

EB-2021-0246 : 2 : Karrain Smith

COST CLAIM NUMBER 1140	SUBMISSION DEADLINE DATE February 09, 2023	CLAIM STATUS Approved by Finance
EB# EB-2021-0246: Initiatives: Policy Dev, Infrastructure and Supply: Ontario Energy Board	OTHER EB#S	PHASE #* 2
INTERVENOR Smith, Karrain; +1 (703) 713-8838 Karrain.smith@icf.com	INTERVENOR COMPANY* ICF Consulting Canada Inc., Ottawa: Corporation	INTERVENOR TYPE Full Registrant
HST RATE ONTARIO 13.00	EXCHANGE RATE	COUNTRY
HST NUMBER 86917-4359-RT0001	LATE SUBMISSION ALLOWED No	EXTENSION DEADLINE DATE

PARTICIPANTS

New	Non-Filing Participant First, Last Name	Filing Participant	Total (\$)	Total Participant Hours	Participant Claim Status
No	,	Dikeos, John; +1 (613) 520-1835 John.Dikeos@icf.com	6,881.70	21.00	Submitted

ATTACHMENTS

Attachment	Document Type	Claim Type	Import Message
ICF EB-2021-0246 Cost Claim 020920231724.pdf			

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No	,	Dikeos, John; +1 (613) 520-1835 John.Dikeos@icf.com	6,881.70	21.00	Submitted
TOTAL LEGAL/CONSULTANT/OTHER FEES 6,090.00		TOTAL DISBURSEMENTS 0.00	TOTAL HST 791.70		
TOTAL CLAIM 6,881.70		TOTAL AMOUNT AWARDED			
TOTAL HOURS CLAIMED 21.00		TOTAL HOURS DISALLOWED			
REASON FOR DISALLOWANCE		REASON FOR DISALLOWANCE - 2	REASON FOR DISALLOWANCE - 3		

MAKE CHEQUE PAYABLE TO
ICF Consulting Canada Inc.

SEND PAYMENT TO ADDRESS
HSBC Bank Canada
70 York Street,
Toronto, ON M5G1S5

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
Karrain Smith

DATE SUBMITTED
February 09, 2023

John Dikeos

CASE EB-2021-0246: Initiatives: Policy Dev, Infrastructure and Supply: Ontario Energy Board	COST CLAIM EB-2021-0246 : 2 : Karrain Smith	INTERVENOR NAME Smith, Karrain; +1 (703) 713-8838 Karrain.smith@icf.com	PARTICIPANT CLAIM STATUS Submitted
FILING PARTICIPANT Dikeos, John; +1 (613) 520-1835 John.Dikeos@icf.com	NEW PARTICIPANT No	NON-FILING PARTICIPANT F. NAME	NON-FILING PARTICIPANT L. NAME
SERVICE PROVIDER TYPE* Consultant	YEAR CALLED TO BAR	COMPLETED YEARS PRACTICING/YEARS OF RELEVANT EXPERIENCE* 15	HOURLY RATE 290
HST RATE CHARGED* 13.00	CV STATUS (FOR CONSULTANT/ANALYST) CV Attached	LAST CV DATE February 09, 2023	OVERRIDE HOURLY RATE False
HST NUMBER 86917-4359-RT0001	HEARINGS No	CONSULTATIONS Yes	DISBURSEMENTS No

CONSULTATION

Consultation Hours	Consultations Subtotal (\$)	Consultations Total Tax (\$)	Consultations Total (\$)
21.00	6,090.00	791.70	6,881.70

<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>
Consultation							
Meeting #7 (DCF+) - July 5, 2022	4.00	2.00	290	580.00	13.00	75.40	655.40
Meeting #10 - August 23, 2022	4.00	4.00	290	1,160.00	13.00	150.80	1,310.80
Meeting #12 - September 27, 2022	4.00	2.50	290	725.00	13.00	94.25	819.25
Meeting #13 (DCF+) - October 12, 2022	4.00	3.00	290	870.00	13.00	113.10	983.10
Meeting #14 - October 25, 2022	4.00	2.00	290	580.00	13.00	75.40	655.40
Meeting #16 - November 22, 2022	4.00	2.50	290	725.00	13.00	94.25	819.25
Meeting #17 (DCF+) - December 6, 2022	4.00	2.50	290	725.00	13.00	94.25	819.25
Meeting #18 - December 20, 2022	4.00	2.50	290	725.00	13.00	94.25	819.25
Consultation Total							
Total Legal/Consultant Fees		21.00		6,090.00		791.70	6,881.70

Attachments

<u>Attachment</u>	<u>Document Type</u>	<u>Import Message</u>
John Dikeos Master CV.pdf	CV	
Cost_Claim_Form_EB-2021-0246.pdf	Cost Claim	
INV2023C-001230_C40587.0.001.00_DEC2022.pdf	Invoice	
INV2023C-001230_C40587.0.001.00_DEC2022.pdf	Time Docket	

Hearings, Consultations, Disbursements Attachments

<u>Attachment</u>	<u>Related Disbursement Claim</u>	<u>Document Type</u>	<u>Claim Type</u>	<u>Import Message</u>
John Dikeos Master CV.pdf		CV	Consultations	
Cost_Claim_Form_EB-2021-0246.pdf		Cost Claim	Consultations	
INV2023C-001230_C40587.0.001.00_DEC2022.pdf		Invoice	Consultations	
INV2023C-001230_C40587.0.001.00_DEC2022.pdf		Time Docket	Consultations	

EB-2021-0246 : 1 : Mariana Du Brul

COST CLAIM NUMBER
529

SUBMISSION DEADLINE DATE
9-Feb-23

CLAIMS STATUS
Submitted

EB#
EB-2021-0246: Initiatives: Policy Dev,
Infrastructure and Supply: Ontario Energy Board

OTHER EB#S

PHASE #
1

INTERVENOR
John Dikeos; (613) 520-1835
john.dikeos@icf.com

INTERVENOR COMPANY
ICF CONSULTING CANADA

INTERVENOR TYPE
Taxable

HST RATE ONTARIO
13%

COUNTRY
US

Invoice Number: 2023C-001230

Invoice Date 2/9/2023

Bill To:

ICF Consulting Canada Inc
John Dikeos
400 University Avenue, 17th Floor
Toronto, ON
M5G 1S5, CAN
john.dikeos@icf.com

Job Name: Ontario Gas IRP Working Group
Project Number C40587
Terms Net 30 Days
Due Date: 3/11/2023

Billing Currency: CAD
Billing Period From 7/21/2022
To: 1/27/2023

Project Description	Week Ending	Consultant Labor	Hours	Rate	Amount
Meeting #7 (DCF+)	July 5, 2022	John Dikeos	2.00	290.00	580.00
Meeting #10	August 23, 2022	John Dikeos	4.00	290.00	1,160.00
Meeting #12	September 27, 2022	John Dikeos	2.50	290.00	725.00
Meeting #13 (DCF+)	October 12, 2022	John Dikeos	3.00	290.00	870.00
Meeting #14	October 25, 2022	John Dikeos	2.00	290.00	580.00
Meeting #16	November 22, 2022	John Dikeos	2.50	290.00	725.00
Meeting #17 (DCF+)	December 6, 2022	John Dikeos	2.50	290.00	725.00
Meeting #18	December 20, 2022	John Dikeos	2.50	290.00	725.00
ICF Labor Subtotal:			21.00		6,090.00
Invoice Sub Total (Taxable)				\$	6,090.00
Total Tax (HST - 13%)				\$	791.70
TOTAL DUE THIS INVOICE:				\$	6,881.70

**Appendix A: Integrated Resource Planning Working Group Consultation
Activities for Which Cost Claims may be Filed and Maximum
Number of Hours**

Item Number	Activity	Date	Maximum Hours ¹	John's Hours
1	Meeting #7 (DCF+)	July 5, 2022	4.0	2.0
2	Meeting #8	July 19, 2022	4.0	
3	Meeting #9 (DCF+)	August 9, 2022	4.0	
4	Meeting #10	August 23, 2022	4.0	4.0
5	Meeting #11 (DCF+)	September 13, 2022	4.0	
6	Meeting #12	September 27, 2022	4.0	2.5
7	Meeting #13 (DCF+)	October 12, 2022	4.0	3.0
8	Meeting #13 development of presentation on addressing price effects and risk in DCF+ (Chris N. only)	October 12, 2022	4.0	
9	Meeting #14	October 25, 2022	4.0	2.0
10	Meeting #15 (DCF+)	November 8, 2022	4.0	
11	Meeting #16	November 22, 2022	4.0	2.5
12	Meeting #17 (DCF+)	December 6, 2022	4.0	2.5
	Meeting #18	December 20, 2022	4.0	2.5
13	Individual member discussion with Enbridge	Between July 1, 2022 to December 31, 2022	6.0 ²	
14	Review of IRP-related material in Enbridge Gas's rebasing application, including Asset Management Plan	Through December 31, 2022 ³	10.0	
	TOTAL			21.0

¹ Per the direction in the Working Group Terms of Reference, maximum eligible hours for each meeting are set at 2.0 times actual meeting time. Working Group members who were unable to attend a meeting are eligible to claim up to 50% of the maximum eligible hours for a given meeting, to account for preparation, follow-up, and review of meeting materials.

² This will cover any discussions Enbridge wishes to have with members outside of Working Group meetings (this time could be used by the Working Group member for discussion with Enbridge and/or research/preparation for such discussions) in the time period from July 1, 2022 to December 31, 2022). It may also be possible for a member to include such time commitments as part of the typical meeting preparation activity (see footnote 1), but this provides an additional option when more than a short follow-up is needed.

³ Consideration of IRP-related material in the rebasing application was not a specific area of focus for the Working Group in 2022. However, an understanding of this material will be important for the group's work in 2023, including the Working Group's mandatory review of Enbridge's annual IRP report, and cost eligibility for this item was provided to enable Working Group members who wish to begin their review of this material in 2022.

JOHN DIKEOS

Senior Manager

John Dikeos is a senior energy management consultant with over 14 years of experience with energy conservation and sustainable energy systems. His work has focused on assessments of energy efficiency technologies, energy efficiency potential studies, and the design and implementation of innovative DSM programs. John also has significant experience with the development and delivery of relevant training material to both key market actors and utility program delivery staff. In his current role, John acts as a senior leader on projects, leveraging his technical expertise and deep experience with a variety of energy efficiency-related projects, his effective communication skills, and his attention to detail to ensure that projects are running smoothly and that the level of quality of his team's deliverables is top-notch.

John's market study and technology characterization experience includes several in-depth studies on a broad array of natural gas and electric energy efficiency technologies. For example, this has included separate studies focused on LED lighting, advanced boiler controls, smart thermostats, and demand control ventilation. He has successfully managed several of these projects, ensuring that the work was delivered on time and on budget and that the quality of the deliverables met and exceeded client expectations. John has also worked on several conservation potential studies for natural gas and electric utilities across Canada, for which he's carried out various types of analyses to determine the economic viability and savings potential of energy efficient technologies.

John's program design experience is informed by projects for utilities across Canada and has included the development and analysis of energy efficiency measures, the completion of in-depth analyses of program and portfolio cost-effectiveness, and the development of program infrastructure. In addition, he has designed and supported the implementation of innovative energy efficiency programs, including a mid-stream lighting program and a program focused on supporting energy efficiency in hotels.

Furthermore, John served as ICF Canada's project manager for technical reviews of energy efficiency incentive applications to the IESO's retrofit and new construction programs for a significant portion of his early career with ICF. As part of this assignment, he managed and provided QA/QC support to a team of technical reviewers. He also managed budgets and staffing and interacted with clients on a regular basis.

John is a Professional Engineer (P.Eng.) in the province of Ontario, a Certified Energy Manager (CEM), and a Certified Measurement and Verification Professional (CMVP). He also holds Master's and Bachelor's degrees in Mechanical Engineering.



Years of Experience

- Professional start date: 06/2007
- ICF start date: 01/2008

Education

- M.A.Sc., Mechanical Engineering, University of Victoria, 2006
- B.Sc., Mechanical Engineering, Queen's University, 2003

Professional Memberships

- Professional Engineers of Ontario (PEO)
- Association of Energy Engineers (AEE)

Certifications/Other

- Certified Energy Manager (CEM), Association of Energy Engineers (AEE), 2019
- ICF Enterprise Program Management Certified, 2018
- Licensed Professional Engineer (P.Eng.), Province of Ontario, 2011
- Certified Measurement and Verification Professional (CMVP), Association of Energy Engineers (AEE), 2011

Selected Project Experience

Technology Assessments and Market Characterization

Pre-Feasibility Studies: Innovative Technologies—FortisBC, British Columbia, 05/2013 – Ongoing.

Deep involvement in several in-depth studies focused on characterizing the BC market for innovative natural gas energy efficiency technologies and determining whether they should be incorporated into pilot studies and/or existing DSM programs. In addition to in-depth reviews of the technologies and any available research and pilot studies, each of these studies includes consultations with key market actors, a review of relevant programs in other jurisdictions, a detailed savings analysis on a large number of scenarios, and the development of technical resource manual (TRM) entries. Have served as the primary researcher, project manager, and executive director on these studies.

John has been involved in the following independent studies:

- Interior air barriers and duct sealing, 2021-Ongoing
- Hybrid heating system controls, 2021-Ongoing
- Radiant barriers, 2020
- Window attachments, 2020
- Step 5 (net-zero ready) homes, 2019
- Vertical common venting in MURBs, 2019
- Warm mix asphalt, 2019
- Manufactured homes (top six measures), 2017-2018
- Advanced boiler controls, 2016-2017
- Web-enabled programmable thermostats (commercial facilities), 2016-2017
- Drain water heat recovery (DWHR) systems, 2016
- Direct vent wall furnaces, 2016
- High-efficiency gas fireplaces, 2014
- Condensing unit heaters and IR radiant tube heaters, 2013

Meta-Analysis of Heat Pump Field Monitoring Studies—CEATI, Canada, 04/2021 – Ongoing.

Project manager for a meta-review and analysis of field monitoring studies of various types of air-source and ground-source heat pumps. Also completing additional research and interviews with a variety of market actors to collect information on typical heat pump costs, understand the various barriers preventing more wide-spread adoption of heat pump technologies, and provide recommendations for improving the design and delivery of relevant programs.

Pre-Feasibility Study: Innovative Emerging Opportunities—FortisBC (Electric), British Columbia, 10/2020 – 02/2021.

Executive director for a study focused on characterizing and assessing the market opportunity of five innovative emerging technologies as potential DSM opportunities, including commercial drain water heat recovery, advanced RTU controllers, advanced power strips, switched reluctance motors, and temperature-mimicking sensors for refrigeration system control.

Non-Residential Lighting Market Characterization Study—IESO, Ontario, 03/2020 – 09/2020.

Project manager for a study to characterize the current state of the non-residential lighting market in Ontario, identify opportunities to further promote energy efficient lighting in the province, and develop a roadmap for future programming in the lighting sector over the next ten years.

Survey of Energy Consumption in Multi-Unit Residential Buildings (MURBs)—Natural Resources Canada (NRCan), Canada, 12/2017 – 03/2020.

Project manager for a study focused on collecting survey data related to energy usage and building characteristics from hundreds of MURBs across Canada. This enabled the creation of a 1-to-100 Portfolio Manager Benchmark for MURBs in Canada, while also answering critical policy questions.

Market Assessment of Ultra-High Efficiency Homes—Natural Resources Canada (NRCan), Canada, 06/2019 – 10/2019.

Executive director for a market assessment study of ultra-high efficiency homes in Canada, including net zero and net zero ready buildings. This study included an assessment of the existing stock of ultra-high efficiency homes, an analysis of hotspots with regards to regions and building types, a forecast of future trends, and the development of strategic recommendations.

Market Assessment of Ultra-High Efficiency Commercial and Institutional Buildings—Natural Resources Canada (NRCan), Canada, 03/2019 – 08/2019.

Executive director for a market assessment study of ultra-high efficiency commercial buildings in Canada, including net zero and net zero ready buildings at the top end and less efficient buildings that meet the top-tier requirements of certification programs such as LEED and BOMA BEST. This study included an assessment of the existing stock of ultra-high efficiency buildings, an analysis of hotspots with regards to regions and building types, a forecast of future trends, and the development of strategic recommendations.

Energy Efficient Refrigerator Glass Doors for the Commercial Sector—CEATI, Canada, 01/2019 – 09/2019.

Executive director for a technology assessment focused on efficiency improvements to open refrigerated display cases. Assessment completed on behalf of sponsor utilities in both the US and Canada included both natural gas savings during the heating season and electricity savings through reduced refrigeration loads.

Residential and Commercial Energy End-Use Surveys—Yukon Energy Corporation, Yukon, 05/2018 – 09/2018.

Managed a project related to the development of energy end-use surveys to YEC's residential and commercial customers.

DHW Recirculation System Controls—Union Gas, Ontario, 11/2016 – 09/2017.

Executive director and technical expert for technology, market, and energy savings assessment of domestic hot water (DHW) recirculation system controls in commercial facilities. Provided general oversight, technical support, and QA/QC of all major deliverables.

Smart Thermostats Compatibility Study—FortisBC, British Columbia, 10/2016 – 04/2017.

Executive director for a compatibility study of smart learning thermostats for residential buildings. This study focused on aspects related to communication, homeowner interaction, utility and functionality, and equipment and thermostat providers and fed into the development of a pilot program for residential customers in Kelowna, BC.

Compact Furnaces for MURBs and SFD Homes—Canadian Gas Association (CGA), Canada, 05/2015 – 11/2015.

Project manager for a pre-feasibility to assess potential energy savings from compact furnaces. This study focused on applying this technology in homes with space constraints, including multi-unit residential buildings (MURBs) and row/townhomes.

Demand Control Ventilation Market Expansion—Union Gas, Ontario, 09/2014 – 10/2015.

Led a pre-feasibility study centered on the market expansion of demand control ventilation (DCV) technology in Ontario. Union Gas used the resulting study to expand their existing program for DCV.

Commercial Refrigeration Technical Assistance—SaskPower, Saskatchewan, 04/2014 – 07/2014.

Led the delivery of this assignment, which focused on providing recommendations on energy efficient commercial refrigeration measures for use in a prescriptive program design.

Inventory and Energy Savings Estimates for Residential Self-Programmable/Smart Thermostats—CEATI, Canada, 01/2014 – 07/2014.

Led the assessment of the energy savings potential for a North-American scale pre-feasibility study that assessed the market opportunity, technical characteristics and projected energy savings for residential smart, self-programmable thermostats.

Conservation Potential and Other Macro-Level Studies

Electrification Potential Study—Natural Resources Canada, Canada, 08/2020 – 04/2021

Provided strategic technical support to an electrification potential study that assessed the potential to electrify all fossil fuel-based energy consumption across Canada, including energy use for buildings, transportation, and industrial processes. The analysis was segmented by province and included the development of detailed profiles for over 150 electrotechnologies.

Integrated Resource Planning (Non-Pipe Solutions) Study—Enbridge and Union Gas, Ontario, 09/2016 – 04/2018

Deputy project manager and DSM impact analysis lead for an integrated resource planning study focused on estimating the peak demand impacts of gas energy efficiency measures and the feasibility of using gas DSM to delay or defer infrastructure investments.

Natural Gas Conservation Potential Study—Ontario Energy Board (OEB), Ontario, 11/2015 – 06/2016.

Commercial team lead for a study to estimate the achievable potential for natural gas efficiency in Ontario from 2015 to 2030, including the franchise areas of Union Gas and Enbridge. Provided general oversight, training, and targeted support to the commercial sector modeling and analysis team, in addition to leading client-facing meetings on behalf of the commercial sector team.

Newfoundland Conservation and Demand Management Potential Study—Newfoundland Power Inc. and Newfoundland and Labrador Hydro, Newfoundland, 12/2014 – 08/2015.

Led the commercial sector modeling and analysis for this study, providing general oversight, training, and targeted expert support to the commercial team.

Study on Energy Efficiency and Energy Savings Potential in Industry and on Possible Policy Measures—European Union (EU) Director General for Energy, London, UK, 04/2014 – 02/2015.

Led the development of models to characterize the energy efficiency potential in several industrial and commercial sectors in the EU. The model considered hundreds of potential energy efficiency measures and compared achievable potential savings to targets set out by the EU.

Achievable Potential Study—IESO, Ontario, 01/2013 – 06/2013.

Used the outputs of the IESO's End Use Forecaster (EUF) model to estimate the achievable potential savings for various energy efficiency measures in both the residential and commercial sectors.

Program Design, Implementation, and Regulatory Support

Integrated Resource Planning Alternatives (IRPA) Regulatory Support—Enbridge, Ontario, 11/2020 – 04/2021.

Providing regulatory support for a proceeding focused on IRPAs (non-pipe solutions), which was seeking clear direction on how Enbridge should proceed with developing an IRPA framework and considering future IRPA projects. Support included reviewing filings from other parties, providing responses to interrogatories, and providing expert testimony during related Technical Conference and Oral Hearing proceedings with the OEB and a number of intervenors.

Smart LED Streetlight Conversion Program—Pepco, Maryland, 02/2020 – Ongoing.

Led the development of cost-effectiveness analysis related to the deployment of a smart LED streetlight conversion program in the State of Maryland. Also supporting the development of a related testimony and addressing any interrogatories as part of the regulatory process.

Natural Gas 2019-2022 DSM Plan—FortisBC, British Columbia, 08/2017 – 09/2018.

Led a project focused on assisting FortisBC to build their 2019-2022 DSM plan submission to the BC Utility Commission. This included providing feedback on their draft program offerings, assessing the cost effectiveness of their portfolio, preparing a detailed report to document the proposed plan and CE results, and providing responses to interrogatories as part of the regulatory process.

Hotel/Motel Pilot Program—Niagara Peninsula Energy Inc., Ontario, 07/2015 – 04/2017.

Deputy project manager of an 18-month hotel/motel pilot program in NPEI's service territory. Unique features included a focus on all utility costs, end-to-end support to help participants identify and implement measures, and an emphasis on building recommissioning (RCx) and testing and metering new energy efficiency measures that are specifically tailored to the hotel/motel sector.

Residential Engagement Platform—Toronto Hydro, Ontario, 02/2016 – 01/2017.

Led the development of an approved business case for a customer engagement platform to support Toronto Hydro's residential CDM programs. Program was focused on the delivery of home energy reports to a large number of their residential customers. Also assisted with program rollout, including the development of the participant list and the acquisition of floor space data.

Residential Program, Design and Analysis—Welland Hydro, Ontario, 10/2014 – 08/2016.

Assisted with the design and analysis of an innovative residential pilot program that focuses on holistic retrofits of homes and savings from multiple utilities (electricity, natural gas, and water). Tasks included measure selection, the development of archetype project inputs, cost-effectiveness modeling, and the preparation of a business case to the IESO.

Yukon DSM Technical Support—Yukon Energy Corporation, Yukon, 09/2014 – 09/2015.

Led the delivery of technical advisory services to support the launch of residential DSM programs in Yukon. This included technical support related to the selection and analysis of LED lighting products, automotive heater timers, and low-cost energy efficiency products and updated modeling to estimate the cost-effectiveness of the program portfolio.

Hospital Sector Host Initiative—OPA, Ontario, 09/2013 – 01/2014.

Completed an energy efficiency potential assessment of Ontario's health care sector, which included both hospitals and long-term care facilities. Investigated the potential savings, with a focus on holistic energy retrofits to maximize long-term cost and energy savings.

Retail Sector Host Initiative—OPA, Ontario, 04/2013 – 06/2013.

Completed an assessment of Ontario's retail sector in order to understand the energy efficiency potential that is available through various measures and to set an achievable target for an incremental program targeted at the retail sector. Also supported the design of the initiative.

Energy Efficiency Program Design—SaskPower, Saskatchewan, 02/2012 – 09/2013.

Carried out analysis related to the design and implementation of several energy efficiency programs, including a prescriptive lighting program, a lighting redesign program, and an industrial energy optimization program. Tasks included the analysis of energy efficiency measures, the development of program process flows, and the production of program documentation.

Technical Reviews of Applications to Energy Efficiency Programs

Technical Reviews of Funding Applications to ecoENERGY Program—Indigenous and Northern Affairs Canada (INAC), Canada, 04/2014 – 06/2015.

Carried out reviews of funding applications for renewable energy projects to the ecoENERGY for Aboriginal and Northern Communities Program. This involved reviews of wind, solar PV, and biomass projects and the associated pre-feasibility analyses that were completed in RETScreen.

Technical Reviews of Retrofit Program Applications—Various Ontario Utilities (LDCs), Ontario, 06/2008 – 12/2012.

Project manager in the review of over 600 prescriptive, engineered, and custom incentive applications for installation of energy efficient lighting, HVAC, motors, and renewable energy systems. Responsible for the QC of review reports, client interactions, and project budgeting and staffing. Also responsible for the reviews of M&V plans and coordinating site visits.

Technical Reviews of High Performance New Construction (HPNC) Program Applications—Enbridge Gas, Ontario, 06/2008 – 12/2012.

Project manager in the review of over 750 prescriptive applications to the HPNC program. Management tasks included supervising a review team, streamlining the evaluation process, conducting final reviews of reports, and interacting with clients on a regular basis.

Training Development and Delivery

Training Development: Quality Installation of Insulation Retrofits in BC Homes, HPSC, Oct. 2020 – Ongoing.

Managing the development and deployment of a BC-specific training curriculum to help train insulation contractors and applicators on the quality installation of insulation retrofits. Also developing demo videos, interactive exercises, quizzes, and a final exam for the training course. The content will be moved to an online learning management system (LMS), where the training course will be delivered to insulation contractors and applicators in an on-demand format. ICF is completing this project in partnership with Okanagan College and RDH Building Science.

Residential HVAC Equipment Quality Installation Training Implementation—HPSC, British Columbia, 05/2020 – 10/2020.

Project manager for a project focused on implementing the furnaces and air source heat pump installation best practices training curriculum, which ICF previously developed for HPSC. This project involved formatting the curriculum in an online learning management system and delivering the training to residential HVAC contractors from all parts of BC. In addition to recorded content, ICF delivered live webinars and added interactive exercises, knowledge checks, and a final exam.

Heat Pump Installation Best Practices Guide Webinars—Home Performance Stakeholder Council (HPSC), British Columbia, 12/2019 – 04/2020.

Led the development of a webinar to inform contractors of about the availability and contents of an Air Source Heat Pump Installation Best Practices Guide, which ICF developed as part of a previous related project. Also acted as the moderator for the delivery of three 2-hour webinars to a total of over 150 participants and provided the client with recordings of the webinars and related reports.

Residential HVAC Equipment Quality Installation Training Curriculum Development—HPSC, FortisBC, and BC Hydro, British Columbia, 04/2019 – 02/2020.

Project manager for a project focused on the development of a BC-specific training curriculum to help train BC HVAC contractors on the quality installation of high efficiency furnaces and heat pumps in residential retrofit applications. The project also includes the development of a Heat Pump Best Practices Installation Guide.

CDM Program Design and CDM Economics Training—MEARIE Group, Ontario, 10/2014 – 02/2016.

Led the delivery of a two-day training course related to CDM program design and CDM economics. The course was delivered on four separate occasions to groups of 10-25 staff from LDCs across Ontario. Also involved in the preparation and updating of the training material.

HPNC Engineered Worksheets Training—Enbridge, Ontario, 08/2012 – 11/2012.

Prepared and delivered a training webinar that was geared towards building owners, contractors and energy service providers and was attended by nearly (100) participants. The training was related to the new engineered worksheets for the IESO's new construction program.

Security Clearances

Secret clearance with Canadian Industrial Security Directorate (CISD)

Languages

English: Fluent (spoken and written)

French: Intermediate (spoken and written)

Greek: Advanced (spoken and written)

Employment History

ICF. Senior Manager. Ottawa, ON. 03/2017 – Present

ICF. Manager. Ottawa, ON. 03/2013 – 03/2017.

ICF. Senior Associate. Ottawa, ON. 01/2011 – 03/2013.

ICF (formerly Marbek Resource Consultants). Consultant. Ottawa, ON. 01/2008 – 12/2010.

NRCan Office of Energy R&D. Science and Technology Analyst. Ottawa, ON. 06/2007 – 12/2007.

Tulmar Safety Systems. R&D Engineering Assistant. Hawkesbury, ON. 05/2002 – 08/2002.

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS



Affidavit and Summary of Fees and Disbursements

This form should be used by a party (defined in the Practice Direction on Cost Awards as including a participant in a consultation process) in a consultation before the Board to identify the fees and disbursements that form the party's cost claim. Paper and electronic copies of this form and itemized receipts must be filed with the Board and served on one or more other parties as directed by the Board in the applicable Board Notice of Hearing for Cost Awards. Please ensure all required fields are filled in and the Affidavit portion is signed and sworn or affirmed.

Instructions

- Required data input is indicated by yellow-shaded fields. Formulas are present in the document to assist with the calculation of the cost claim.
- All claims must be in Canadian dollars. If applicable, state exchange rate and country of initial currency.
Rate: \$290 Country: Canada
- A separate "Statement of Disbursements Being Claimed" is required for each consultant or lawyer/articling student/paralegal. However only one "Statement of Fees Being Claimed" and one "Summary of Fees and Disbursements Being Claimed" covering the whole of the party's cost claim should be provided.
- The cost claim must be supported by a completed Affidavit signed by a representative of the party.
- A CV for each consultant must be attached unless, for a given consultant, a CV has been provided to the Board in another process within the last 24 months.
- Except as provided in section 7.03 of the Practice Direction on Cost Awards, itemized receipts must be provided.

File # EB- <u>2021-0246</u>	Process: <u>Integrated Resource Planning Working Group Co</u>
Party: <u>ICF</u>	Affiant's Name: <u></u>
HST Number: <u>BN/GST No. 86917-4359-RT0001</u>	HST Rate Ontario: <u>13.0%</u>
Full Registrant <input checked="" type="checkbox"/>	Qualifying Non-Profit <input type="checkbox"/>
Unregistered <input type="checkbox"/>	Tax Exempt <input type="checkbox"/>
Other <input type="checkbox"/>	

Affidavit

I, Karrain Smith, of the City/Town of ICF Consulting Canada
in the Province/State of Ontario, swear or affirm that:

1. I am a representative of the above-noted party (the "Party") and as such have knowledge of the matters attested to herein.
2. I have examined all of the documentation in support of this cost claim, including the attached "Summary of Fees and Disbursements Being Claimed", "Statement of Fees Being Claimed" and "Statement(s) of Disbursements Being Claimed".
3. The attached "Summary of Fees and Disbursements Being Claimed", "Statement of Fees Being Claimed" and "Statement(s) of Disbursements Being Claimed" include only costs incurred and time spent directly for the purposes of the Party's participation in the Ontario Energy Board process referred to above.
4. 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 sections 6.05 and 6.09 of the Board's Practice Direction on Cost Awards.

Signature of Affiant

Sworn or affirmed before me at the City/Town of ,
in the Province/State of , on (date)

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Affidavit and Summary of Fees and Disbursements



Commissioner for taking Affidavits

File # EB- 2021-0246 **Process:** Integrated Resource Planning Working Group Coi

Party: ICF

Summary of Fees and Disbursements Being Claimed

Legal/consultant fees	\$6,090.00
Disbursements	\$0.00
HST	\$791.70
Total Cost Claim	\$6,881.70

Payment Information

Make cheque payable to: ICF Consulting Canada Inc.

Send payment to this address: HSBC Bank Canada
70 York Street,
Toronto, ON M5G1S5

Detail of Fees and Disbursements Being Claimed

Statement of Fees Being Claimed

Statement of Fees being claimed for Eligible Activity is found on the third tab of this workbook.

Statement(s) of Disbursements Being Claimed

Statement of Disbursements being claimed is found on the fourth tab of this workbook.



Individual Whose Costs are Being Claimed

Name: <input type="text"/>		
Counsel/Articling Student/Paralegal: <input type="checkbox"/> Analyst/Consultant: <input type="checkbox"/> CV attached: <input type="checkbox"/>	Year Called to Bar <input type="text"/>	Completed Years Practicing/Years of relevant experience <input type="text"/> <input type="text"/>
CV not required: <input type="checkbox"/>		

**Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Statement of Fees Being Claimed**



File # EB- 2021-0246

Process Integrated Resource Planning Working Group Consultation

Party ICF

HST Rate: 13%

		1	2	3	4	5	6	7	8	9	10	11	12		13	14			
	Activity	Meeting #7 (DCF+) - July 5, 2022	Meeting #8 - July 19th, 2022	Meeting #9 (DCF+) - August 9, 2022	Meeting #10 - August 23, 2022	Meeting #11 (DCF+) - September 13, 2022	Meeting #12 - September 27, 2022	Meeting #13 (DCF+) - October 12, 2022	Meeting #13 development of presentation on addressing price effects and risk in DCF+ (Chris N. only) - October 12, 2022	Meeting #14 October 25, 2022	Meeting #15 (DCF+) - November 8, 2022	Meeting #16 November 22, 2022	Meeting # 17 (DCF+) - December 6th, 2022	Meeting #18 - December 20th, 2022	Individual Member Discussion With Enbridge	Review of IRP-related material in Enbridge Gas's rebasing application, including Asset Management Plan			
	Hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 4 hours	Up to a Maximum of 6 hours	Up to a Maximum of 10 hours			
Individual Whose Fees are Being Claimed	Hourly rate																Subtotal	HST	Total
John Dilkos	\$290.00	2.00			4.00		2.50	3.00		2.00		2.50	2.50	2.50			\$6,090.00	\$791.70	\$6,881.70
																	\$0.00	\$0.00	\$0.00
																	\$0.00	\$0.00	\$0.00
																	\$0.00	\$0.00	\$0.00
																	\$0.00	\$0.00	\$0.00
																	\$6,090.00	\$791.70	\$6,881.70
																	Total legal/consultant fees:		\$6,881.70

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Statement of Disbursements Being Claimed



File #	EB- <u>2021-0246</u>	Process:	Integrated Resource Planning Working Group
Party:	<u>ICF</u>		

Name of individual whose disbursements are being claimed:

HST Rate Ontario: 13.0%

		Net Cost	HST	Total
Scanning/Photocopy			\$0.00	\$0.00
Printing			\$0.00	\$0.00
Courier			\$0.00	\$0.00
Telephone/Fax			\$0.00	\$0.00
Transcripts			\$0.00	\$0.00
Travel: Air			\$0.00	\$0.00
Travel: Car			\$0.00	\$0.00
Travel: Rail			\$0.00	\$0.00
Travel (Other):			\$0.00	\$0.00
Parking			\$0.00	\$0.00
Taxi			\$0.00	\$0.00
Accommodation			\$0.00	\$0.00
Meals			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
TOTAL DISBURSEMENTS:		\$0.00	\$0.00	\$0.00

1/

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Statement of Disbursements Being Claimed



File # EB-	2021-0246	Process:	Integrated Resource Planning Working Group
Party:	ICF		

Name of individual whose disbursements are being claimed: 0

HST Rate Ontario: 13.0%

		Net Cost	HST	Total
Scanning/Photocopy			\$0.00	\$0.00
Printing			\$0.00	\$0.00
Courier			\$0.00	\$0.00
Telephone/Fax			\$0.00	\$0.00
Transcripts			\$0.00	\$0.00
Travel: Air			\$0.00	\$0.00
Travel: Car			\$0.00	\$0.00
Travel: Rail			\$0.00	\$0.00
Travel (Other):			\$0.00	\$0.00
Parking			\$0.00	\$0.00
Taxi			\$0.00	\$0.00
Accommodation			\$0.00	\$0.00
Meals			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
TOTAL DISBURSEMENTS:		\$0.00	\$0.00	\$0.00

2/

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Statement of Disbursements Being Claimed



File #	EB- <u>2021-0246</u>	Process:	Integrated Resource Planning Working Group
Party:	<u>ICF</u>		

Name of individual whose disbursements are being claimed: _____

HST Rate Ontario: 13.0%

		Net Cost	HST	Total
Scanning/Photocopy			\$0.00	\$0.00
Printing			\$0.00	\$0.00
Courier			\$0.00	\$0.00
Telephone/Fax			\$0.00	\$0.00
Transcripts			\$0.00	\$0.00
Travel: Air			\$0.00	\$0.00
Travel: Car			\$0.00	\$0.00
Travel: Rail			\$0.00	\$0.00
Travel (Other):			\$0.00	\$0.00
Parking			\$0.00	\$0.00
Taxi			\$0.00	\$0.00
Accommodation			\$0.00	\$0.00
Meals			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
TOTAL DISBURSEMENTS:		\$0.00	\$0.00	\$0.00

3/

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Statement of Disbursements Being Claimed



File #	EB- <u>2021-0246</u>	Process:	Integrated Resource Planning Working Group
Party:	<u>ICF</u>		

Name of individual whose disbursements are being claimed:

HST Rate Ontario: 13.0%

		Net Cost	HST	Total
Scanning/Photocopy			\$0.00	\$0.00
Printing			\$0.00	\$0.00
Courier			\$0.00	\$0.00
Telephone/Fax			\$0.00	\$0.00
Transcripts			\$0.00	\$0.00
Travel: Air			\$0.00	\$0.00
Travel: Car			\$0.00	\$0.00
Travel: Rail			\$0.00	\$0.00
Travel (Other):			\$0.00	\$0.00
Parking			\$0.00	\$0.00
Taxi			\$0.00	\$0.00
Accommodation			\$0.00	\$0.00
Meals			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
TOTAL DISBURSEMENTS:		\$0.00	\$0.00	\$0.00

4/

Ontario Energy Board
COST CLAIM FOR CONSULTATIONS
Statement of Disbursements Being Claimed



File #	EB- <u>2021-0246</u>	Process:	Integrated Resource Planning Working Group
Party:	<u>ICF</u>		

Name of individual whose disbursements are being claimed:

HST Rate Ontario: 13.0%

		Net Cost	HST	Total
Scanning/Photocopy			\$0.00	\$0.00
Printing			\$0.00	\$0.00
Courier			\$0.00	\$0.00
Telephone/Fax			\$0.00	\$0.00
Transcripts			\$0.00	\$0.00
Travel: Air			\$0.00	\$0.00
Travel: Car			\$0.00	\$0.00
Travel: Rail			\$0.00	\$0.00
Travel (Other):			\$0.00	\$0.00
Parking			\$0.00	\$0.00
Taxi			\$0.00	\$0.00
Accommodation			\$0.00	\$0.00
Meals			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
Other:			\$0.00	\$0.00
TOTAL DISBURSEMENTS:		\$0.00	\$0.00	\$0.00

5/

EB-2021-0246 : 1 : Mariana Du Brul

COST CLAIM NUMBER
529

SUBMISSION DEADLINE DATE
9-Feb-23

CLAIMS STATUS
Submitted

EB#
EB-2021-0246: Initiatives: Policy Dev,
Infrastructure and Supply: Ontario Energy Board

OTHER EB#S

PHASE #
1

INTERVENOR
John Dikeos; (613) 520-1835
john.dikeos@icf.com

INTERVENOR COMPANY
ICF CONSULTING CANADA

INTERVENOR TYPE
Taxable

HST RATE ONTARIO
13%

COUNTRY
US

Invoice Number: 2023C-001230

Invoice Date 2/9/2023

Bill To:

ICF Consulting Canada Inc
John Dikeos
400 University Avenue, 17th Floor
Toronto, ON
M5G 1S5, CAN
john.dikeos@icf.com

Job Name: Ontario Gas IRP Working Group
Project Number C40587
Terms Net 30 Days
Due Date: 3/11/2023

Billing Currency: CAD
Billing Period From 7/21/2022
To: 1/27/2023

Project Description	Week Ending	Consultant Labor	Hours	Rate	Amount
Meeting #7 (DCF+)	July 5, 2022	John Dikeos	2.00	290.00	580.00
Meeting #10	August 23, 2022	John Dikeos	4.00	290.00	1,160.00
Meeting #12	September 27, 2022	John Dikeos	2.50	290.00	725.00
Meeting #13 (DCF+)	October 12, 2022	John Dikeos	3.00	290.00	870.00
Meeting #14	October 25, 2022	John Dikeos	2.00	290.00	580.00
Meeting #16	November 22, 2022	John Dikeos	2.50	290.00	725.00
Meeting #17 (DCF+)	December 6, 2022	John Dikeos	2.50	290.00	725.00
Meeting #18	December 20, 2022	John Dikeos	2.50	290.00	725.00
ICF Labor Subtotal:			21.00		6,090.00
Invoice Sub Total (Taxable)				\$	6,090.00
Total Tax (HST - 13%)				\$	791.70
TOTAL DUE THIS INVOICE:				\$	6,881.70

**Appendix A: Integrated Resource Planning Working Group Consultation
Activities for Which Cost Claims may be Filed and Maximum
Number of Hours**

Item Number	Activity	Date	Maximum Hours ¹	John's Hours
1	Meeting #7 (DCF+)	July 5, 2022	4.0	2.0
2	Meeting #8	July 19, 2022	4.0	
3	Meeting #9 (DCF+)	August 9, 2022	4.0	
4	Meeting #10	August 23, 2022	4.0	4.0
5	Meeting #11 (DCF+)	September 13, 2022	4.0	
6	Meeting #12	September 27, 2022	4.0	2.5
7	Meeting #13 (DCF+)	October 12, 2022	4.0	3.0
8	Meeting #13 development of presentation on addressing price effects and risk in DCF+ (Chris N. only)	October 12, 2022	4.0	
9	Meeting #14	October 25, 2022	4.0	2.0
10	Meeting #15 (DCF+)	November 8, 2022	4.0	
11	Meeting #16	November 22, 2022	4.0	2.5
12	Meeting #17 (DCF+)	December 6, 2022	4.0	2.5
	Meeting #18	December 20, 2022	4.0	2.5
13	Individual member discussion with Enbridge	Between July 1, 2022 to December 31, 2022	6.0 ²	
14	Review of IRP-related material in Enbridge Gas's rebasing application, including Asset Management Plan	Through December 31, 2022 ³	10.0	
	TOTAL			21.0

¹ Per the direction in the Working Group Terms of Reference, maximum eligible hours for each meeting are set at 2.0 times actual meeting time. Working Group members who were unable to attend a meeting are eligible to claim up to 50% of the maximum eligible hours for a given meeting, to account for preparation, follow-up, and review of meeting materials.

² This will cover any discussions Enbridge wishes to have with members outside of Working Group meetings (this time could be used by the Working Group member for discussion with Enbridge and/or research/preparation for such discussions) in the time period from July 1, 2022 to December 31, 2022). It may also be possible for a member to include such time commitments as part of the typical meeting preparation activity (see footnote 1), but this provides an additional option when more than a short follow-up is needed.

³ Consideration of IRP-related material in the rebasing application was not a specific area of focus for the Working Group in 2022. However, an understanding of this material will be important for the group's work in 2023, including the Working Group's mandatory review of Enbridge's annual IRP report, and cost eligibility for this item was provided to enable Working Group members who wish to begin their review of this material in 2022.

