

**July 17, 2024**

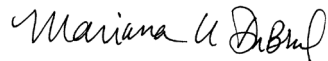
**Hatem Hassan  
Lawren Murray  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
PO Box 2319  
Toronto, ON M4P 1E4**

**Re: Cost Claim for EB-2022-0295**

**Dear Mr. Hassan and Mr. Murray:**

Please accept our materials submitted via the OEB Portal for our Cost Claim for Chris Neme's work on the Natural Gas DSM Stakeholder Advisory Group (SAG) and Evaluation Advisory Committee (EAC) from November 1, 2023 through April 30, 2024.

**Sincerely,**



**Mariana Du Brul  
Administrative Manager**

## EB-2022-0295 : 2 : Mariana Du Brul

COST CLAIM NUMBER 2255	SUBMISSION DEADLINE DATE July 22, 2024	CLAIM STATUS Approved by Finance
EB# EB-2022-0295: Initiatives: Policy Dev, CDM: Ontario Energy Board	OTHER EB#S	PHASE #* 2
INTERVENOR Du Brul, Mariana; +1 (802) 482-4940 finance@energyfuturesgroup.com	INTERVENOR COMPANY* Energy Futures Group, Hinesburg: Corporation	INTERVENOR TYPE Tax Exempt
HST RATE ONTARIO 0.00	EXCHANGE RATE	COUNTRY US
HST NUMBER	LATE SUBMISSION ALLOWED No	EXTENSION DEADLINE DATE

### PARTICIPANTS

New	Non-Filing Participant First, Last Name	Filing Participant	Total (\$)	Total Hours	Participant Claim Status
No	,	Neme, Chris; +1 (802) 482-5001 x.1 cneme@energyfuturesgroup .com	31,102.50	94.25	Submitted

### ATTACHMENTS

Attachment	Document Type	Import Message
EnergyFuturesGroup_CostClaim_CoverLetter_20240717.pdf	Cover Letter	
EFG EB-2022-0295 Cost Claim 071820241041.pdf		

TOTAL LEGAL/CONSULTANT/OTHER FEES 31,102.50	TOTAL DISBURSEMENTS 0.00	TOTAL HST 0.00
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TOTAL CLAIM 31,102.50	TOTAL AMOUNT AWARDED
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TOTAL HOURS CLAIMED 94.25	TOTAL HOURS DISALLOWED
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REASON FOR DISALLOWANCE	REASON FOR DISALLOWANCE - 2	REASON FOR DISALLOWANCE - 3
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MAKE CHEQUE PAYABLE TO  
Energy Futures Group, Inc.

SEND PAYMENT TO ADDRESS  
PO Box 587  
Hinesburg, VT 05461 USA

ATTENTION

#### 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  
Chris Neme

DATE SUBMITTED  
July 18, 2024

<b>CASE</b> EB-2022-0295: Initiatives: Policy Dev, CDM: Ontario Energy Board	<b>COST CLAIM</b> EB-2022-0295 : 2 : Mariana Du Brul	<b>INTERVENOR NAME</b> Du Brul, Mariana; +1 (802) 482-4940 finance@energyfuturesgroup. com	<b>PARTICIPANT CLAIM STATUS</b> Submitted
<b>FILING PARTICIPANT</b> Neme, Chris; +1 (802) 482-5001 x.1 cneme@energyfuturesgroup.com	<b>NEW PARTICIPANT</b> No	<b>NON-FILING PARTICIPANT F. NAME</b>	<b>NON-FILING PARTICIPANT L. NAME</b>
<b>SERVICE PROVIDER TYPE*</b> Consultant	<b>YEAR CALLED TO BAR*</b>	<b>COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE*</b> 37	<b>HOURLY RATE</b> 330
<b>HST RATE CHARGED*</b> 0.00	<b>CV STATUS (FOR CONSULTANT/ANALYST)</b> CV Provided within Previous 24 Months	<b>LAST CV DATE</b> April 29, 2024	<b>OVERRIDE HOURLY RATE</b> No
<b>HST NUMBER</b>	<b>HEARINGS</b> No	<b>CONSULTATIONS</b> Yes	<b>DISBURSEMENTS</b> No

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# CONSULTATION

Consultation		Consultations		Consultations		Consultations	
Hours		Subtotal (\$)		Total Tax (\$)		Total (\$)	
94.25		31,102.50		0.00		31,102.50	
Description		Maximum Hours	Hours	Hourly Rate	Sub Total	HST Rate	Total
1	SAG Meeting #13 - November 9, 2023	3.75	3.25	330	1,072.50	0.00	1,072.50
2	Meeting with OEB Staff and Guidehouse on Achievable Potential Study (APS) scenarios - Nov 13 2023	0.75	0.50	330	165.00	0.00	165.00
3	APS Sub Committee Meeting OEB APS - Residential Measure Characterization Sub-Committee - Nov 16 2023	3.00	3.00	330	990.00	0.00	990.00
4	APS Sub Committee Meeting: OEB APS - Industrial Measure Characterization Sub-Committee - Nov 16 2023	4.50	2.75	330	907.50	0.00	907.50
5	APS Sub Committee Meeting OEB APS - Residential Measure Characterization Sub-Committee - Nov 17 2023	4.50	4.00	330	1,320.00	0.00	1,320.00
6	APS Sub Committee Meeting: Commercial Measure Characterization Tutorial - November 17, 2023	0.75	0.00	330		0.00	
7	Review and Comment: OEB APS - Incentive Application Memo - November 17, 2023	0.50	0.00	330		0.00	
8	SAG Meeting #14 - November 28, 2023	2.25	0.00	330		0.00	
9	Review and Comment: OEB APS Commercial Measure Characterization: Applicability Factors - Dec 1 2023	4.50	0.00	330		0.00	
10	APS Sub Committee Meeting: Scenario Finalization - December 4, 2023	1.50	0.00	330		0.00	
11	Review and Comment: SAG call with Guidehouse on APS Technical/Economic potentials - Dec 5 2023	1.50	1.00	330	330.00	0.00	330.00
12	SAG Meeting #15 - December 7, 2023	4.50	3.25	330	1,072.50	0.00	1,072.50
13	Touch Point Call: APS call with OEB Staff - December 14, 2023	0.75	0.75	330	247.50	0.00	247.50
14	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #1 - December 19, 2023	4.00	3.75	330	1,237.50	0.00	1,237.50
15	SAG Meeting #16 - December 21, 2023	5.25	5.25	330	1,732.50	0.00	1,732.50
16	Review/Comment Responding to Guidehouse heat pump characterizations & follow-up meeting -Dec 22 2023	0.75	0.75	330	247.50	0.00	247.50
17	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #2 - January 12, 2024	6.00	5.50	330	1,815.00	0.00	1,815.00
18	Review and Comment: OEB APS - Technical/Economic Potential Discussion Follow-Up - January 17, 2024	2.00	2.00	330	660.00	0.00	660.00
19	SAG Meeting #17 - January 18, 2024	4.50	3.00	330	990.00	0.00	990.00

	<u>Description</u>	<u>Maximum Hours</u>	<u>Hours</u>	<u>Hourly Rate</u>	<u>Sub Total</u>	<u>HST Rate</u>	<u>HST</u>	<u>Total</u>
20	Review/Comment: Residential & Commercial Technical/Economic Comment Response Round 1 - Jan 19 2024	4.00	2.25	330	742.50	0.00		742.50
21	Review/Comment: Residential & Commercial Technical/Economic Comment Response Round 2 - Jan 23 2024	4.00	2.75	330	907.50	0.00		907.50
22	Review and Comment: OEB APS - Draft Industrial Achievable Potential Results - January 24, 2024	6.00	0.00	330		0.00		
23	APS Sub Committee Meeting: Industrial Achievable Roll-Out - January 26, 2024	1.00	1.00	330	330.00	0.00		330.00
24	Review/Comment: Residential & Commercial Technical/Economic Comment Response Round 3 - Jan 28 2023	4.00	0.00	330		0.00		
25	SAG Meeting #18 - February 1, 2024	1.50	0.00	330		0.00		
26	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #3 - February 7, 2024	4.00	0.00	330		0.00		
27	APS Sub Committee Meeting: Sensitivity Analysis Planning - February 7, 2024	1.50	0.00	330		0.00		
28	APS Sub Committee Meeting: Commercial Coefficient of Performance - February 9, 2024	1.50	0.75	330	247.50	0.00		247.50
29	Touch Point Call with OEB Staff and Enbridge Gas, Inc. on sensitivity scenarios - February 9, 2024	0.75	0.50	330	165.00	0.00		165.00
30	Review/Comment: Residential & Commercial Technical/Economic Comment Response Round 4 - Feb 13 2024	3.00	1.75	330	577.50	0.00		577.50
31	Review and Comment: APS - Technical Suitability of Commercial Heat Pumps - Feb 28 2024	3.00	0.00	330		0.00		
32	APS Sub-Committee Meeting: Residential Achievable Roll-Out - March 1, 2024	0.50	0.00	330		0.00		
33	Review and Comment: OEB APS - Sensitivity Analysis Proposal - March 4, 2024	0.50	0.25	330	82.50	0.00		82.50
34	Meeting: On Sensitivity Scenarios - March 12, 2024	1.50	1.25	330	412.50	0.00		412.50
35	SAG Meeting #19 - March 14, 2024	1.50	0.00	330		0.00		
36	Review and Comment: APS Data Walkthrough - March 14, 2024	1.00	0.00	330		0.00		
37	Review and Comment: OEB APS - First Draft Residential Achievable Results - March 14, 2024	6.00	4.00	330	1,320.00	0.00		1,320.00
38	Review: OEB APS - Payback Acceptance Curves - March 18, 2024	0.50	0.00	330		0.00		
39	Meeting: Enbridge Gas, Inc Intervenor Session - March 26, 2024	3.00	3.00	330	990.00	0.00		990.00
40	SAG Meeting #20 - March 28, 2024	4.50	4.50	330	1,485.00	0.00		1,485.00
41	Review and Comment: OEB APS - Residential Achievable Comment Disposition - March 28, 2024	3.00	3.00	330	990.00	0.00		990.00

	<u>Description</u>	<u>Maximum Hours</u>	<u>Hours</u>	<u>Hourly Rate</u>	<u>Sub Total</u>	<u>HST Rate</u>	<u>HST</u>	<u>Total</u>
42	Review and Comment: OEB APS - Draft Commercial Achievable Potential Results - March 28, 2024	6.00	3.25	330	1,072.50	0.00		1,072.50
43	Review and Comment: OEB APS - Commercial Achievable Potential Intro - April 5, 2024	1.00	1.00	330	330.00	0.00		330.00
44	Review and Comment: OEB APS - Commercial Hybrid Air Sourced Heat Pumps - April 11, 2024	1.50	0.75	330	247.50	0.00		247.50
45	Review/Comment: OEB APS - Second Draft Residential Achievable Results for Review - April 16, 2024	3.00	2.50	330	825.00	0.00		825.00
46	SAG Meeting #21 - April 18, 2024	3.75	3.00	330	990.00	0.00		990.00
47	Review and Comment: OEB APS - Commercial Achievable Potential - April 18, 2024	4.00	1.75	330	577.50	0.00		577.50
48	EAC Meeting #7 - November 6, 2023	2.25	2.00	330	660.00	0.00		660.00
49	EAC Meeting #8 - November 14, 2023	3.50	1.50	330	495.00	0.00		495.00
50	Review and Comment: Custom Sample Design Memos - November 22, 2023	1.50	0.25	330	82.50	0.00		82.50
51	Review and Comment: Draft Technical Resource Manual (TRM) measures 1st Round - November 30, 2023	1.00	0.00	330		0.00		
52	Review and Comment: Draft TRM measures, 1st Round continued - December 6, 2023	1.00	0.00	330		0.00		
53	EAC Meeting #9 - December 12, 2023	2.50	1.00	330	330.00	0.00		330.00
54	Review and Comment: 2022 Annual Verification Draft Report - Portion 1 - December 18, 2023	2.00	2.00	330	660.00	0.00		660.00
55	Review and Comment: Residential Adaptive Thermostat Process Evaluation proposal - December 21, 2023	2.00	1.75	330	577.50	0.00		577.50
56	EAC Meeting #10 - January 16, 2024	2.50	0.25	330	82.50	0.00		82.50
57	Review and Comment: eTools Adjustment Factor - Draft Memo - January 31, 2024	1.50	0.00	330		0.00		
58	Review and Comment: TRM Review 2nd Round - February 1, 2024	1.00	0.00	330		0.00		
59	Review/Comment: 2022 Annual Verification Draft Report - Complete Draft (Post eTools) - Feb 14 2024	1.00	1.00	330	330.00	0.00		330.00
60	Review and Comment: Spillover Scope of Work Draft - February 14, 2024	4.00	0.00	330		0.00		
61	Review and Comment: EAC Delphi panel proposal - February 15, 2024	1.50	0.75	330	247.50	0.00		247.50
62	EAC Meeting #11 - February 27, 2024	2.25	2.25	330	742.50	0.00		742.50
63	Review and Comment: Process evaluation reports - March 6, 2024	12.00	0.00	330		0.00		
64	Review and Comment: Custom Sample Design Memos - March 8, 2024	2.50	0.00	330		0.00		
65	EAC Meeting #12 - March 19, 2024	1.00	0.00	330		0.00		
66	Review/Comment: Spillover examples, data request, meeting slides & sample design plans - Mar 20 2024	1.50	0.50	330	165.00	0.00		165.00

	<u>Description</u>	<u>Maximum Hours</u>	<u>Hours</u>	<u>Hourly Rate</u>	<u>Sub Total</u>	<u>HST Rate</u>	<u>HST</u>	<u>Total</u>
67	Review/Comment: Custom project savings verification (CPSV) Batch 1 Site Report - Mar 12 2024	0.50	0.00	330		0.00		
68	EAC Meeting #13 - April 2, 2024	2.25	1.50	330	495.00	0.00		495.00
69	Review and Comment: TRM Review 3rd Round - April 4, 2024	1.00	0.00	330		0.00		
70	Review and Comment: CPSV Batch 2 site reports - April 15, 2024	1.50	1.00	330	330.00	0.00		330.00
71	EAC Meeting #14 - April 16, 2024	1.00	1.00	330	330.00	0.00		330.00
72	EAC Meeting #15 - April 30, 2024	2.25	1.50	330	495.00	0.00		495.00
<b>Total Legal/Consultant Fees</b>			<b>94.25</b>		<b>31,102.50</b>		<b>0.00</b>	<b>31,102.50</b>

## Attachments

<u>Attachment</u>	<u>Document Type</u>	<u>Import Message</u>
EnergyFuturesGroup_CostClaim_Invoice_20240718.pdf	Invoice	
EnergyFuturesGroup_CostClaim_TimeDocket_EAC_20240717.pdf	Time Docket	
EnergyFuturesGroup_CostClaim_TimeDocket_SAG_20240717.pdf	Time Docket	

## Hearings, Consultations, Disbursements Attachments

<u>Attachment</u>	<u>Document Type</u>	<u>Claim Type</u>	<u>Import Message</u>
EnergyFuturesGroup_CostClaim_Invoice_20240718.pdf	Invoice	Consultations	
EnergyFuturesGroup_CostClaim_TimeDocket_EAC_20240717.pdf	Time Docket	Consultations	
EnergyFuturesGroup_CostClaim_TimeDocket_SAG_20240717.pdf	Time Docket	Consultations	



EB-2022-0295

Energy Futures Group, Inc.

EAC Activities between November 1, 2023 and April 30, 2024

Employee Name	Work Date	JobID	Project Description	Service Hours	Rate	Fees	Description	EAC Task Number	EAC Activity
Chris Neme	11/6/2023	1045	EAC	2.00	\$330.00	\$660.00	EAC mtg	1	EAC Meeting #7
Chris Neme	11/14/2023	1045	EAC	1.50	\$330.00	\$495.00	participate in EAC mtg	2	EAC Meeting #8
Chris Neme	12/5/2023	1045	EAC	0.25	\$330.00	\$82.50	feedback to DNV on sample design memos	3	Review and Comment: Custom Sample Design Memos
Chris Neme	12/12/2023	1045	EAC	1.00	\$330.00	\$330.00	prep for and participate in EAC mtg	6	EAC Meeting #9
Chris Neme	1/2/2024	1045	EAC	1.75	\$330.00	\$577.50	review and provide comments on draft Enbridge process eval of smart t-stats	8	Review and Comment: Residential Adaptive Thermostat Process Evaluation proposal
Chris Neme	1/10/2024	1045	EAC	2.00	\$330.00	\$660.00	review and draft comments on proposed eval plan; review and provide comments on draft 2022 verification report	7	Review and Comment: 2022 Annual Verification Draft Report - Portion 1
Chris Neme	1/16/2024	1045	EAC	0.25	\$330.00	\$82.50	participate in EAC mtg	9	EAC Meeting #10
Chris Neme	2/22/2024	1045	EAC	1.00	\$330.00	\$330.00	review and comment on draft 2022 AV report	12	Review and Comment: 2022 Annual Verification Draft Report - Complete Draft (Post eTools)
Chris Neme	2/27/2024	1045	EAC	1.50	\$330.00	\$495.00	EAC monthly meeting	15	EAC Meeting #11
Chris Neme	2/28/2024	1045	EAC	0.75	\$330.00	\$247.50	review Enbridge recommendation, draft and send comments on proposed delphi panel	14	Review and Comment: EAC Delphi panel proposal
Chris Neme	2/29/2024	1045	EAC	0.75	\$330.00	\$247.50	follow up on 2022 AV report comments on nominal discount rate; send email info request to Enbridge; comments on 2/27 mtg notes	15	EAC Meeting #11
Chris Neme	4/2/2024	1045	EAC	1.50	\$330.00	\$495.00	EAC mtg	21	EAC Meeting #13
Chris Neme	4/12/2024	1045	EAC	0.50	\$330.00	\$165.00	review Enbridge Spillover proposal, draft and send response	19	Review and Comment: Spillover examples, data request, meeting slides and sample design plans
Chris Neme	4/16/2024	1045	EAC	0.75	\$330.00	\$247.50	prep for and participate in EAC mtg	24	EAC Meeting #14
Chris Neme	4/22/2024	1045	EAC	1.00	\$330.00	\$330.00	review CPSV Batch 2, send comments	23	Review and Comment: CPSV Batch 2 site reports
Chris Neme	4/23/2024	1045	EAC	0.25	\$330.00	\$82.50	review #14 mtg notes	24	EAC Meeting #14
Chris Neme	4/30/2024	1045	EAC	1.50	\$330.00	\$495.00	EAC mtg	25	EAC Meeting #15
<b>Total</b>						<b>\$6,022.50</b>			

Employee Name	Work Date	JobID	Project Description	Service Hours	Rate	Fees	Description	SAG Task Number	SAG Activity
Chris Neme	11/1/2023	1045	SAG	2.75	\$330.00	\$907.50	Research on data sources for Res assumptions, call w/Guidehouse; call w/Guidehouse, Staff on scenarios;	5	APS Sub Committee Meeting: OEB APS - Residential Measure Characterization Sub-Committee
Chris Neme	11/7/2023	1045	SAG	1.50	\$330.00	\$495.00	Review applicability factors, other Res. Assumptions and send comments	3	APS Sub Committee Meeting: OEB APS - Residential Measure Characterization Sub-Committee
Chris Neme	11/9/2023	1045	SAG	3.25	\$330.00	\$1,072.50	Working Group meeting, including prep and follow up	1	SAG Meeting #13
Chris Neme	11/13/2023	1045	SAG	0.50	\$330.00	\$165.00	mtg w/Staff, Guidehouse on APS scenarios	2	Meeting with OEB Staff and Guidehouse on Achievable Potential Study (APS) scenarios
Chris Neme	11/16/2023	1045	SAG	1.50	\$330.00	\$495.00	Res APS Subcommittee	3	APS Sub Committee Meeting: OEB APS - Residential Measure Characterization Sub-Committee
Chris Neme	11/16/2023	1045	SAG	2.75	\$330.00	\$907.50	Industrial APS Subcommittee	4	APS Sub Committee Meeting: OEB APS - Industrial Measure Characterization Sub-Committee
Chris Neme	11/17/2023	1045	SAG	1.25	\$330.00	\$412.50	APS res assumptions call	5	APS Sub Committee Meeting: OEB APS - Residential Measure Characterization Sub-Committee
Chris Neme	12/5/2023	1045	SAG	1.00	\$330.00	\$330.00	SAG call with Guidehouse on tech/econ potential	11	Review and Comment: SAG call with Guidehouse on APS Technical/Economic potentials
Chris Neme	12/7/2023	1045	SAG	3.25	\$330.00	\$1,072.50	prep for and participate in SAG mtg	12	SAG Meeting #15
Chris Neme	12/13/2023	1045	SAG	2.75	\$330.00	\$907.50	Review and comment on draft Res/Ind tech potential	14	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #1
Chris Neme	12/14/2023	1045	SAG	0.75	\$330.00	\$247.50	APS call w/Josh, Alex; feedback on Enbridge proposed DSM framework "rules"	13	Touch Point Call: APS call with OEB Staff
Chris Neme	12/19/2023	1045	SAG	1.00	\$330.00	\$330.00	mtg on APS deliverables, res measures	14	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #1
Chris Neme	12/20/2023	1045	SAG	0.50	\$330.00	\$165.00	Research, feedback on HP cost issues	16	Review and Comment: Responding to Guidehouse on heat pump chatacterizations and follow-up meeting
Chris Neme	12/21/2023	1045	SAG	5.25	\$330.00	\$1,732.50	prep for and participate in SAG mtg; APS deliverable call	15	SAG Meeting #16
Chris Neme	12/22/2023	1045	SAG	0.25	\$330.00	\$82.50	response to GH on HP characterizations, call w/Peter M	16	Review and Comment: Responding to Guidehouse on heat pump chatacterizations and follow-up meeting
Chris Neme	1/4/2024	1045	SAG	1.00	\$330.00	\$330.00	work on responses to Enbridge framework questions	17	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #2
Chris Neme	1/5/2024	1045	SAG	0.75	\$330.00	\$247.50	call w/Andrew Pride	17	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #2
Chris Neme	1/11/2024	1045	SAG	0.50	\$330.00	\$165.00	review and provide feedback on Guidehouse response to my Res measure comments	17	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #2
Chris Neme	1/12/2024	1045	SAG	3.25	\$330.00	\$1,072.50	APS call on tech/econ issues (2); draft responses to EGI framework questions (1.25)	17	APS Sub Committee Meeting: Technical/Economic Potential Review Meeting #2
Chris Neme	1/15/2024	1045	SAG	2.00	\$330.00	\$660.00	Review R&C tech/econ potential, send comments	18	Review and Comment: OEB APS - Technical Economic Potential Discussion Follow-Up
Chris Neme	1/18/2024	1045	SAG	3.00	\$330.00	\$990.00	prep for and participate in SAG mtg	19	SAG Meeting #17
Chris Neme	1/19/2024	1045	SAG	0.25	\$330.00	\$82.50	review feedback and respond on electrification cost; review GH response on GHG costs, send question	20	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 1
Chris Neme	1/22/2024	1045	SAG	1.25	\$330.00	\$412.50	res measure issues; review feedback from others	20	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 1
Chris Neme	1/25/2024	1045	SAG	0.50	\$330.00	\$165.00	review feedback on window assumptions, HPWH, electrical cost for ASHP; draft responses	20	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 1
Chris Neme	1/26/2024	1045	SAG	1.00	\$330.00	\$330.00	SAG mtg on industrial achievable potential	23	APS Sub Committee Meeting: Industrial Achievable Roll-Out
Chris Neme	1/29/2024	1045	SAG	0.25	\$330.00	\$82.50	feedback on electric panel upgrade cost, other measure assumptions	20	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 1
Chris Neme	2/6/2024	1045	SAG	0.75	\$330.00	\$247.50	call on res measure assumptions; follow up	21	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 2
Chris Neme	2/7/2024	1045	SAG	1.50	\$330.00	\$495.00	SAG call on APS; feedback on heat pump assumptions, bldg envelop measure saturation assumptions for	21	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 2
Chris Neme	2/8/2024	1045	SAG	0.75	\$330.00	\$247.50	review commercial heat pump assumptions, discuss w/Francis W.; responses to emails from Alex	28	APS Sub Committee Meeting: Commercial Coefficient of Performance
Chris Neme	2/9/2024	1045	SAG	0.50	\$330.00	\$165.00	Call w/OEB and Enbridge on insulation measures	21	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 2
Chris Neme	2/9/2024	1045	SAG	0.50	\$330.00	\$165.00	call w/OEB and Enbridge on sensitivity scenarios	29	Touch Point Call with OEB Staff and Enbridge Gas, Inc. on sensitivity scenarios
Chris Neme	2/12/2024	1045	SAG	0.50	\$330.00	\$165.00	Review table of APS assumptions for Res building envelop baselines, follow up w/Guidehouse	30	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 4
Chris Neme	2/14/2024	1045	SAG	1.00	\$330.00	\$330.00	Review and provide feedback on revised baseline assumptions for APS residential envelop measures, non-	30	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 4
Chris Neme	2/15/2024	1045	SAG	0.25	\$330.00	\$82.50	Feedback and email discussion of 4 residential heat pump scenario characterizations	30	Review and Comment: Residential & Commercial Technical/Economic Comment Response - Round 4
Chris Neme	3/4/2024	1045	SAG	0.25	\$330.00	\$82.50	review GH memo on sensitivities, comments to OEB	33	Review and Comment: OEB APS - Sensitivity Analysis Proposal
Chris Neme	3/6/2024	1045	SAG	0.25	\$330.00	\$82.50	feedback on sensitivity scenarios and avoided cost issues	34	Meeting: On Sensitivity Scenarios
Chris Neme	3/12/2024	1045	SAG	1.00	\$330.00	\$330.00	SAG mtg on sensitivity analysis	34	Meeting: On Sensitivity Scenarios
Chris Neme	3/14/2024	1045	SAG	4.00	\$330.00	\$1,320.00	SAG meetings; email feedback on approach to sensitivities; review Res draft achievable potential results,	37	Review and Comment: OEB APS - First Draft Residential Achievable Results
Chris Neme	3/26/2024	1045	SAG	3.00	\$330.00	\$990.00	Enbridge DSM engagement meeting (incl prep)	39	Meeting: Enbridge Gas, Inc. Intervenor Session
Chris Neme	3/28/2024	1045	SAG	4.25	\$330.00	\$1,402.50	SAG meeting on industrial planning (incl prep); Res APS meeting (incl prep)	40	SAG Meeting #20
Chris Neme	4/2/2024	1045	SAG	0.75	\$330.00	\$247.50	research on insulation and air sealing savings algorithms	41	Review and Comment: OEB APS - Residential Achievable Comment Disposition
Chris Neme	4/3/2024	1045	SAG	0.75	\$330.00	\$247.50	analysis of Enbridge home retrofit program data; emails to Guidehouse & Staff on insulation savings	41	Review and Comment: OEB APS - Residential Achievable Comment Disposition
Chris Neme	4/4/2024	1045	SAG	1.00	\$330.00	\$330.00	analysis of Enbridge home retrofit program data; draft and send proposal on insulation savings assumption	41	Review and Comment: OEB APS - Residential Achievable Comment Disposition
Chris Neme	4/5/2024	1045	SAG	1.00	\$330.00	\$330.00	SAG mtg on commercial achievable potential	43	Review and Comment: OEB APS - Commercial Achievable Potential Intro
Chris Neme	4/6/2024	1045	SAG	0.50	\$330.00	\$165.00	air sealing analysis; response to Enbridge proposal	41	Review and Comment: OEB APS - Residential Achievable Comment Disposition
Chris Neme	4/10/2024	1045	SAG	0.25	\$330.00	\$82.50	Review ACEEE commercial HP cost reference, email feedback to Staff, GH	44	Review and Comment: OEB APS - Commercial Hybrid Air Sourced Heat Pumps
Chris Neme	4/11/2024	1045	SAG	3.25	\$330.00	\$1,072.50	commercial APS mtg; analysis and emails on commercial APS assumptions	42	Review and Comment: OEB APS - Draft Commercial Achievable Potential Results
Chris Neme	4/12/2024	1045	SAG	0.50	\$330.00	\$165.00	research on commercial ASHP incr costs, email follow up	44	Review and Comment: OEB APS - Commercial Hybrid Air Sourced Heat Pumps
Chris Neme	4/23/2024	1045	SAG	0.25	\$330.00	\$82.50	review meeting #20 draft notes	40	SAG Meeting #20
Chris Neme	4/25/2024	1045	SAG	3.00	\$330.00	\$990.00	SAG mtg on Enbridge industrial programs	46	SAG Meeting #21
Chris Neme	4/29/2024	1045	SAG	1.75	\$330.00	\$577.50	call w/Guidehouse on Commercial measures; feedback on avoided costs for APS	47	Review and Comment: OEB APS - Commercial Achievable Potential
Chris Neme	4/30/2024	1045	SAG	2.50	\$330.00	\$825.00	review res achievable potential, send comments	45	Review and Comment: OEB APS - Second Draft Residential Achievable Results for Review
<b>Total</b>				<b>76.00</b>		<b>\$25,080.00</b>			

## Energy Futures Group, Inc.

PO Box 587

Hinesburg, VT 05461

Phone: (802) 482-5001

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### Invoice

**TO: Ontario Energy Board**

Hatem Hassan

2300 Yonge Street

27th Floor

Toronto, ON M4P 1E4

[hatem.hassan@oeb.ca](mailto:hatem.hassan@oeb.ca)

Lawren Murray, [lawren.murray@oeb.ca](mailto:lawren.murray@oeb.ca)

Registrar, [registrar@oeb.ca](mailto:registrar@oeb.ca)

Invoice #: 6397

Job Name: DSM Stakeholder Advisory Group

Project Manager: Chris Neme

Invoice Date: 7/18/2024

Invoice Period: 11/1/2023-4/30/2024

Terms: Net 30 Days

Reference: EB-2022-0295

Consultant Labor	Job-Phase-Project	Project Description	Rate	Hours	Amount
Chris Neme	1045-01-01	SAG	\$330.00	76.00	\$25,080.00
Chris Neme	1045-02-01	EAC	\$330.00	18.25	\$6,022.50
<b>EFG Labor Subtotal:</b>				<b>94.25</b>	<b>\$31,102.50</b>

<b>TOTAL DUE THIS INVOICE:</b>	<b>\$31,102.50 CAD</b>
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### Task Description

Invoice #: 6397  
Job Name: DSM Stakeholder Advisory Group  
Job Code: 1045  
Invoice Period: 11/1/2023-4/30/2024  
Consultant: Chris Neme

Date	Phase-Project	Project Description	Hours	Task Description
11/1/2023	01-01	SAG	2.75	Research on data sources for Res assumptions, call w/Guidehouse; call w/Guidehouse, Staff on scenarios; follow up to Guidehouse on their meeting notes
11/7/2023	01-01	SAG	1.50	Review applicability factors, other Res. Assumptions and send comments
11/9/2023	01-01	SAG	3.25	Working Group meeting, including prep and follow up
11/13/2023	01-01	SAG	0.50	mtg w/Staff, Guidehouse on APS scenarios
11/16/2023	01-01	SAG	2.75	Industrial APS Subcommittee
11/16/2023	01-01	SAG	1.50	Res APS Subcommittee
11/17/2023	01-01	SAG	1.25	APS res assumptions call
12/5/2023	01-01	SAG	1.00	SAG call with Guidehouse on tech/econ potential
12/7/2023	01-01	SAG	3.25	prep for and participate in SAG mtg
12/13/2023	01-01	SAG	2.75	Review and comment on draft Res/Ind tech potential
12/14/2023	01-01	SAG	0.75	APS call w/Josh, Alex; feedback on Enbridge proposed DSM framework "rules"
12/19/2023	01-01	SAG	1.00	mtg on APS deliverables, res measures
12/20/2023	01-01	SAG	0.50	Research, feedback on HP cost issues
12/21/2023	01-01	SAG	5.25	prep for and participate in SAG mtg; APS deliverable call
12/22/2023	01-01	SAG	0.25	response to GH on HP characterizations, call w/Peter M
1/4/2024	01-01	SAG	1.00	work on responses to Enbridge framework questions
1/5/2024	01-01	SAG	0.75	call w/Andrew Pride
1/11/2024	01-01	SAG	0.50	review and provide feedback on Guidehouse response to my Res measure comments
1/12/2024	01-01	SAG	3.25	APS call on tech/econ issues (2); draft responses to EGI framework questions (1.25)
1/15/2024	01-01	SAG	2.00	Review R& C tech/econ potential, send comments
1/18/2024	01-01	SAG	3.00	prep for and participate in SAG mtg
1/19/2024	01-01	SAG	0.25	review feedback and respond on electrification cost; review GH response on GHG costs, send question
1/22/2024	01-01	SAG	1.25	feedback to and discuss w/Guidehouse on avoided cost assumptions (incl GHGs); feedback to Guidehouse on res measure issues; review feedback from others

1/25/2024	01-01	SAG	0.50 review feedback on window assumptions, HPWH, electrical cost for ASHP; draft responses
1/26/2024	01-01	SAG	1.00 SAG mtg on industrial achievable potential
1/29/2024	01-01	SAG	0.25 feedback on electric panel upgrade cost, other measure assumptions
2/6/2024	01-01	SAG	0.75 call on res measure assumptions; follow up
2/7/2024	01-01	SAG	1.50 SAG call on APS; feedback on heat pump assumptions, bldg envelop measure saturation assumptions for Res, Com
2/8/2024	01-01	SAG	0.75 review commercial heat pump assumptions, discuss w/Francis W.; responses to emails from Alex
2/9/2024	01-01	SAG	0.50 call w/OEB and Enbridge on sensitivity scenarios
2/9/2024	01-01	SAG	0.50 Call w/OEB and Enbridge on insulation measures
2/12/2024	01-01	SAG	0.50 Review table of APS assumptions for Res building envelop baselines, follow up w/Guidehouse
2/14/2024	01-01	SAG	1.00 Review and provide feedback on revised baseline assumptions for APS residential envelop measures, non-rebate costs
2/15/2024	01-01	SAG	0.25 Feedback and email discussion of 4 residential heat pump scenario characterizations
3/4/2024	01-01	SAG	0.25 review GH memo on sensitivities, comments to OEB
3/6/2024	01-01	SAG	0.25 feedback on sensitivity scenarios and avoided cost issues
3/12/2024	01-01	SAG	1.00 SAG mtg on sensitivity analysis
3/14/2024	01-01	SAG	4.00 SAG meetings; email feedback on approach to sensitivities; review Res draft achievable potential results, draft and send comments
3/26/2024	01-01	SAG	3.00 Enbridge DSM engagement meeting (incl prep)
3/28/2024	01-01	SAG	4.25 SAG meeting on industrial planning (incl prep)
4/2/2024	01-01	SAG	0.75 research on insulation and air sealing savings algorithms
4/3/2024	01-01	SAG	0.75 analysis of Enbridge home retrofit program data; emails to Guidehouse & Staff on insulation savings assumption changes
4/4/2024	01-01	SAG	1.00 analysis of Enbridge home retrofit program data; draft and send proposal on insulation savings assumption changes
4/5/2024	01-01	SAG	1.00 SAG mtg on commercial achievable potential
4/6/2024	01-01	SAG	0.50 air sealing analysis; response to Enbridge proposal
4/10/2024	01-01	SAG	0.25 Review ACEEE commercial HP cost reference, email feedback to Staff, GH
4/11/2024	01-01	SAG	3.25 commercial APS mtg; analysis and emails on commercial APS assumptions
4/12/2024	01-01	SAG	0.50 research on commercial ASHP incr costs, email follow up
4/23/2024	01-01	SAG	0.25 review meeting #20 draft notes
4/25/2024	01-01	SAG	3.00 SAG mtg on Enbridge industrial programs
4/29/2024	01-01	SAG	1.75 call w/Guidehouse on Commercial measures; feedback on avoided costs for APS
4/30/2024	01-01	SAG	2.50 review res achievable potential, send comments

TOTAL:			76.00
11/6/2023	02-01	EAC	2.00 EAC mtg
11/14/2023	02-01	EAC	1.50 participate in EAC mtg
12/5/2023	02-01	EAC	0.25 feedback to DNV on sample design memos
12/12/2023	02-01	EAC	1.00 prep for and participate in EAC mtg
1/2/2024	02-01	EAC	1.75 review and provide comments on draft Enbridge process eval of smart t-stats
1/10/2024	02-01	EAC	2.00 review and draft comments on proposed eval plan; review and provide comments on draft 2022 verification report
1/16/2024	02-01	EAC	0.25 participate in EAC mtg
2/22/2024	02-01	EAC	1.00 review and comment on draft 2022 AV report
2/27/2024	02-01	EAC	1.50 EAC monthly meeting
2/28/2024	02-01	EAC	0.75 review Enbridge recommendation, draft and send comments on proposed delphi panel
2/29/2024	02-01	EAC	0.75 follow up on 2022 AV report comments on nominal discount rate; send email info request to Enbridge; comments on 2/27 mtg notes
4/2/2024	02-01	EAC	1.50 EAC mtg
4/12/2024	02-01	EAC	0.50 review Enbridge Spillover proposal, draft and send response
4/16/2024	02-01	EAC	0.75 prep for and participate in EAC mtg
4/22/2024	02-01	EAC	1.00 review CPSV Batch 2, send comments
4/23/2024	02-01	EAC	0.25 review #14 mtg notes
4/30/2024	02-01	EAC	1.50 EAC mtg
TOTAL:			18.25