research Application and Evidence	<ul> <li>Alice Na poleon</li> </ul>	A nalyst 20+	330	1 \$3	\$330.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$330.
	Asa Hopkins	A nalyst 20+	330	1.25 \$4:	\$412.50 1.	1.5 \$495.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2.75	\$907.
	Paul Rhodes	A nalyst 0-5	170	1.5 \$2	\$255.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1.5	\$255.
	Sol Deleon	Analyst 20+	330	0.75 \$2	\$247.50	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.75	\$247.
	Tyler Fitch	Analyst 6-10	230	1 \$2	\$ 230.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$230.
Review interrogatory responses	Asa Hopkins	Analyst 20+	330	0	\$0.00	0 \$0.00	2	\$660.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2	\$660.00
Written submissions	Asa Hopkins	Analyst 20+	330	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2	\$660.00	0.25	\$82.50	2.5	\$825.00	4.75	\$1,567.
	Jenny Marusiak	A nalyst 6-10	230	0	\$0.00	0 \$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0.5	\$115.00	0	\$0.00	0.5	\$115.
Total				11.5 \$3.4	\$3.455.00 29.25	25 \$9.652.50	83.75	\$26.917.50	26	\$6.680.00	30	00.005	0.25	\$82.50	36.25	\$11.962.50	1.75	\$577 50	3 5	\$875.00	22125	\$70.002.50



### Tim Woolf, Senior Vice President

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### **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics Inc.,** Cambridge, MA. *Senior Vice President*, 2019 – Present, *Vice President*, 2011 – 2019.

Provides expert consulting on the economic, regulatory, consumer, environmental, and public policy implications of the electricity and gas industries. The primary focus of work includes technical and economic analyses, electric power system planning, climate change strategies, energy efficiency programs and policies, renewable resources and related policies, power plant performance and economics, air quality, and many related aspects of consumer and environmental protection.

#### Massachusetts Department of Public Utilities, Boston, MA. Commissioner, 2007 – 2011.

Oversaw a significant expansion of clean energy policies as a consequence of the Massachusetts Green Communities Act, including an aggressive expansion of ratepayer-funded energy efficiency programs; the implementation of decoupled rates for electric and gas companies; an update of the DPU energy efficiency guidelines; the promulgation of net metering regulations; review of smart grid pilot programs; and review of long-term contracts for renewable power. Oversaw six rate case proceedings for Massachusetts electric and gas companies. Played an influential role in the development of price responsive demand proposals for the New England wholesale energy market. Served as President of the New England Conference of Public Utility Commissioners from 2009-2010. Served as board member on the Energy Facilities Siting Board from 2007-2010. Served as co-chair of the Steering Committee for the Northeast Energy Efficiency Partnership's Regional Evaluation, Measurement and Verification Forum.

Synapse Energy Economics Inc., Cambridge, MA. Vice President, 1997 – 2007.

**Tellus Institute,** Boston, MA. Senior Scientist, Manager of Electricity Program, 1992 – 1997.

Association for the Conservation of Energy, London, England. Research Director, 1991 – 1992.

Massachusetts Department of Public Utilities, Boston, MA. Staff Economist, 1989 – 1990.

Massachusetts Office of Energy Resources, Boston, MA. Policy Analyst, 1987 – 1989.

Energy Systems Research Group, Boston, MA. Research Associate, 1983 – 1987.

Union of Concerned Scientists, Cambridge, MA. Energy Analyst, 1982-1983.

#### **EDUCATION**

**Boston University,** Boston, MA Master of Business Administration, 1993 London School of Economics, London, England Diploma, Economics, 1991

**Tufts University,** Medford, MA Bachelor of Science in Mechanical Engineering, 1982 **Tufts University,** Medford, MA Bachelor of Arts in English, 1982

### REPORTS

Synapse Energy Economics, Climable, Brown University Climate and Development Lab. 2023. *Power Play: Actions for New England's Equitable Energy Transition.* Full report. Climable.org.

Malone, E., D. Goldberg, S. Kwok, T. Woolf. 2022. *The Cape Light Compact's Low-Income Energy Efficiency Programs: Challenges and Opportunities*. Synapse Energy Economics for The Cape Light Compact.

Kallay, J., A. Napoleon, K. Takahashi, E. Sinclair, T. Woolf. 2021. *Opportunities for Evergy Kansas to Address Energy Equity Within its Integrated Resource Plan and Other Planning Processes*. Synapse Energy Economics for Union of Concerned Scientists.

Takahashi, K., T. Woolf, B. Havumaki, D. White, D. Goldberg, S. Kwok, A. Takasugi. 2021. *Missed Opportunities: The Impacts of Recent Policies on Energy Efficiency Programs in Midwestern States.* Synapse Energy Economics for the Midwest Energy Efficiency Alliance.

Liburd, S., E. Sinclair, T. Woolf, C. Roberto. 2021. *Hosting Capacity Analysis and Distribution Grid Data Security.* Synapse Energy Economics for the Northern Plains Resource Council.

Kallay, J., A. Napoleon, B. Havumaki, J. Hall, C. Odom, A. Hopkins, M. Whited, T. Woolf, M. Chang, R. Broderick, R. Jeffers, B. Garcia. 2021. *Performance Metrics to Evaluate Utility Resilience Investments.* Synapse Energy Economics for Sandia National Laboratories.

Kallay, J., S. Letendre, T. Woolf, B. Havumaki, S. Kwok, A. Hopkins, R. Broderick, R. Jeffers, K. Jones, M. DeMenno. 2021. *Application of a Standard Approach to Benefit-Cost Analysis for Electric Grid Resilience Investments*. Synapse Energy Economics for Sandia National Laboratories.

Woolf, T., B. Havumaki, S. Letendre, C. Odom, J. Hall. 2021. *Macroeconomic Impacts of the Rhode Island Community Remote Net Metering Program*. Synapse Energy Economics for the Rhode Island Division of Public Utilities and Carriers.

Woolf, T., D Bhandari, C. Lane, J. Frost, B. Havumaki, S. Letendre, C. Odom. 2021. *Benefit-Cost Analysis of the Rhode Island Community Remote Net Metering Program*. Synapse Energy Economics for the Rhode Island Division of Public Utilities and Carriers.

Woolf, T., L. Schwartz, B. Havumaki, D. Bhandari, M. Whited. 2021. *Benefit-Cost Analysis for Utility-Facing Grid Modernization Investments: Trends, Challenges, and Considerations.* Prepared by Lawrence Berkeley National Laboratory and Synapse Energy Economics for the Grid Modernization Laboratory Consortium of the U.S. Department of Energy. National Energy Screening Project. 2020. *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources*. E4TheFuture, Synapse Energy Economics, Energy Futures Group, ICF, Pace Energy and Climate Center, Schiller Consulting, Smart Electric Power Alliance.

Glick, D., D. Bhandari, C. Roberto, T. Woolf. 2020. *Review of benefit-cost analysis for the EPA's proposed revisions to the 2015 Steam Electric Limitations Guidelines*. Synapse Energy Economics for Earthjustice and Environmental Integrity Project.

Knight, P., E. Camp, D. Bhandari, J. Hall, M. Whited, B. Havumaki, A. Allison, N. Peluso, T. Woolf. 2019. *Making Electric Vehicles Work for Utility Customers: A Policy Handbook for Consumer Advocates.* Synapse Energy Economics for the Energy Foundation.

Napoleon, A., B. Havumaki, D. Bhandari, T. Woolf. 2019. *Review of New Brunswick Power's Application for Approval of an Advanced Metering Infrastructure Capital Project: In the Matter of the New Brunswick Power Corporation and Section 107 of the Electricity Act; Matter No. 452.* Synapse Energy Economics for the New Brunswick Energy and Utilities Board Staff.

Malone, E., T. Woolf, S. Letendre. 2019. *New Hampshire Cost-Effectiveness Review: Application of the National Standard Practice Manual to New Hampshire.* Synapse Energy Economics for the New Hampshire Evaluation, Measurement, and Verification Working Group.

Havumaki, B., J. Kallay, K. Takahashi, T. Woolf. 2019. *All-Electric Solid Oxide Fuel Cells as an Energy Efficiency Measure*. Synapse Energy Economics for Bloom Energy.

Takahashi, K., B. Havumaki, J. Kallay, T. Woolf. 2019. *Bloom Fuel Cells: A Cost-Effectiveness Brief.* Synapse Energy Economics for Bloom Energy.

Napoleon, A., D. Goldberg, K. Takahashi, T. Woolf. 2019. *An Assessment of Prince Edward Island Energy Corporations' 2018 - 2021 Energy Efficiency and Conservation Plan*. Synapse Energy Economics for Carr, Stevenson and MacKay as Counsel to the Island Regulatory and Appeals Commission.

Camp, E., B. Fagan, J. Frost, D. Glick, A. Hopkins, A. Napoleon, N. Peluso, K. Takahashi, D. White, R. Wilson, T. Woolf. 2018. *Phase 1 Findings on Muskrat Falls Project Rate Mitigation*. Synapse Energy Economics for Board of Commissioners of Public Utilities, Province of Newfoundland and Labrador.

Malone, E., T. Woolf, D. Goldberg. 2018. *Updating the Energy Efficiency Cost-Effectiveness Framework in Minnesota: Application of the National Standard Practice Manual to Minnesota*. Conservation Applied Research and Development (CARD) Report. Synapse Energy Economics for Minnesota Department of Commerce, Division of Energy Resources.

White, D., K. Takahashi, A. Napoleon, T. Woolf. 2018. *Value of Energy Efficiency in New York: Assessment of the Range of Benefits of Energy Efficiency Programs*. Synapse Energy Economics for Natural Resources Defense Council.

Fisher, J., M. Whited, T. Woolf, D. Goldberg. 2018. *Utility Investments for Market Transformation: How Utilities Can Help Achieve Energy Policy Goals.* Synapse Energy Economics for Energy Foundation.

Woolf, T., A. Hopkins, M. Whited, K. Takahashi, A. Napoleon. 2018. *Review of New Brunswick Power's* 2018/2019 Rate Case Application. In the Matter of the New Brunswick Power Corporation and Section

103(1) of the Electricity Act Matter No. 375. Synapse Energy Economics for the New Brunswick Energy and Utilities Board Staff.

Woolf, T., C. Neme, M. Kushler, S. R. Schiller, T. Eckman. 2017. *National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources*. Edition 1, Spring 2017. Prepared by the National Efficiency Screening Project.

Whited, M., A. Horowitz, T. Vitolo, W. Ong, T. Woolf. 2017. *Distributed Solar in the District of Columbia: Policy Options, Potential, Value of Solar, and Cost-Shifting*. Synapse Energy Economics for the Office of the People's Counsel for the District of Columbia.

Raab Associates and Synapse Energy Economics. 2017. *Grid Modernization in New Hampshire: Report to the New Hampshire Public Utilities Commission*. Prepared by the New Hampshire Grid Modernization Working Group. March 20, 2017.

Woolf, T. 2016. *Expert Report: Rate Mechanism, Reconciliation of Provisional Rates, Energy Efficiency Rider*. Prepared for Puerto Rico Energy Commission regarding Matter No. CEPR-AP-2015-0001, November 21, 2016.

Woolf, T., M. Whited, P. Knight, T. Vitolo, K. Takahashi. 2016. *Show Me the Numbers: A Framework for Balanced Distributed Solar Policies*. Synapse Energy Economics for Consumers Union.

Fisher, J., A. Horowitz, J. Migden-Ostrander, T. Woolf. 2016. *Puerto Rico Electric Power Authority's 2015 Integrated Resource Plan*. Synapse Energy Economics for Puerto Rico Energy Commission.

Woolf, T., A. Napoleon, P. Luckow, W. Ong, K. Takahashi. 2016. *Aiming Higher: Realizing the Full Potential of Cost-Effective Energy Efficiency in New York.* Synapse Energy Economics for Natural Resources Defense Council, E4TheFuture, CLEAResult, Lime Energy, Association for Energy Affordability, and Alliance for Clean Energy New York.

Lowry, M. N., T. Woolf, M. Whited, M. Makos. 2016. *Performance-Based Regulation in a High Distributed Energy Resources Future*. Pacific Economics Group Research and Synapse Energy Economics for Lawrence Berkley National Laboratory.

Woolf, T., M. Whited, A. Napoleon. 2015-2016. *Comments and Reply Comments in the New York Public Service Commission Case 14-M-0101: Reforming the Energy Vision*. Comments related to Staff's (a) a benefit-costs analysis framework white paper, (b) ratemaking and utility business models white paper, and (c) Distributed System Implementation Plan guide. Synapse Energy Economics on behalf of Natural Resources Defense Council and Pace Energy and Climate Center. August 21, 2015, September 10, 2015, October 26, 2015, November 23, 2015, December 7, 2015, and January 6, 2016.

Kallay, J., K. Takahashi, A. Napoleon, T. Woolf. 2015. *Fair, Abundant, and Low-Cost: A Handbook for Using Energy Efficiency in Clean Power Plan Compliance.* Synapse Energy Economics for the Energy Foundation.

Woolf, T., K. Takahashi, E. Malone, A. Napoleon, J. Kallay. 2015. *Ontario Gas Demand-Side Management 2016-2020 Plan Review*. Synapse Energy Economics for the Ontario Energy Board.

Whited, M., T. Woolf, A. Napoleon. 2015. *Utility Performance Incentive Mechanisms: A Handbook for Regulators*. Synapse Energy Economics for the Western Interstate Energy Board.

Woolf, T., E. Malone, F. Ackerman. 2014. *Cost-Effectiveness Screening Principles and Guidelines for Alignment with Policy Goals, Non-Energy Impacts, Discount Rates, and Environmental Compliance Costs.* Synapse Energy Economics for Northeast Energy Efficiency Partnerships (NEEP) Regional Evaluation, Measurement and Verification Forum.

Woolf, T., E. Malone, C. Neme. 2014. *Regulatory Policies to Support Energy Efficiency in Virginia*. Synapse Energy Economics and Energy Futures Group for the Virginia Energy Efficiency Council.

Woolf, T., M. Whited, E. Malone, T. Vitolo, R. Hornby. 2014. *Benefit-Cost Analysis for Distributed Energy Resources: A Framework for Accounting for All Relevant Costs and Benefits.* Synapse Energy Economics for the Advanced Energy Economy Institute.

Woolf, T., E. Malone, J. Kallay. 2014. *Rate and Bill Impacts of Vermont Energy Efficiency Programs*. Synapse Energy Economics for the Vermont Public Service Department.

Woolf, T., C. Neme, P. Stanton, R. LeBaron, K. Saul-Rinaldi, S. Cowell. 2014. *The Resource Value Framework: Reforming Energy Efficiency Cost-Effectiveness Screening.* The National Efficiency Screening Project for the National Home Performance Council.

Malone, E., T. Woolf, K. Takahashi, S. Fields. 2013. "Appendix D: Energy Efficiency Cost-Effectiveness Tests." *Readying Michigan to Make Good Energy Decisions: Energy Efficiency*. Synapse Energy Economics for the Council of Michigan Foundations.

Stanton, E. A., S. Jackson, G. Keith, E. Malone, D. White, T. Woolf. 2013. *A Clean Energy Standard for Massachusetts*. Synapse Energy Economics for the Massachusetts Clean Energy Center and the Massachusetts Departments of Energy Resources, Environmental Protection, and Public Utilities.

Woolf, T., K. Saul-Rinaldi, R. LeBaron, S. Cowell, P. Stanton. 2013. *Recommendations for Reforming Energy Efficiency Cost-Effectiveness Screening in the United States.* Energy Efficiency Screening Coalition for the National Home Performance Council.

Woolf, T., E. Malone, J. Kallay, K. Takahashi. 2013. *Energy Efficiency Cost-Effectiveness Screening in the Northeast and Mid-Atlantic States.* Synapse Energy Economics for Northeast Energy Efficiency Partnerships, Inc. (NEEP).

Raab Associates and Synapse Energy Economics. 2013. *Massachusetts Electric Grid Modernization Stakeholder Working Group Process: Report to the Department of Public Utilities from the Steering Committee*. Prepared for the Massachusetts Department of Public Utilities. DPU 12-76.

Jackson, S., P. Peterson, D. Hurley, T. Woolf. 2013. *Forecasting Distributed Generation Resources in New England: Distributed Generation Must Be Properly Accounted for in Regional System Planning.* Synapse Energy Economics for E4 Group.

Woolf, T., E. Malone, L. Schwartz, J. Shenot. 2013. *A Framework for Evaluating the Cost-Effectiveness of Demand Response.* Synapse Energy Economics and Regulatory Assistance Project for the National Forum on the National Action Plan on Demand Response: Cost-effectiveness Working Group.

Woolf, T., W. Steinhurst, E. Malone, K. Takahashi. 2012. *Energy Efficiency Cost-Effectiveness Screening: How to Properly Account for 'Other Program Impacts' and Environmental Compliance Costs.* Synapse Energy Economics for Regulatory Assistance Project and Vermont Housing Conservation Board.

Woolf, T., M. Whited, T. Vitolo, K. Takahashi, D. White. 2012. *Indian Point Replacement Analysis: A Clean Energy Roadmap. A Proposal for Replacing the Nuclear Plant with Clean, Sustainable Energy Resource.* Synapse Energy Economics for Natural Resources Defense Council (NRDC) and Riverkeeper.

Keith, G., T. Woolf, K. Takahashi. 2012. *A Clean Electricity Vision for Long Island: Supplying 100% of Long Island's Electricity Needs with Renewable Power*. Synapse Energy Economics for Renewable Energy Long Island.

Woolf, T. 2012. *Best Practices in Energy Efficiency Program Screening: How to Ensure that the Value of Energy Efficiency is Properly Accounted For.* Synapse Energy Economics for National Home Performance Council.

Woolf, T., J. Kallay, E. Malone, T. Comings, M. Schultz, J. Conyers. 2012. *Commercial & Industrial Customer Perspectives on Massachusetts Energy Efficiency Programs.* Synapse Energy Economics for the Massachusetts Energy Efficiency Advisory Council.

Woolf, T., M. Wittenstein, R. Fagan. 2011. *Indian Point Energy Center Nuclear Plant Retirement Analysis*. Synapse Energy Economics for Natural Resources Defense Council (NRDC) and Riverkeeper.

Woolf, T., V. Sabodash, B. Biewald. 2011. *Equipment Price Forecasting in Energy Conservation Standards Analysis.* Synapse Energy Economics for Appliance Standards Awareness Project and Natural Resources Defense Council (NRDC).

Johnston, L., E. Hausman, A. Sommer, B. Biewald, T. Woolf, D. Schlissel, A. Rochelle, D. White. 2007. *Climate Change and Power: Carbon Dioxide Emission Costs and Electricity Resource Planning*. Synapse Energy Economics for Tallahassee Electric Utility.

Woolf, T. 2007. *Cape Light Compact Energy Efficiency Plan 2007-2012: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*. Synapse Energy Economics for the Cape Light Compact.

Woolf, T. 2007. *Review of the District of Columbia Reliable Energy Trust Fund and Natural Gas Trust Fund Working Group and Regulatory Processes*. Synapse Energy Economics for the District of Columbia Office of People's Counsel.

Woolf, T. 2006. *Cape Light Compact Annual Report on Energy Efficiency Activities in 2005*. Synapse Energy Economics for the Cape Light Compact, submitted to the Massachusetts Department of Telecommunications and Energy and the Massachusetts Division of Energy Resources.

Steinhurst, W., T. Woolf, A. Sommer, K. Takahashi, P. Chernick, J. Wallach. 2006. *Integrated Portfolio Management in a Restructured Supply Market*. Synapse Energy Economics and Resource Insight for the Ohio Office of Consumer Counsel.

Peterson, P., D. Hurley, T. Woolf, B. Biewald. 2006. *Incorporating Energy Efficiency into the ISO-New England Forward Capacity Market*. Synapse Energy Economics for Conservation Services Group.

Woolf, T., D. White, C. Chen, A. Sommer. 2005. *Potential Cost Impacts of a Renewable Portfolio Standard in New Brunswick*. Synapse Energy Economics for New Brunswick Department of Energy.

Woolf, T., K. Takahashi, G. Keith, A. Rochelle, P. Lyons. 2005. *Feasibility Study of Alternative Energy and Advanced Energy Efficiency Technologies for Low-Income Housing in Massachusetts*. Synapse Energy Economics and Zapotec Energy for the Low-Income Affordability Network, Action for Boston Community Development, and Action Inc.

Woolf, T. 2005. *The Cape Light Compact Energy Efficiency Plan: Phase III 2005-2007: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*. Synapse Energy Economics for the Cape Light Compact.

Woolf, T. 2004. *Review of Avoided Costs Used in Minnesota Electric Utility Conservation Improvement Programs*. Synapse Energy Economics for the Minnesota Office of Legislative Auditor.

Woolf, T. 2004. *NEEP Strategic Initiative Review: Qualitative Assessment and Initiative Ranking for the Residential Sector*. Synapse Energy Economics for Northeast Energy Efficiency Partnerships, Inc.

Woolf, T. 2004. *A Balanced Energy Plan for the Interior West*. Synapse Energy Economics, West Resource Advocates, and Tellus Institute for the Hewlett Foundation Energy Series.

Steinhurst, W., P. Chernick, T. Woolf, J. Plunkett, C. Chen. 2003. *OCC Comments on Alternative Transitional Standard Offer*. Synapse Energy Economics for the Connecticut Office of Consumer Counsel.

Woolf, T. 2003. *Potential Cost Impacts of a Vermont Renewable Portfolio Standard*. Synapse Energy Economics for Vermont Public Service Board, presented to the Vermont RPS Collaborative.

Biewald, B., T. Woolf, A. Rochelle, W. Steinhurst. 2003. *Portfolio Management: How to Procure Electricity Resources to Provide Reliable, Low-Cost, and Efficient Electricity Services to All Retail Customers*. Synapse Energy Economics for Regulatory Assistance Project and Energy Foundation.

Woolf, T., G. Keith, D. White, M. Drunsic, M. Ramiro, J. Ramey, J. Levy, P. Kinney, S. Greco, K. Knowlton, B. Ketcham, C. Komanoff, D. Gutman. 2003. *Air Quality in Queens: Cleaning Up the Air in Queens County and Neighboring Regions*. Synapse Energy Economics, Konheim & Ketcham, and Komanoff Energy Associates for Natural Resources Defense Council (NRDC), Keyspan Energy, and the Coalition Helping to Organize a Kleaner Environment.

Chen, C., D. White, T. Woolf, L. Johnston. 2003. *The Maryland Renewable Portfolio Standard: An Assessment of Potential Cost Impacts*. Synapse Energy Economics for the Maryland Public Interest Research Group.

Woolf, T. 2003. *The Cape Light Compact Energy Efficiency Plan: Phase II 2003 – 2007: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*. Synapse Energy Economics, Cort Richardson, Vermont Energy Investment Corporation, and Optimal Energy Incorporated for the Cape Light Compact.

Woolf, T. 2002. *Green Power and Energy Efficiency Opportunities for Municipalities in Massachusetts: Promoting Community Involvement in Energy and Environmental Decisions*. Synapse Energy Economics for the Massachusetts Energy Consumers Alliance. Woolf, T. 2002. *The Energy Efficiency Potential in Williamson County, Tennessee: Opportunities for Reducing the Need for Transmission Expansion*. Synapse Energy Economics for the Harpeth River Watershed Association and the Southern Alliance for Clean Energy.

Woolf, T. 2002. *Electricity Restructuring Activities in the US: A Survey of Selected States*. Synapse Energy Economics for Arizona Corporation Commission Utilities Division Staff.

Woolf, T. 2002. *Powering the South: A Clean and Affordable Energy Plan for the Southern United States*. Synapse Energy Economics with and for the Renewable Energy Policy Project and a coalition of Southern environmental advocates.

Johnston, L., G. Keith, T. Woolf, B. Biewald, E. Gonin. 2002. *Survey of Clean Power and Energy Efficiency Programs*. Synapse Energy Economics for the Ozone Transport Commission.

Woolf, T. 2001. *Proposal for a Renewable Portfolio Standard for New Brunswick*. Synapse Energy Economics for the Conservation Council of New Brunswick, presented to the New Brunswick Market Design Committee.

Woolf, T., G. Keith, D. White, F. Ackerman. 2001. *A Retrospective Review of FERC's Environmental Impact Statement on Open Transmission Access*. Synapse Energy Economics and the Global Development and Environmental Institute for the North American Commission for Environmental Cooperation, with the Global Development and Environment Institute.

Woolf, T. 2001. *Repowering the Midwest: The Clean Energy Development Plan for the Heartland*. Synapse Energy Economics for the Environmental Law and Policy Center and a coalition of Midwest environmental advocates.

Woolf, T. 2000. *The Cape Light Compact Energy Efficiency Plan: Providing Comprehensive Energy Efficiency Services to Communities on Cape Cod and Martha's Vineyard*. Synapse Energy Economics for the Cape Light Compact.

Woolf, T., B. Biewald. 1999. *Market Distortions Associated With Inconsistent Air Quality Regulations*. Synapse Energy Economics for the Project for a Sustainable FERC Energy Policy.

Woolf, T., B. Biewald, D. Glover. 1998. *Competition and Market Power in the Northern Maine Electricity Market*. Synapse Energy Economics and Failure Exponent Analysis for the Maine Public Utilities Commission.

Woolf, T. 1998. *New England Tracking System.* Synapse Energy Economics for the New England Governors' Conference, with Environmental Futures and Tellus Institute.

Woolf, T., D. White, B. Biewald, W. Moomaw. 1998. *The Role of Ozone Transport in Reaching Attainment in the Northeast: Opportunities, Equity and Economics*. Synapse Energy Economics and the Global Development and Environment Institute for the Northeast States for Coordinated Air Use Management.

Biewald, B., D. White, T. Woolf, F. Ackerman, W. Moomaw. 1998. *Grandfathering and Environmental Comparability: An Economic Analysis of Air Emission Regulations and Electricity Market Distortions*. Synapse Energy Economics and the Global Development and Environment Institute for the National Association of Regulatory Utility Commissioners.

Biewald, B., T. Woolf, P. Bradford, P. Chernick, S. Geller, J. Oppenheim. 1997. *Performance-Based Regulation in a Restructured Electric Industry*. Synapse Energy Economics, Resource Insight, and the National Consumer Law Center for the National Association of Regulatory Utility Commissioners.

Biewald, B., T. Woolf, M. Breslow. 1997. *Massachusetts Electric Utility Stranded Costs: Potential Magnitude, Public Policy Options, and Impacts on the Massachusetts Economy*. Synapse Energy Economics for the Union of Concerned Scientists, MASSPIRG, and Public Citizen.

Woolf, T. 1997. *The Delaware Public Service Commission Staff's Report on Restructuring the Electricity Industry in Delaware.* Tellus Institute for The Delaware Public Service Commission Staff. Tellus Study No. 96-99.

Woolf, T. 1997. *Preserving Public Interest Obligations Through Customer Aggregation: A Summary of Options for Aggregating Customers in a Restructured Electricity Industry*. Tellus Institute for The Colorado Office of Energy Conservation. Tellus Study No. 96-130.

Woolf, T. 1997. *Zero Carbon Electricity: the Essential Role of Efficiency and Renewables in New England's Electricity Mix*. Tellus Institute for The Boston Edison Settlement Board. Tellus Study No. 94-273.

Woolf, T. 1997. *Regulatory and Legislative Policies to Promote Renewable Resources in a Competitive Electricity Industry*. Tellus Institute for The Colorado Governor's Office of Energy Conservation. Tellus Study No. 96-130-A5.

Woolf, T. 1996. *Can We Get There From Here? The Challenge of Restructuring the Electricity Industry So That All Can Benefit*. Tellus Institute for The California Utility Consumers' Action Network. Tellus Study No. 95-208.

Woolf, T. 1995. *Promoting Environmental Quality in a Restructured Electric Industry*. Tellus Institute for The National Association of Regulatory Utility Commissioners. Tellus Study No. 95-056.

Woolf, T. 1995. *Systems Benefits Funding Options*. Tellus Institute for Wisconsin Environmental Decade. Tellus Study No. 95-248.

Woolf, T. 1995. *Non-Price Benefits of BECO Demand-Side Management Programs*. Tellus Institute for Boston Edison Settlement Board. Tellus Study No. 93-174.

Woolf, T., B. Biewald. 1995. *Electric Resource Planning for Sustainability*. Tellus Institute for the Texas Sustainable Energy Development Council. Tellus Study No. 94-114.

#### TESTIMONY

**Public Utilities Commission of New Hampshire (Docket No. DE 20-161):** Direct Testimony of Tim Woolf and Ben Havumaki regarding Eversource's 2020 least-cost integrated resource plan. On behalf of the Office of the Consumer Advocate. August 19, 2022.

**Colorado Public Utilities Commission (Proceeding No. 19AL-0687E):** Cross-answer testimony and attachments of Tim Woolf regarding the need for a customer opt-out provision in Public Service Company of Colorado's proposed TOU rates plan. On behalf of Energy Outreach Colorado. May 21, 2020.

**Colorado Public Utilities Commission (Proceeding No. 19AL-0687E):** Answer testimony and attachments of Tim Woolf regarding Public Service Company of Colorado's proposal to establish mandatory Modified RE-TOU rates for residential customers. On behalf of Energy Outreach Colorado. April 24, 2020.

**New York Public Service Commission (Cases 19-E-0065 and 19-G-0066):** Direct testimony of Tim Woolf and Alice Napoleon regarding energy efficiency targets and incentives in Con Edison rate case. On behalf of the Natural Resources Defense Council. May 24, 2019.

**Virginia State Corporation Commission (Case No. PUR-2018-00168):** Direct testimony of Tim Woolf and Erin Malone regarding Virginia Electric and Power Company's application for approval to implement demand-side management programs and for approval of two updated rate adjustment clauses. On behalf of the Sierra Club. February 6, 2019.

**Rhode Island Public Utilities Commission (Docket No. 4780):** Direct testimony of Tim Woolf and Melissa Whited regarding National Grid's Power Sector Transformation proposals. On behalf of the Rhode Island Division of Public Utilities and Carriers. April 28, 2018.

**Rhode Island Public Utilities Commission (Docket No. 4770):** Direct testimony of Tim Woolf regarding National Grid's rate case. On behalf of the Rhode Island Division of Public Utilities and Carriers. April 6, 2018.

**Rhode Island Public Utilities Commission (Docket No. 4770):** Direct testimony of Tim Woolf and Melissa Whited regarding National Grid's proposed performance incentive mechanisms, benefit-cost analyses, and request for recovery of costs for its Advanced Metering Functionality study and distributed energy resources enablement investments. On behalf of the Rhode Island Division of Public Utilities and Carriers. April 6, 2018.

**Rhode Island Public Utilities Commission (Docket No. 4783):** Direct testimony of Tim Woolf and Melissa Whited regarding National Grid's Advanced Metering Functionality Pilot. On behalf of the Rhode Island Division of Public Utilities and Carriers. February 22, 2018.

**New York Public Service Commission (Case 17-E-0459):** Direct testimony of Tim Woolf regarding Energy Efficiency Earnings Adjustment Mechanisms proposed by Central Hudson Gas & Electric Company. On behalf of Natural Resources Defense Council. November 21, 2017.

**New York Public Service Commission (Case 17-E-0238)**: Direct and rebuttal testimony of Tim Woolf and Melissa Whited regarding Earnings Adjustment Mechanisms proposed by National Grid. On behalf of Advanced Energy Economy Institute. August 25 and September 15, 2017.

**Utah Public Service Commission (Docket No. 14-035-114)**: Direct and rebuttal testimony of Tim Woolf regarding the Pacificorp's analysis of the benefits and costs associated with distributed generation resources. On behalf of Utah Clean Energy. June 8, 2017 and July 25, 2017.

**Massachusetts Department of Public Utilities (D.P.U. 17-05)**: Direct and surrebuttal testimony of Tim Woolf and Melissa Whited regarding performance-based regulation, the monthly minimum reliability contribution, storage pilots, and rate design in Eversource's petition for approval of rate increases and a

performance-based ratemaking mechanism. On behalf of Sunrun and the Energy Freedom Coalition of America, LLC. April 28, 2017 and May 26, 2017.

**Massachusetts Department of Public Utilities (D.P.U. 15-120, D.P.U. 15-121, D.P.U. 15-122/15-123)**: Direct testimony of Tim Woolf and Ariel Horowitz, PhD, regarding the petitions by National Grid, Unitil, NSTAR, and Eversource Energy for approval of their grid modernization plans. On behalf of Conservation Law Foundation. March 10, 2017.

**Massachusetts Department of Public (D.P.U. 16-169)**: Direct testimony of Tim Woolf and Erin Malone regarding Nation Grid's petition for ruling regarding the provision of gas energy efficiency services. On behalf of the Cape Light Compact. November 2, 2016.

**New Jersey Board of Public Utilities (Docket No. ER16060524)**: Direct testimony regarding Rockland Electric Company's proposed advanced metering program. On behalf of the New Jersey Division of Rate Counsel. September 9, 2016.

**Colorado Public Utilities Commission (Proceeding No. 16AL-0048E)**: Answer testimony regarding Public Service Company of Colorado's rate design proposal. On behalf of Energy Outreach Colorado. June 6, 2016.

**Georgia Public Service Commission (Docket No. 40161 and Docket No. 40162)**: Direct testimony regarding the demand-side management programs proposed by Georgia Power Company in its Certification, Decertification, and Amended Demand-Side Management Plan and its 2016 Integrated Resource Plan. On behalf of Sierra Club. May 3, 2016.

**Massachusetts Department of Public Utilities (Docket No. 15-155)**: Joint direct and rebuttal testimony with M. Whited regarding National Grid's rate design proposal. On behalf of Energy Freedom Coalition of America, LLC. March 18, 2016 and April 28, 2016.

**Maine Public Utilities Commission (Docket No. 2015-00175):** Direct testimony on Efficiency Maine Trust's petition for approval of the Triennial Plan for Fiscal Years 2017-2019. On behalf of the Natural Resources Council of Maine and the Conservation Law Foundation. February 17, 2016.

**Nevada Public Utilities Commission (Docket Nos. 15-07041 and 15-07042):** Direct testimony on NV Energy's application for approval of a cost of service study and net metering tariffs. On behalf of The Alliance for Solar Choice. October 27, 2015.

**New Jersey Board of Public Utilities (Docket No. ER14030250):** Direct testimony on Rockland Electric Company's petition for investments in advanced metering infrastructure. On behalf of the New Jersey Division of Rate Counsel. September 4, 2015.

**Utah Public Service Commission (Docket No. 14-035-114):** Direct, rebuttal, and surrebuttal testimony on the benefit-cost framework for net energy metering. On behalf of Utah Clean Energy, the Alliance for Solar Choice, and Sierra Club. July 30, 2015, September 9, 2015, and September 29, 2015.

**Nova Scotia Utility and Review Board (Matter No. M06733):** Direct testimony on EfficiencyOne's 2016-2018 demand-side management plan. On behalf of the Nova Scotia Utility and Review Board. June 2, 2015.

**Missouri Public Service Commission (Case No. ER-2014-0370):** Direct and surrebuttal testimony on the topic of Kansas City Power and Light's rate design proposal. On behalf of Sierra Club. April 16, 2015 and June 5, 2015.

**Missouri Public Service Commission (File No. EO-2015-0055):** Rebuttal and surrebuttal testimony on the topic of Ameren Missouri's 2016-2018 Energy Efficiency Plan. On behalf of Sierra Club. March 20, 2015 and April 27, 2015.

**Florida Public Service Commission (Dockets No. 130199-El et al.):** Direct testimony on the topic of setting goals for increasing the efficiency of energy consumption and increasing the development of demand-side renewable energy systems. On behalf of the Sierra Club. May 19, 2014.

**Massachusetts Department of Public Utilities (Docket No. DPU 14-86):** Direct and rebuttal Testimony regarding the cost of compliance with the Global Warming Solution Act. On behalf of the Massachusetts Department of Energy Resources and the Department of Environmental Protection. May 16, 2014.

**Kentucky Public Service Commission (Case No. 2014-00003):** Direct testimony regarding Louisville Gas and Electric Company and Kentucky Utilities Company's proposed 2015-2018 demand-side management and energy efficiency program plan. On behalf of Wallace McMullen and the Sierra Club. April 14, 2014.

Maine Public Utilities Commission (Docket No. 2013-168): Direct and surrebuttal testimony regarding policy issues raised by Central Maine Power's 2014 Alternative Rate Plan, including recovery of capital costs, a Revenue Index Mechanism proposal, and decoupling. On behalf of the Maine Public Advocate Office. December 12, 2013 and March 21, 2014.

**Colorado Public Utilities Commission (Docket No. 13A-0686EG):** Answer and surrebuttal testimony regarding Public Service Company of Colorado's proposed energy savings goals. On behalf of the Sierra Club. October 16, 2013 and January 21, 2014.

**Kentucky Public Service Commission (Case No. 2012-00578):** Direct testimony regarding Kentucky Power Company's economic analysis of the Mitchell Generating Station purchase. On behalf of the Sierra Club. April 1, 2013.

**Nova Scotia Utility and Review Board (Matter No. M04819):** Direct testimony regarding Efficiency Nova Scotia Corporation's Electricity Demand Side Management Plan for 2013 – 2015. On behalf of the Counsel to Nova Scotia Utility and Review Board. May 22, 2012.

**Missouri Office of Public Counsel (Docket No. EO-2011-0271):** Rebuttal testimony regarding IRP rule compliance. On behalf of the Missouri Office of the Public Counsel. October 28, 2011.

**Nova Scotia Utility and Review Board (Matter No. M03669):** Direct testimony regarding Efficiency Nova Scotia Corporation's Electricity Demand Side Management Plan for 2012. On behalf of the Counsel to Nova Scotia Utility and Review Board. April 8, 2011.

**Rhode Island Public Utilities Commission (Docket No. 3790):** Direct testimony regarding National Grid's Gas Energy Efficiency Programs. On behalf of the Division of Public Utilities and Carriers. April 2, 2007.

**North Carolina Utilities Commission (Docket E-100, Sub 110):** Filed comments with Anna Sommer regarding the Potential for Energy Efficiency Resources to Meet the Demand for Electricity in North Carolina. Synapse Energy Economics on behalf of the Southern Alliance for Clean Energy. February 2007.

**Rhode Island Public Utilities Commission (Docket No. 3765):** Direct and Surrebuttal testimony regarding National Grid's Renewable Energy Standard Procurement Plan. On behalf of the Division of Public Utilities and Carriers. January 17, 2007 and February 20, 2007.

**Minnesota Public Utilities Commission (Docket Nos. CN-05-619 and TR-05-1275):** Direct testimony regarding the potential for energy efficiency as an alternative to the proposed Big Stone II coal project. On behalf of the Minnesota Center for Environmental Advocacy, Fresh Energy, Izaak Walton League of America, Wind on the Wires and the Union of Concerned Scientists. November 29, 2006.

**Rhode Island Public Utilities Commission (Docket No. 3779):** Oral testimony regarding the settlement of Narragansett Electric Company's 2007 Demand-Side Management Programs. On behalf of the Division of Public Utilities and Carriers. November 24, 2006.

**Nevada Public Utilities Commission (Docket Nos. 06-04002 & 06-04005):** Direct testimony regarding Nevada Power Company's and Sierra Pacific Power Company's Renewable Portfolio Standard Annual Report. On behalf of the Nevada Bureau of Consumer Protection. October 26, 2006

**Nevada Public Utilities Commission (Docket No. 06-06051):** Direct testimony regarding Nevada Power Company's Demand-Side Management Plan in the 2006 Integrated Resource Plan. On behalf of the Nevada Bureau of Consumer Protection. September 13, 2006.

**Nevada Public Utilities Commission (Docket Nos. 06-03038 & 06-04018):** Direct testimony regarding the Nevada Power Company's and Sierra Pacific Power Company's Demand-Side Management Plans. On behalf of the Nevada Bureau of Consumer Protection. June 20, 2006.

**Nevada Public Utilities Commission (Docket No. 05-10021):** Direct testimony regarding the Sierra Pacific Power Company's Gas Demand-Side Management Plan. On behalf of the Nevada Bureau of Consumer Protection. February 22, 2006.

**South Dakota Public Utilities Commission (Docket No. EL04-016):** Direct testimony regarding the avoided costs of the Java Wind Project. On behalf of the South Dakota Public Utilities Commission Staff. February 18, 2005.

**Rhode Island Public Utilities Commission (Docket No. 3635):** Oral testimony regarding the settlement of Narragansett Electric Company's 2005 Demand-Side Management Programs. On behalf of the Division of Public Utilities and Carriers. November 29, 2004.

**British Columbia Utilities Commission.** Direct testimony regarding the Power Smart programs contained in BC Hydro's Revenue Requirement Application 2004/05 and 2005/06. On behalf of the Sierra Club of Canada, BC Chapter. April 20, 2004.

**Maryland Public Utilities Commission (Case No. 8973):** Oral testimony regarding proposals for the PJM Generation Attributes Tracking System. On behalf of the Maryland Office of People's Counsel. December 3, 2003.

**Rhode Island Public Utilities Commission (Docket No. 3463):** Oral testimony regarding the settlement of Narragansett Electric Company's 2004 Demand-Side Management Programs. On behalf of the Division of Public Utilities and Carriers. November 21, 2003.

**California Public Utilities Commission (Rulemaking 01-10-024):** Direct testimony regarding the market price benchmark for the California renewable portfolio standard. On behalf of the Union of Concerned Scientists. April 1, 2003.

**Québec Régie de l'énergie (Docket R-3473-01):** Direct testimony with Philp Raphals regarding Hydro-Québec's Energy Efficiency Plan: 2003-2006. On behalf of Regroupment national des Conseils régionaux de l'environnement du Québec. February 5, 2003.

**Connecticut Department of Public Utility Control (Docket No. 01-10-10):** Direct testimony regarding the United Illuminating Company's service quality performance standards in their performance-based ratemaking mechanism. On behalf of the Connecticut Office of Consumer Counsel. April 2, 2002.

**Nevada Public Utilities Commission (Docket No. 01-7016):** Direct testimony regarding the Nevada Power Company's Demand-Side Management Plan. On behalf of the Bureau of Consumer Protection, Office of the Attorney General. September 26, 2001.

**United States Department of Energy (Docket Number-EE-RM-500)**: Comments with Bruce Biewald, Daniel Allen, David White, and Lucy Johnston of Synapse Energy Economics regarding the Department of Energy's proposed rules for efficiency standards for central air conditioners and heat pumps. On behalf of the Appliance Standards Awareness Project. December 2000.

**US Department of Energy (Docket EE-RM-500)**: Oral testimony at a public hearing on marginal price assumptions for assessing new appliance efficiency standards. On behalf of the Appliance Standards Awareness Project. November 2000.

**Connecticut Department of Public Utility Control (Docket No. 99-09-03 Phase II):** Direct testimony regarding Connecticut Natural Gas Company's proposed performance-based ratemaking mechanism. On behalf of the Connecticut Office of Consumer Counsel. September 25, 2000.

**Mississippi Public Service Commission (Docket No. 96-UA-389):** Oral testimony regarding generation pricing and performance-based ratemaking. On behalf of the Mississippi Attorney General. February 16, 2000.

**Delaware Public Service Commission (Docket No. 99-328):** Direct testimony regarding maintaining electric system reliability. On behalf of Delaware Public Service Commission Staff. February 2, 2000.

**Delaware Public Service Commission (Docket No. 99-328):** Filed expert report ("Investigation into the July 1999 Outages and General Service Reliability of Delmarva Power & Light Company," jointly authored with J. Duncan Glover and Alexander Kusko). Synapse Energy Economics and Exponent Failure Analysis Associates on behalf the Delaware Public Service Commission Staff. February 1, 2000.

**New Hampshire Public Service Commission (Docket No. 99-099 Phase II):** Oral testimony regarding standard offer services. On behalf of the Campaign for Ratepayers Rights. January 14, 2000.

West Virginia Public Service Commission (Case No. 98-0452-E-GI): Rebuttal testimony regarding codes of conduct. On behalf of the West Virginia Consumer Advocate Division. July 15, 1999.

West Virginia Public Service Commission (Case No. 98-0452-E-GI): Direct testimony regarding codes of conduct and other measures to protect consumers in a restructured electricity industry. On behalf of the West Virginia Consumer Advocate Division. June 15, 1999.

**Public Service Commission of West Virginia (Case No. 98-0452-E-GI ):** Filed expert report ("Measures to Ensure Fair Competition and Protect Consumers in a Restructured Electricity Industry in West Virginia," jointly authored with Jean Ann Ramey and Theo MacGregor) in the matter of the General Investigation to determine whether West Virginia should adopt a plan for open access to the electric power supply market and for the development of a deregulation plan. Synapse Energy Economics and MacGregor Energy Consultancy on behalf of the West Virginia Consumer Advocate Division. June 1999.

**Massachusetts Department of Telecommunications and Energy (DPU/DTE 97-111):** Direct testimony regarding Commonwealth Electric Company's energy efficiency plan, and the role of municipal aggregators in delivering demand-side management programs. On behalf of Cape and Islands Self-Reliance Corporation. January 1998.

**Delaware Public Service Commission (DPSC 97-58):** Direct testimony regarding Delmarva Power and Light's request to merge with Atlantic City Electric. On behalf of Delaware Public Service Commission Staff. May 1997.

**Delaware Public Service Commission (DPSC 95-172):** Oral testimony regarding Delmarva's integrated resource plan and DSM programs. On behalf of the Delaware Public Service Commission Staff. May 1996.

**Colorado Public Utilities Commission (5A-531EG)**: Direct testimony regarding the impact of proposed merger on DSM, renewable resources and low-income DSM. On behalf of the Colorado Office of Energy Conservation. April 1996.

**Colorado Public Utilities Commission (3I-199EG):** Direct testimony regarding the impacts of increased competition on DSM, and recommendations for how to provide utilities with incentives to implement DSM. On behalf of the Colorado Office of Energy Conservation. June 1995.

**Colorado Public Utilities Commission (5R-071E):** Oral testimony on the Commission's integrated resource planning rules. On behalf of the Colorado Office of Energy Conservation. July 1995.

**Colorado Public Utilities Commission (3I-098E):** Direct testimony on the Public Service Company of Colorado's DSM programs and integrated resource plans. On behalf of the Colorado Office of Energy Conservation. April 1994.

**Delaware Public Service Commission (Docket No. 96-83):** Filed comments regarding the Investigation of Restructuring the Electricity Industry in Delaware (Tellus Institute Study No. 96-99). On behalf of the Staff of the Delaware Public Service Commission. November 1996.

**Colorado Public Utilities Commission (Docket No. 96Q-313E):** Filed comments in response to the Questionnaire on Electricity Industry Restructuring (Tellus Institute Study No. 96-130-A3). On behalf of the Colorado Governor's Office of Energy Conservation. October 1996.

**State of Vermont Public Service Board (Docket No. 5854):** Filed expert report (Tellus Institute Study No. 95-308) regarding the Investigation into the Restructuring of the Electric Utility Industry in Vermont. On behalf of the Vermont Department of Public Service. March 1996.

**Pennsylvania Public Utility Commission (Docket No. I-00940032):** Filed comments (Tellus Institute Study No. 95-260) regarding an Investigation into Electric Power Competition. On behalf of The Pennsylvania Office of Consumer Advocate. November 1995.

**New Jersey Board of Public Utilities (Docket No. EX94120585Y):** Initial and reply comments ("Achieving Efficiency and Equity in the Electricity Industry Through Unbundling and Customer Choice," Tellus Institute Study No. 95-029-A3) regarding an investigation into the future structure of the electric power industry. On behalf of the New Jersey Division of Ratepayer Advocate. September 1995.

### ARTICLES

Malone, E., T. Woolf, D. Goldberg. 2019. "Assessing Resource Cost Effectiveness." A.E.S.P. Magazine, 2019 Edition, 8-10.

Woolf, T., E. Malone, C. Neme, R. LeBaron. 2014. "Unleashing Energy Efficiency." *Public Utilities Fortnightly*, October, 30-38.

Woolf, T., A. Sommer, J. Nielson, D. Berry, R. Lehr. 2005. "Managing Electricity Industry Risk with Clean and Efficient Resources." *The Electricity Journal* 18 (2): 78–84.

Woolf, T., A. Sommer. 2004. "Local Policy Measures to Improve Air Quality: A Case Study of Queens County, New York." *Local Environment* 9 (1): 89–95.

Woolf, T. 2001. "Clean Power Opportunities and Solutions: An Example from America's Heartland." *The Electricity Journal* 14 (6): 85–91.

Woolf, T. 2001. "What's New With Energy Efficiency Programs." *Energy & Utility Update, National Consumer Law Center*: Summer 2001.

Woolf T., B. Biewald. 2000. "Electricity Market Distortions Associated With Inconsistent Air Quality Regulations." *The Electricity Journal* 13 (3): 42–49.

Ackerman, F., B. Biewald, D. White, T. Woolf, W. Moomaw. 1999. "Grandfathering and Coal Plant Emissions: the Cost of Cleaning Up the Clean Air Act." *Energy Policy* 27 (15): 929–940.

Biewald, B., D. White, T. Woolf. 1999. "Follow the Money: A Method for Tracking Electricity for Environmental Disclosure." *The Electricity Journal* 12 (4): 55–60.

Woolf, T., B. Biewald. 1998. "Efficiency, Renewables and Gas: Restructuring As if Climate Mattered." *The Electricity Journal* 11 (1): 64–72.

Woolf, T., J. Michals. 1996. "Flexible Pricing and PBR: Making Rate Discounts Fair for Core Customers." *Public Utilities Fortnightly*, July 1996.

Woolf, T., J. Michals. 1995. "Performance-Based Ratemaking: Opportunities and Risks in a Competitive Electricity Industry." *The Electricity Journal* 8 (8): 64–72.

Woolf, T. 1994. "Retail Competition in the Electricity Industry: Lessons from the United Kingdom." *The Electricity Journal* 7 (5): 56–63.

Woolf, T. 1994. "A Dialogue About the Industry's Future." *The Electricity Journal* 7 (5).

Woolf, T., E. D. Lutz. 1993. "Energy Efficiency in Britain: Creating Profitable Alternatives." *Utilities Policy* 3 (3): 233–242.

Woolf, T. 1993. "It is Time to Account for the Environmental Costs of Energy Resources." *Energy and Environment* 4 (1): 1–29.

Woolf, T. 1992. "Developing Integrated Resource Planning Policies in the European Community." *Review of European Community & International Environmental Law* 1 (2) 118–125.

### PRESENTATIONS

Woolf, T. B Havumaki. 2022. "Economic Assessment of Grid Modernization Plans." Presentation at the NASUCA 2022 Mid-Year Meeting.

Woolf, T. 2019. "Benefit-Cost Analysis for Utility-Facing Grid Modernization Investments." Distribution Systems and Planning Training for Mid-Atlantic Region and NARUC-NASEO Task Force on Comprehensive Electricity Planning. March 7-8, 2019.

Woolf, T. 2018. Stakeholder presentation on "Updating the Energy Efficiency Cost-Effectiveness Framework in Minnesota: Application of the National Standard Practice Manual to Minnesota." Synapse Energy Economics project for Minnesota Department of Commerce, Division of Energy Resources, supported by the Conservation Applied Research and Development (CARD) Program. St. Paul, Minnesota. September 2018.

Woolf, T. 2018. "Benefit-Cost Analysis for Investments in the Modern Grid: Recent trends in how to determine whether grid modernization investments will deliver value to customers." Smart Money Panel, NARUC Summer Policy Summit. Scottsdale, Arizona.

Woolf, T. 2018. "Benefit-Cost Analysis for New York Energy Investments." Training Session for Earthjustice.

Woolf, T. 2018. "National Standard Practice Manual for Energy Efficiency Cost-Effectiveness." Presentation at the NASUCA 2018 Mid-Year Meeting.

Woolf, T. 2018. "The National Standard Practice Manual and the Value of Energy Efficiency in New York." Presentation on behalf of the Natural Resources Defense Council at the Stakeholder Forum, Case 18-M-0084.

Woolf, T., M. Whited. 2016. "Show Me the Numbers: A Framework for Balanced Distributed Solar Policies." Presentation for Consumers Union Webinar, December 2016.

Woolf, T. 2016. "Show Me the Numbers: Balancing Solar DG with Consumer Protection." Public workshop on solar distributed generation for the Federal Trade Commission, June 2016.

Woolf, T. 2016. "Rate Designs for Distributed Generation: State Activities & A New Framework." Presentation at the NASUCA 2016 Mid-Year Meeting, June 2016.

Woolf, T., M. Whited. 2016. "3<sup>rd</sup> Annual 21<sup>st</sup> Century Electricity System Workshop – Implications of Different Rate Designs." Presentation at the Advanced Energy Economy Institute, April 2016.

Woolf, T., M. Whited. 2016. "Decoupling in Pennsylvania: Advantages, Disadvantages, and Design Issues." Presentation to Pennsylvania Decoupling Stakeholders, February 2016.

Woolf, T. 2016. "Earnings Impact Mechanisms: Energy Efficiency." Presentation at the New York REV Technical Conference, January 2016.

Lowry, M. N., T. Woolf. 2015. "Performance-Based Regulation in a High Distributed Energy Resources Future." Webinar on January 2016.

Woolf, T. 2015. "Performance Incentive Mechanisms: A Catalyst for Change." Webinar for Power Sector Transformation Group, December 2015.

Woof, T. 2015. "Energy Efficiency Valuation: Boogie Men, Time Warps, and other Terrifying Pitfalls." Presentation at ACEEE Conference on Energy Efficiency as a Resource, September 2015.

Woolf, T., M. Whited, A. Napoleon. 2015. "Thoughts on How to Design Clean Energy Performance Incentive Mechanisms." Webinar for the Western Clean Energy Advocates, April 2015.

Woolf, T. 2015. "Properly Valuing the Benefits and Costs of Energy Efficiency." Presentation at the 2015 National Efficiency Advocates Meeting, April 2015.

Woolf, T. 2015. "Non-Energy Benefits & Efficiency Program Screening." Presentation for Georgia DSM Work Group, March 2015.

Woolf, T. 2014. "Performance Incentive Mechanisms And Their Role in New Regulatory Models." Presentation at Acadia Center Conference, Envisioning Our Energy Future, December 2014.

Woolf, T., M. Whited., A. Napoleon. 2014. "Guiding Utility Performance: A Handbook for Regulators." Webinar for the Western Interstate Energy Board, December 2014.

Woolf, T. 2014. "Planning for Distributed Energy Resources." Presentation for Advanced Energy Economy Webinar, November 2014.

Woolf, T. 2014. "Benefit-Cost Analysis for Distributed Energy Resources in New York: A Framework for Accounting for All Relevant Costs and Benefits." Presentation to NARUC ERE Committee, November 2014.

Woolf, T. 2014. "Presenting the Full Value of Energy Efficiency: Creating a Better Message." Presentation at Sierra Club Beyond Coal Conference, October 2014.

Woolf, T., C. Neme. 2014. "Regulatory Policies to Support Energy Efficiency in Virginia." Presentation for the 2014 Virginia Energy Efficiency Workshop, October 2014.

Woolf, T. 2014. "Benefit-Cost Analysis for Distributed Energy Resources in New York: A Framework for Accounting for All Relevant Costs and Benefits." Presentation for Advanced Energy Economy Institute, October 2014.

Woolf, T. 2014. "Performance Incentive Mechanisms: Digging Deeper Into Performance-Based Regulation." Presentation for National Governor's Association Conference: Utility Business Models That Align with State Clean Energy Goals, September 2014.

Woolf, T. 2014. "The Resource Value Framework: Reforming Energy Efficiency Cost-Effectiveness Screening." Presentation at the ACEEE Summer Study, August 2014.

Woolf, T. 2014. "Cost-Effectiveness of Demand Response." Presentation at MADRI Working Group Meeting #34, July 2014.

Woolf, T. 2014. "Time to Overhaul Our Energy Efficiency Screening Practices." Presentation for U.S. Environmental Protection Agency Energy Efficiency Cost-Effectiveness Webinar, January 2014.

Woolf, T. 2013. "Survey of Energy Efficiency Screening Practices in the Northeast and Mid-Atlantic." Presentation for Northeast Energy Efficiency Partnerships EM&V Forum Annual Public Meeting, December 2013.

Woolf, T. 2013. "Recommendations for Reforming Energy Efficiency Cost-Effectiveness Screening in the United States." Presentation at the National Association of Regulatory Commissioners Annual Meeting, November 2013.

Woolf, T. 2013. "Energy Efficiency Program Screening: Let's Get Beyond the TRC Test." Presentation for 7<sup>th</sup> Annual ENERGY STAR Certified Homes Utility Sponsor Meeting, October 2013.

Woolf, T. 2013. "Decoupling in Maine: Why Decoupling is in Consumers' Interest." Presentation for Office of Public Advocate- Decoupling Debate, October 2013.

Woolf, T. 2013. "NHPC Efficiency Screening Initiative: Unleashing the Potential for Energy Efficiency." Presentation for Advocates Meeting, September 2013.

Woolf, T. 2013. "Energy Efficiency: Rate, Bill and Participation Impacts." Presentation for ACEEE's Energy Efficiency as a Resource Conference, September 2013.

Woof, T. 2013. "Energy Efficiency Screening: Challenges and Opportunities." Presentation for NARUC Summer Meeting Consumer Affairs Panel, July 2013.

Woolf, T., R. Sedano. 2013. "Decoupling Overview." Presentation for Finding Common Ground Meeting, July 2013.

Woolf, T. 2013. "Utility Incentives for Energy Efficiency." Presentation for Finding Common Ground Meeting, July 2013.

Woolf, T. 2013. "Energy Efficiency: Rate, Bill and Participation Impacts." Presentation for State Energy Efficiency Action Webinar, June 2013.

Woolf, T., B. Biewald, and J. Migden-Ostrander. 2013. "NARUC Risk Workshop for Regulators." Presentation at the Mid-Atlantic Conference of Regulatory Utility Commissioners, June 2013.

Woolf, T. 2013. "Energy Efficiency Screening: Accounting for 'Other Program Impacts' & Environmental Compliance Costs." Presentation for the Consortium for Energy Efficiency Summer Meeting, May 2013.

Woolf, T. 2013. "Best Practices in Energy Efficiency Program Screening." Presentation at ACI National Home Performance Conference, May 2013.

Woolf, T. 2013. "Utility Shareholder Incentives to Support Energy Efficiency Programs." Presentation to Common Ground, May 2013.

Woolf, T. 2013. "Energy Efficiency Screening: Accounting for 'Other Program Impacts' & Environmental Compliance Costs." Presentation for Regulatory Assistance Project Webinar, March 2013.

Woolf, T. 2013. "Energy Efficiency: Rates, Bills, Participants, Screening, and More." Presentation at Connecticut Energy Efficiency Workshop, March 2013.

Woolf T. 2013. "Best Practices in Energy Efficiency Program Screening." Presentation for SEE Action Webinar, March 2013.

Woolf, T. 2013. "Energy Efficiency: Rates, Bills and Participants." Presentation for Rhode Island Energy Efficiency Collaborative, February 2013.

Woolf, T. 2013. "Energy Efficiency Screening: Application of the TRC Test." Presentation for Energy Advocates Webinar, January 2013.

Woolf, T. 2012. "Best Practices in Energy Efficiency Program Screening." Presentation for American Council for an Energy-Efficient Economy Webinar, December 2012.

Woolf, T. 2012. Indian Point Replacement Analysis: A Clean Energy Roadmap. Presentation for Natural Resource Defenses Council and Environmental Entrepreneurs, November 2012.

Woolf, T. 2012. "In Pursuit of All Cost-Effective Energy Efficiency." Presentation at Sierra Club Boot Camp, October 2012.

Woolf, T. 2012. "Best Practices in Energy Efficiency Program Screening." Webinar for Northeast Energy Efficiency Partnerships, September 2012.

Woolf, T., L. Schwartz. "What Remains to be Done with Demand Response? A National Forum from the FERC National Action Plan on Demand Response Tries to Give an Answer." Presentation at NARUC National Town Meeting on Demand Response, July 2012.

Woolf, T. 2012. "Best Practices in Energy Efficiency Program Screening." Presentation at NARUC Summer Meetings – Energy Efficiency Cost-Effectiveness Breakfast, July 2012.

Woolf, T. 2012. "Avoided Cost of Complying with Environmental Regulations in MA." Presentation for Mass Energy Consumer's Alliance, January 2012.

Woolf, T. 2011. "Energy Efficiency Cost-Effectiveness Tests." Presentation at the Northeast Energy Efficiency Partnerships Annual Meeting, October 2011.

Woolf, T. 2011. "Why Consumer Advocates Should Support Decoupling." Presentation at the 2011 ACEEE National Conference on Energy Efficiency as a Resource, September 2011.

Woolf, T. 2011. "A Regulator's Perspective on Energy Efficiency." Presentation at the Efficiency Maine Symposium *In Pursuit of Maine's Least-Cost Energy*, September 2011.

Woolf, T. 2010. "Bill Impacts of Energy Efficiency Programs: The Importance of Analyzing and Managing Rate and Bill Impacts." Presentation at the Energy in the Northeast Conference, Law Seminar International, September 2010.

Woolf, T. 2010. "Bill Impacts of Energy Efficiency Programs: The Implications of Bill Impacts in Developing Policies to Motivate Utilities to Implement Energy Efficiency." Presentation to the State Energy Efficiency Action Network, Utility Motivation Work Group, November 2010.

Woolf, T. 2010. "Bill Impacts of Energy Efficiency Programs." Presentation to the Energy Resources and Environment Committee at the NARUC Winter Meetings, February 2010.

Woolf, T. 2009. "Price-Responsive Demand in the New England Wholesale Energy Market: Description of NECPUC's Limited Supply-Side Proposal." Presentation at the NEPOOL Markets Committee Meeting, November 2009.

Woolf, T. 2009. "Demand Response in the New England Wholesale Energy Market: How Much Should We Pay for Demand Resources?" Presentation at the New England Electricity Restructuring Roundtable, October 2009.

Woolf, T. 2008. "Promoting Demand Resources in Massachusetts: A Regulator's Perspective." Presentation at the Energy Bar Association, Northeast Chapter Meeting, June 2008.

Woolf, T. 2008. "Turbo-Charging Energy Efficiency in Massachusetts: A DPU Perspective." Presentation at the New England Electricity Restructuring Roundtable, April 2008.

Woolf T. 2002. "A Renewable Portfolio Standard for New Brunswick." Presentation to the New Brunswick Market Design Committee, January 10, 2002.

Woolf, T. 2001. "Potential for Wind and Renewable Resource Development in the Midwest." Presentation at WINDPOWER 2001 in Washington DC, June 7, 2001.

Woolf T. 1999. "Challenges Faced by Clean Generation Resources Under Electricity Restructuring." Presentation at the Symposium on the Changing Electric System in Florida and What it Means for the Environment in Tallahassee, FL, November 1999.

Woolf, T. 2000. "Generation Information Systems to Support Renewable Portfolio Standards, Generation Performance Standards and Environmental Disclosure." Presentation at the Massachusetts Restructuring Roundtable on behalf of the Union of Concerned Scientists, March 2000. Woolf, T. 1998. "New England Tracking System Project: An Electricity Tracking System to Support a Wide Range of Restructuring-Related Policies." Presentation at the Ninth Annual Energy Services Conference and Exposition in Orlando, FL, December 1998.

Woolf, T. 2000. "Comments of the Citizens Action Coalition of Indiana." Presentation at Workshop on Alternatives to Traditional Generation Resources, June 2000.

Woolf, T. 1996. "Overview of IRP and Introduction to Electricity Industry Restructuring." Training session provided to the staff of the Delaware Public Service Commission, April 1996.

Woolf, T. 1995. "Competition and Regulation in the UK Electric Industry." Presentation at the Illinois Commerce Commission's workshop on Restructuring the Electric Industry, August 1995.

Woolf, T. 1995. "Competition and Regulation in the UK Electric Industry." Presentation at the British Columbia Utilities Commission Electricity Market Review, February 1995.

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