25 Adelaide St. E Suite 1602 Toronto ON, M5C 3A1



November 1, 2016

Ms. Kirsten Walli Board Secretary Ontario Energy Board 27<sup>th</sup> Floor, 2300 Yonge St Toronto, ON M4P 1E4

Re: Rate Design for Commercial and Industrial Customers (Board File No. EB-2015-0043)

Dear Ms. Walli,

Attached please find APPrO's cost claim for the most recent round of work in the abovenoted proceeding.

Sincerely,

Jake Brooks
Executive Director

cc: Laurie Reid Dave Butters

# **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

lirected 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 in	nput is indicated by yellow-shade	ed fields. Form	ulas are present in the do	cument to assist wi	th the calculation of		
the cost claim.							
All claims must	be in Canadian dollars. If applica	able, state exc	hange rate and country o	f initial currency.			
		Rate:		Country:			
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- 20:	15-0043		Process: Rate Design	for Electricity Cus	tomers		
arty: APPrO, Association of Power Producers of Affiant's Name: Jake Brooks							
HST Number: 12529 8802 RT0001			нѕт	Rate Ontario:	13.00%		
	Full Registrant Unregistered Other		Qualifyin	g Non-Profit Tax Exempt			
Affidavit							
Amuavic							
Ι,	Jake Brooks	,	of the City/Town of	Richm	ond Hill		
in the Province/State of		Ontario , swear or affirm that:					
2. I have examine Disbursements B	ntative of the above-noted party ed all of the documentation in su eeing Claimed", "Statement of Fee	pport of this ones Being Claim	cost claim, including the a ed" and "Statement(s) of	ttached "Summary o Disbursements Bein	of Fees and		

- 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

Jonathan Blake McClung Barrister & Solicitor

Commissioner for taking Affidavit Notary Public & Commissioner of Oaths

RED SEAL NOTARY INC. 25 Adelaide St. East #100 Toronto, ON M5C 3A1

for the Province of Ontario My Commission is of unlimited duration. No Legal Advice Was given

Affidavit and Summary

# Ontario Energy Board COST CLAIM FOR CONSULTATIONS



## **Affidavit and Summary of Fees and Disbursements**

File # EB- 2015-0043 Process: Rate Design for Electricity Customers

Party: APPrO, Association of Power Producers of

	Summary of Fees and Disbursements	Being Claimed
Legal/consultant fees	\$5,140.00	
Disbursements	\$0.00	
HST	\$668.20	
<b>Total Cost Claim</b>	\$5,808.20	

#### **Payment Information**

Make cheque payable to: APPrO, Association of Power Producers of Ontario

Send payment to this address: Suite 1602 - 25 Adelaide St. East

Toronto, Ontario M5C 3A1

**Detail of Fees and Disbursements Being Claimed** 

#### **Statement of Fees Being Claimed**

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

#### Statement(s) of Disbursements Being Claimed

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

# **Ontario Energy Board**



# COST CLAIM FOR CONSULTATIONS Affidavit and Summary of Fees and Disbursements

#### **Individual Whose Costs are Being Claimed** Name: John Dalton **Completed Years Year Called** Practicing/Years of Relevant to Bar Experience Counsel/Articling Student/Paralegal: Analyst/Consultant: <a> \square</a> CV attached: CV not required: Name: Travis Lusney **Completed Years Year Called** Practicing/Years of relevant to Bar experience Counsel/Articling Student/Paralegal: 10 Analyst/Consultant: <a> \square</a> CV attached: CV not required: Name: **Completed Years** Year Called Practicing/Years of relevant to Bar experience Counsel/Articling Student/Paralegal: Analyst/Consultant: CV attached: CV not required: Name: **Completed Years** Year Called Practicing/Years of relevant to Bar experience Counsel/Articling Student/Paralegal: Analyst/Consultant: CV attached: CV not required: Name: **Completed Years** Year Called Practicing/Years of relevant to Bar experience Counsel/Articling Student/Paralegal: Analyst/Consultant: CV attached: CV not required:

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



File # EB-2015-0043

**Process** Rate Design for Electricity Customers

Party APPrO, Association of Power Producers

HST Rate: 13%

				Travis Lusney \$230.00	ohn Dalton \$330.00	Claimed Hourly ra	Individual Whose Fees are Being						
				).00	0.00	te Up					Gro		
						to 3.75 hours		Participant	Eligible	Aug 4, 2016	oup Meeting on		
						Hourly rate Up to 3.75 hours Up to 3.75 hours		Participant	Eligible	Aug 18, 2016	Group Meeting on Group Meeting on Group Meeting on comment on Staff Meeting on Jun 2,		
						Up to 3 hours		Participant	Eligible	Aug 26, 2016	Group Meeting on		12
				8.00	10.00	Up to 20 hours	P	Participant	Eligible	Discussion Paper	comment on Staff	Review and	
						Up to 3 hours		Participant	Eligible	2016	Meeting on Jun 2,		
70.00	\$0.00	\$0.00	\$0.00	\$1,840.00	\$3,300.00	Subtotal							
1			1	ı				ı					

Totals:

Total legal/consultant fees: \$5,808.20 \$5,140.00 \$668.20

\$0.00

\$0.00 \$0.00

\$0.00 \$0.00

\$0.00

 HST
 Total

 \$429.00
 \$3,729.00

 \$239.20
 \$2,079.20

1 of 1



June 13, 2016

David Butters Association of Power Producers of Ontario 25 Adelaide St. E., Suite 1602 Toronto, ON M5C 3A1

Dear Mr. Butters,

This represents Power Advisory's summary of services for May 2016 for Consulting Services for EB-2015-0043 (Rate Design for Commercial and Industrial Customers). I have attached an invoice with details of the service provided.

Hours for John Dalton:	10.00
Hourly Rate for Services:	\$ 330.00
Fees for John Dalton:	\$ 3,300.00
Hours for Travis Lusney:	8.00
Hourly Rate for Services:	\$ 230.00
Fees for Travis Lusney:	\$ 1,840.00
<b>Total Professional Fees</b>	\$ 5,140.00
HST 81338 8691 RT001 @ 13%	\$ 668.20
Amount Invoiced (Payment Requested):	\$ 5,808.20

Please call if you have any questions regarding this invoice.

Please make the check payable to Power Advisory LLC and send to the address below.

Best Regards,

John Dation

John Dalton

President



## Invoice

Bill to:

Date 6/13/16

Invoice: 16-0522

David Butters Association of Power Producers of Ontario 25 Adelaide St. E., Suite 1602 Toronto, ON M5C 3A1

Contract:

Item	Date	Description	Qty	Rate	Amount
JD	17-May	Review of Materials	4.00	330.00	1320.00
JD	19-May	Drafting	6.00	330.00	1980.00
ST					3300.00
TL	10-May	Call with Jake to discuss C/I dx rate response for APPrO. Create draft outline of C/I Dx Rates submission for APPrO	1.00	230.00	230.00
TL	13-May	Call with Barry Chuddy: Discussion on difficulties for LDCs with fixed fee approach	0.50	230.00	115.00
TL	17-May	Call with John dalton to discuss strategy and feedback from APPrO members on C/I dx rate submissions	0.50	230.00	115.00
TL	20-May	Editing and drafting APPrO C/I Dx Rate submission for circulation with working group	4.00	230.00	920.00
TL	24-May	Conference call with C/I Dx Rates working group	1.00	230.00	230.00
TL	25-May	Edits to C/I Dx Rate Submission based on feedback from members	1.00	230.00	230.00
ST					1840.00
HST		HST 81338 8691 RT0001 (13%)			668.20
					5,808.20



#### John Dalton

John Dalton President

Power Advisory LLC 212 Thoreau Street Concord, MA 01742 Cell: 978-831-3368 Tel: 978-369-2465

jdalton@poweradvisoryllc.com

#### Professional History

- · Navigant Consulting
- · Reed Consulting Group
- R.J. Rudden Associates Inc., 1987-1988
- Massachusetts Energy Facilities Siting Council, 1984-1987
- Massachusetts Department of Environmental Protection, 1981-1984

#### Education

- · Boston University, MBA, 1987
- Brown University, AB, Economics, 1980

A senior electricity market analyst and electricity policy consultant with over 25 years of experience in energy market analysis, power procurement, project valuation, and strategy development. Experienced in the evaluation and analysis of electricity markets and the competitive position of generation technologies and projects within these markets including the assessment of the competitiveness of the underlying market, the development of power market price forecasts, the implementation of power procurement processes, and the development and evaluation of renewable energy policies. Frequent speaker on these subjects at energy industry conferences.

#### **Professional Experience**

#### **Market Assessment**

- » Developed and supported numerous market price forecasts for wholesale power markets across North America. Price forecasts were used to support generation project development efforts, project financings and acquisitions, regulatory policy development, and power procurement efforts.
- » Demonstrated the need for electric generation projects in filings submitted to various state and provincial regulatory agencies. Evaluated the cost of a wide range of different generation technologies for a number of clients. Defended analyses in prepared and oral testimony before these state

agencies.

- » Conducted wholesale power market analyses across North America for a wide range of market participants. Analysis included identifying likely competitors and pricing, security provisions, and general terms and conditions of various power supply options. Evaluated pricing required to compete in the market.
- » Advised the Ontario Electricity Financial Corporation with the management of its non-utility generation contracts. Advice included addressing the policy issues associated with balancing concerns with the sanctity of existing contracts and the desire to minimize stranded debt as well as to use the contracts as a source of competitive discipline for the incumbent provincial electric utility.
- » Managed a team that was retained by a large power generation company to develop a market assessment and wholesale power market price forecast for the Alberta market. Our assessment focused on issues affecting the fundamentals of the Alberta power market, including the future demand supply balance, growth in demand, market interconnections, and potential new generation capacity additions.

- » Retained by the financial advisors for the developer of a proposed new combined cycle gas turbine project in Alberta to establish the toll between the Corporate entity participating in the income fund and the parent. Defended forecast assumptions and the modelling approach before investors as part of a public offering.
- » Directed the use of ProSym in a proceeding before the Alberta Energy and Utilities Board (AEUB) to estimate the costs of transmission congestion and the benefits of increasing the transfer capability of the North South transmission interface. Modeling assumptions and methodology were successfully defended before the AEUB.
- » Advised numerous generation project developers across North America on opportunities offered by participating in the relevant wholesale power market and various power supply procurement RFPs. Evaluated market risks and outlined strategies for managing these risks most efficiently.
- » Analyzed and critiqued the supply planning methodologies of electric and gas utilities, focusing on the appropriateness of the supply planning models and methods. Provided recommendations for improving supply planning methods which were designed to assist the utilities in addressing the uncertainties associated with long-range planning. Prepared recommendations for the refinement of demand forecasting methods for electric and natural gas utilities. Analyzed and evaluated the statistical and quantitative projection methods used, including end-use and econometric forecasting techniques.
- » Evaluated electric generating technologies on the basis of the capital and operating costs, technological risk, and environmental impact, identifying a preferred alternative in light of these considerations. Defended the selection process before a regulatory agency.
- » Prepared strategic plan for a number of electric and natural gas market participants which evaluated the state/provincial and federal regulatory climate for cogeneration and generation projects, market prices and risks and recommended a competitive strategy.

#### **Market Structure Development and Evaluation**

- » Advised the governments of Ontario, New Brunswick, Nova Scotia, Western Australia, and Manitoba regarding the restructuring of their wholesale power markets and possible market structures to achieve a workably competitive wholesale market.
- » Responsible officer for market design project for the Province of New Brunswick. Navigant Consulting assisted the Market Design Committee and its subcommittees in providing the Minister of Natural Resources and Energy with recommendations on the implementation of electricity restructuring. Issues addressed included developing a market design that addresses concerns with the potential for the exercise of market power and enables New Brunswick to integrate with its interconnected markets. The Market Design Committee addressed development of the electricity market including its design, structure and rules. Navigant Consulting provided advice on the issues to be addressed, prepared issue papers and presentations, created strawmen for resolution of issues, and developed guidelines and direction for the creation of market design rules and protocols.

- » Project manager for an assignment with the Province of New Brunswick to assist with the development of its ten-year energy policy. The cornerstone of this energy policy was the framework for restructuring its wholesale and retail electric markets. Advised regarding developments in other wholesale and retail markets and the prospects for meaningful competition in New Brunswick's wholesale and retail markets. Navigant Consulting advised regarding benefits offered by wholesale and retail competition; strategies for protecting New Brunswick consumers from market dislocations and higher prices; appropriate regulatory frameworks for the wires businesses and the prospects for achieving a workably competitive wholesale market in New Brunswick and the resulting market design requirements; and policies for addressing stranded costs raised by market restructuring.
- » Markets and economics expert for a project with Western Power, the state-owned fully integrated utility that serves the vast majority of Western Australia. Advised regarding potential changes to the wholesale and retail electric power markets to enhance the competitiveness of these markets. Alternative market structures were evaluated and assessed in an effort to determine the market structure that offers the greatest societal net benefits. Offered proposed market structure changes that would accommodate government policy objectives of allowing greater levels of retail contestability and new entrants to satisfy the market's need for additional capacity. Evaluated restructuring reforms that had been implemented in a range of different markets that were of a similar size as Western Australia.
- Advised the Energy Strategy Working Group regarding the development of an electricity restructuring policy for the Province of Nova Scotia. Reviewed the experience with respect to the wholesale and retail market restructuring in California, New England, PJM, and Alberta and based on this experience outlined lessons learned and potential implications for electric restructuring Nova Scotia. Outlined the arguments for considering the restructuring of Nova Scotia's electricity market, reviewed contrasting market models, and discussed the critical constraints on wholesale and retail market restructuring in Nova Scotia.
- » .Provided numerous presentations regarding the experiences with the restructuring of wholesale power markets and the lessons learned. Markets evaluated have included California, Alberta, New York, New England, PJM, Victoria, and England and Wales.

#### **Project Valuation**

- » Served as Project Manager for assignments requiring the development of valuation estimates for numerous energy projects. Projects typically entailed modeling revenues and costs to predict cash flows and calculate the cumulative present worth of after-tax cash flows. The overall viability of projects were assessed by reviewing the status of project permitting efforts and financial commitments, the major provisions of power purchase agreements and steam purchase agreements.
- » Managed a project to provide an independent valuation of a multi-unit generating portfolio as part of a refinancing for the portfolio. Oversaw and managed the development of an electricity market price forecast and estimate of the fair market value of the proposed portfolio. Defended analyses before credit rating agencies and lenders.
- » Completed a comprehensive valuation of an oil-sands cogeneration project. As part of this effort, the team examined various market scenarios and potential spot market volatility and the subsequent impact on the client's electricity commodity costs.
- » Performed detailed analyses of numerous generation projects' financial feasibility. Analyses considered alternative financing schemes and identified strategies for enhancing project values.
- » Evaluated the economic and financial feasibility of a number of different generation projects for project developers, project hosts, and a gas utility. Assisted in the development of a cogeneration feasibility assessment model.

- » Developed an estimate of the capital and operating costs of a wide range of generating technologies as part of a comprehensive assessment of the costs of new entry. Also estimated the appropriate cost of equity using the capital asset pricing model and debt and capital structure based on market information for merchant generators.
- » Oversaw the development of numerous electricity distribution company valuation models. Used models to derive an estimate of the fair market value of the LDCs. Defended analysis before utility boards and management.
- » Developed quantitative and qualitative analyses of generating assets in support of numerous generation asset acquisitions. Assisted in the management and coordination of multiple facets of the due diligence process, including technical engineering assessments, environmental, fuel supply, etc. Experience includes a broad range of fuels / technologies, including wind and other renewables.

#### **Competitive Procurement Support**

- » Advised on the development of over 25 RFPs for power supplies and demand-side resources for electric utilities across North America, serving as project manager for well over half of these RFPs. Support covered the full range of RFP support services including advising regarding the appropriate form of the RFP and evaluation process to secure resources that best satisfy the client's objectives, drafting the RFP, developing the evaluation framework, marketing the RFP process to prospective bidders and negotiating with bidders.
- » Testified before the Alberta Utilities Commission on the appropriate structure for the Alberta Electric System Operator's competitive procurement process. The applicant adopted the many of the recommendations made in rebuttal testimony and the Commission directed the applicant to revise its proposal to conform to other recommendations. A primary focus of the testimony was how to enhance competitive tension in the procurement process for the benefit of electricity consumers.
- » Managed a multi-disciplinary team that served as the Renewable Electricity Administrator for the Province of Nova Scotia responsible for procuring 300 GWh of renewable energy through a competitive procurement process.
- » Advised the Vermont Public Service Board on the development of a market-based mechanism for the procurement of renewable energy. Legislation identified a reverse auction as a possible procurement mechanism. This along with other procurement methods were evaluated to determine the method that would be serve customers. Alternatives were evaluated by contrasting the product and other distinguishing characteristics, degree of price transparency, requirements for bidders, with each alternatives evaluated in terms of efficiency of outcomes given the anticipated level of competition.
- » Advised on commercial issues for power purchase agreements.
- » Offered testimony before the Massachusetts Department of Public Utilities on a utility RFP process. Authored reports on the evaluation of proposals.
- » Reviewed the performance of the Alberta PPA Auction and critically assessed elements of the PPAs and the auction design which caused the auction to reduce the value secured for the generation assets that were auctioned.
- » Outlined the pro and cons of different frameworks that could be used for the sale of surplus energy and reviewed whether these sales frameworks were appropriate for the products being offered and the relevant market.

- » Advised the Western Australia Electricity Restructuring Task Force with respect to the performance of auctions in Ireland for the sale of capacity and energy. Reviewed the structure of the auction how it could be employed in Western Australia to mitigate the market power of the incumbent state generator.
- » Managed numerous competitive solicitations for renewable energy resources and energy efficiency projects. Projects involved the development of frameworks for evaluating these energy alternatives and for comparing them on a consistent basis with conventional electricity supplies. Analyses considered the relative environmental impacts, reliability benefits, and cost-effectiveness of alternatives.
- » Acted as Project Manager for several assignments to serve as the independent evaluator of conventional generation, renewable resource and demand-side RFPs. Responsible for determining whether proposals satisfy the threshold requirements in the RFP and for scoring all proposals. Also responsible for identifying the short-list of proposals, conducting bid clarification meetings with shortlisted bidders, and recommending to the selection of winning bidders.

#### Transmission Facility Review and Pricing Proceeding Support

- » Advised the staff of the Ontario Energy Board on the evaluation of the proposal for a 1,250 MW HVDC line between Quebec and Ontario and served as a participating staff member for the Massachusetts Energy Facilities Siting Board's evaluation of the 2,000 MW HVDC interconnection between Massachusetts and Quebec.
- » Advised OEB staff on the review of evidence presented by Hydro One in its application for two 240 kV transmission lines to alleviate the Queenston Flow West constraint.
- » Advised clients in Saskatchewan, Newfoundland and Labrador, and Alberta on transmission pricing issues. Testified in the Alberta Transmission Congestion Pricing Principles proceeding.
- » Led a consulting team that assisted with the preparation of the East-West Electrical Transmission Grid Study. Authored subsequent updates to this study for Natural Resources Canada.
- » Advised a client regarding the elements of a comprehensive electricity export policy framework. Advice focussed on economic and social issues arising from the development of export oriented transmission infrastructure to support the development generation for export.
- » Provided testimony on Northeast power markets and transmission issues and consequential damages in a civil case in New York. Evaluated the implications of the loss of a transmission facilities on the power system adequacy.
- » Advised a number of clients on the issues associated with the development of merchant transmission facilities. Projects included reviewing the status of merchant project development efforts, merchant project structures, key success factors for merchant plant development and a review of merchant plant development opportunities worldwide.

#### Renewable Energy Policy Development and Evaluation

- » Advised governments of Ontario, New Brunswick, Nova Scotia, and Manitoba on policies for the promotion of renewable energy technologies.
- » Advised the Ontario Select Committee on Alternative Fuels on the most promising renewable technologies, identified barriers to their development and adoption and proposed policies for overcoming these barriers.

- » Directed a project for a group of municipalities in Manitoba that evaluated the economic opportunity offered by wind projects in Manitoba and identified policies to promote the development of Manitoba's wind resources.
- » Evaluated a Continental Renewable Portfolio Standard (RPS) that would span the US and Canada. Project included reviewing the RPS designs for all the major RPS programs in the US and evaluating the changes in electricity trade and resulting electricity cost savings from relaxing various RPS provisions.
- » Advised the Ontario Power Authority on the development of a standard offer for renewable energy technologies.
- » Delivered a presentation on Canadian policies to promote the development of wind energy projects. Presentation reviewed federal and all relevant provincial programs and policies to promote the development of wind energy projects.
- » Developed recommendations for the Manitoba Sustainable Energy Association on policies to promote the adoption of renewable energy technologies in Manitoba. Reviewed the relative advantages and disadvantages of standard offers versus RFPs and made recommendations regarding the appropriate applications of each.
- » Advised numerous electricity generation development companies on the implications and opportunities presented by renewable energy policies. Developed strategic plans for a wide range of renewable energy technologies including large scale wind, landfill gas, biomass, anaerobic digestion, and small hydro.
- » Evaluated electricity wholesale market and REC prices that would apply to landfill gas projects and reviewed US federal policies that benefited these projects including the production tax credit.
- » Reviewed the general market for the development of renewable energy projects in Canada and contrasted market conditions with those in other countries.
- » Led the development of a multi-client study that evaluated the opportunities for wind project development in Ontario under existing federal and provincial programs.
- » Contrasted state RPS programs by identifying eligible technologies, eligibility requirements for projects in different jurisdictions, strategies for assessing compliance, RPS targets, and penalty provisions for failure to achieve the target.

#### **Speaking Engagements**

- "Strategies for Enhancing the Value of Your Asset", IBC Conference, (November, 1999)
- "Electricity Restructuring Lessons Learned: Implications for Ontario", Ontario Energy Marketers Association (April, 2001)
- "Electricity Power Prices in the Deregulated Ontario Market, 2001 CERI Conference, (October, 2001)
- "Electricity Restructuring in the US and Eastern Canada", World Bank/CREG/CERI Conference, (November, 2001)
- » "Prices and Price Volatility in the Ontario Wholesale Power Market" PowerFair 2002, (May, 2002)
- "Pricing Fundamentals in the Ontario Wholesale Power Market" PowerFair 2003, (August, 2003)

- » "The Economics of Power Generation in Atlantic Canada", 2003 Atlantic Power Summit (October, 2003)
- » "Future Opportunities in the Maritimes", 2003 Ontario Energy Contracts Conference, (November, 2003)
- "A Perspective on Ontario's Evolving Wholesale and Retail Power Market Structures", PowerFair 2004, (May, 2004)
- "Canadian Policies to Promote Wind Project Development" EUCI's 4th Wind Energy and Power Markets Conference (September, 2004)
- » "Effectively Navigating Ontario's RFP Processes" Power ON Conference, (October, 2004)
- "Enhancing the Performance of the Maritimes Market", 2004 Atlantic Power Summit, (November, 2004)
- "What Will the Ontario Landscape Look Like?", 2005 Ontario Energy Contracts Conference, (January, 2005)
- "Policies to Promote the Adoption of Renewable Energy Technologies in Manitoba", Manitoba Sustainable Energy Association, (April, 2005)
- "Outlook for Ontario Electricity Supply & Pricing", PowerFair 2005, (May, 2005)
- "Key Risks Affecting Ontario Electricity Consumers", AMPCO General Member Seminar (November, 2005)
- "What Kind of Market Structure Would Spark New Investment?" Canadian Institute's Generation Adequacy in Ontario Conference (April 19, 2006)
- "Where are Electricity Pricing Going" Insight Information, Ontario Power Forum (June 15, 2006)
- » "Transmission Planning and Policy Development: An Update", APPrO Conference (November 15, 2006)
- "Recent Developments in Transmission Access and Pricing" Insight Information's Grid Reliability and Competition in the Power Sector (December 12, 2006)
- » "Renewables in Ontario" Insight Info Conference (June 14, 2007)
- "Report Card on Ontario's Electricity Market" Ontario Energy Association Annual Conference (September 6, 2007)
- "Opportunities for Selling Renewable Power into the New England Market" Insight Info's 5<sup>th</sup> Annual Atlantic Power Summit (September 26, 2007)
- "New England Market Opportunities and the Prospects for Increased Inter-Regional Trade" Canadian Institute's Atlantic Energy Conference (May 28, 2008)
- "Cost Recovery and Return on Equity for Transmission Investment in the U.S.", Canadian Electricity Association Transmission Council (February 25, 2009)
- "Ontario's Feed In Tariff in the Context of North American Renewable Energy Policies", 2009 OEA Industry Leaders' Roundtable (April 30, 2009)

- "Transmission as Barrier to Wind Power Exports from the Maritime Provinces to the US Northeast", Canadian Wind Energy Association Wind Matters Conference (May 20, 2009)
- "Electricity Transmission Enhancements to Capitalize on Opportunities for Renewable Resource Development", Renewable Energy Conference 2009 (May 28, 2009)
- "Lessons Learned in the Design of Standard Offer and Feed-in Tariff Programs" Vermont Public Service Board Standard Offer Workshop (July 10, 2009)
- "Impact of the Current Economic Climate on North American Renewable Energy Investment", Rothesay Energy Dialogue 2009 (July 14, 2009)
- "Evaluation of Opportunities and Barriers to Wind Power Exports from the Maritime Provinces to the US Northeast", CanWEA 2009: Infinite Possibilities (September 21, 2009)
- "Stakeholder Conference Presentation on the Cost of Capital", Ontario Energy Board (September 22, 2009)
- » "Opportunities Offered by the New England Power Market", Insight Info's 7<sup>th</sup> Annual Atlantic Canada Power Summit (October 5, 2009)
- » "Assessment of Ontario's Green Energy Act and its Implications for Ontario", PowerLogic ION Users Conference 2009 (October 23, 2009)
- "Securing Regulatory Support for Smart Grid Investments", Canadian Electricity Association Customer Council (November 24, 2009)
- "Creating a Policy Environment that Supports New Transmission Development", Canadian Institute's Transmission and Integrating New Power into the Grid, (April 19, 2010)
- "Policies for Facilitating Transmission Investment" 2010 OEA Energy Leader's Roundtable, (April 21, 2010)
- » Clean Energy Dialogue Conference, U.S. Department of Energy and Natural Resources Canada, (May 20, 2010)
- "Providing Revenue Stability for Offshore Wind: PPAs, RFPs and FITs", Insight Info's Freshwater Wind 2010 (July 19, 2010)
- » "Market and Economic Barriers to Electricity Storage", Canadian Electricity Association Generation Council Meeting, (September 16, 2010)
- » "Opportunities Offered by the New England Power Market", Canadian Wind Energy Association: Growing Wind Energy in Atlantic Canada, (September 22, 2010)
- "Considerations for Implementing Feed in Tariffs in Atlantic Canada", 8th Annual Atlantic Canada and US NE Power Summit (October 26, 2010)
- "The Role of Cross Border Trade in Achieving Regional Renewable Energy Objectives", Council of State Governments Energy Plenary (August 8, 2011)

- "Overview of RFP Process for the Procurement of 300 GWh of Renewable Energy from IPPs", The Nova Scotia Feed In Tariff Forum (September 22, 2011)
- » Procuring Renewable Electricity under Long-Term Contracts: Balancing Customer and Developer Interests, Atlantic Canada and NE US Power Summit 2011 (October 20, 2011)
- » Assessing the Competitiveness of Atlantic Canada's Renewable Energy Sector, Rothesay Energy Dialogue (October 26, 2011)
- » Nova Scotia's 2012 Renewable Energy RFP: Delivering Value for Customers 8th Canadian German Wind Energy Conference (February 23, 2012)
- » Employing Competition to Procure Transmission: Lessons Learned from Other Markets, IPPSA 18th Annual Conference (March 12, 2012)
- » Future Opportunities for IPPs in Atlantic Canada, Halifax 2012 FIT Forum (September 24, 2012)
- » Procurement Programs for Long-term Contracts for Renewable Energy Projects in New England, Northeast Energy and Commerce Association, 10<sup>th</sup> Annual Renewable Energy Conference, (March 28, 2013)
- » Market Issues Associated with Wind Integration, Canadian Wind Energy Association and Natural Resources Canada, (September 18, 2013).
- » Evidence Regarding Future Declines in the Cost of Wind, CanWEA 2014 Annual Conference (October 28, 2014)
- » Renewable Energy Credits and Harmonizing Renewable Energy Trading, EUCI US and Canada Cross Border Trade Conference (April 9, 2015)

#### List of Expert Testimony

Alberta Utilities Commission, Regulated Rate Option Service Providers Generic Proceeding on Energy Price Setting Plans, (Proceeding 2941), Establishing the Appropriate Return Margin for the Regulated Rate Option (October 2014)

Ontario Support Court, Ogichidaakwe (Grand Chief) Diane M. Kelly on her own behalf, on behalf of all members of the Anishinaabe Nation in Treaty 3 and on behalf of Grand Council Treaty 3, Grand Council Treaty 3, Chief Lorraine Cobiness, Chief Janice Henderson, Chief Kimberly Sandy-Kasprick, and Chief Earl Klyne, on their own behalf and on behalf of Grand Council Treaty #3, Chiefs in Assembly versus Ontario Minister of Energy and Ontario Power Authority, (Court File No. 411/11) (March 2014)

Alberta Utilities Commission, Alberta Electric System Operator's 2014 General Tariff Application (Proceeding 2718), Proposed Approach for Designating Transmission Projects (February 2014)

Province of Quebec Superior Court, Churchill Falls (Labrador) Corporation Limited v. Hydro-Québec, Evaluation of the Power Purchase Contract for the Churchill Falls Project when Negotiated and under Current Market Conditions, (September 2013)

Nova Scotia Utility and Review Board, Nova Scotia Power's Application to Build the Maritime Link (ML-2013-01), (June 2013)

Vermont Public Service Board, Investigation into the Development of Standard Offer

Prices for Sustainably Priced Energy Enterprise Development (SPEED) Program, (Docket No. 7874), (January 2013)

Vermont Public Service Board, Investigation into the Establishment of a Standard Offer Prices for Baseload Renewable Power under the SPEED Program (Docket No. 7782), (May 2012)

Vermont Public Service Board, Investigation into the Establishment of a Standard Offer Prices for certain existing Hydroelectric Plants under the Sustainably Priced Energy Enterprise Development (SPEED) Program (Docket No. 7781), (February 2012)

Vermont Public Service Board, Investigation into the Review of a Standard Offer Prices for Qualifying Sustainably Priced Energy Enterprise Development (SPEED) Resources (Docket No. 7780), (November 2011)

New Hampshire Public Utilities Commission, Concord Steam Corporation, Application of Public Service Company of New Hampshire for Approval of the Power Purchase Agreement with Laidlaw Berlin BioPower LLC (Docket DE 10-195), (December 2010)

Ontario Energy Board, Hydro One Networks Inc. 2010-2011 Electricity Transmission Revenue Requirement and Rates Application, (Docket EB-2010-0002), (September 2010)

Vermont Public Service Board, Investigation Re: Establishment of a Standard Offer Program for Qualifying Sustainably Priced Energy Enterprise Development ("SPEED") Resources (Docket No. 7533), (December 2009)

United States District Court for Eastern California, Global Ampersand, LLC v. Crown Engineering & Construction, Inc., Damage Cost Analysis for Chowchilla and El Nido Biomass Projects (July 2009)

Florida Public Service Commission: Florida Power & Light Company Application for Approval of Standard Offer Contract and Tariff (Docket NO. 080193-EQ), (December 2008)

Louisiana Public Service Commission: Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility and for Authority to Commence Construction and for Certain Cost Protection and Cost Recovery (Docket No. U-301922) (September 2007)

Alberta Energy and Utilities Board: Transmission Congestion Management Principles Proceeding, testified on behalf of TransAlta Corporation (EUB 2002-099)

New Brunswick Public Utilities Board: Generic Proceeding on the Need for Proposed Facilities, testified on behalf of New Brunswick Power Corporation Re: forecast of electricity market prices in New England (2001)

New Jersey Board of Public Utilities: Proceeding regarding the competitive implications of restructuring electricity markets on behalf of Orange and Rockland Utilities (1998)

New York Public Service Commission: Proceeding regarding competitive implications of restructuring electricity markets on behalf of Orange and Rockland Utilities (1997)

Federal Energy Regulatory Commission: Review of Competitive Implications of Proposed Merger between Delmarva Power & Light and Atlantic City Electric, testified on behalf of Delmarva Power & Light and Atlantic City Electric (1996)

Rhode Island Energy Facilities Siting Board: Application of Aquidneck Power Ltd. To Build a Natural Gasfired Generating Facility (1995)

Massachusetts Department of Public Utilities: Review of the Commonwealth Electric Company's Competitive Procurement Process for Demand-Side Resources, testified on behalf of Commonwealth Electric Company (91-234)

Massachusetts Energy Facilities Siting Council: Review of Application by MassPower to build an electric generating facility, testified on behalf of MassPower on the Need and Impacts relative to alternative generation technologies of the proposed project (20 DOMSC 301 (1990))

Massachusetts Energy Facilities Siting Council: Review of Application by Northeast Energy Associates to build an electric generating facility, testified on behalf of Northeast Energy Associates on the impacts and costs relative to alternative generation technologies (16 DOMSC 335 (1987))



### **Travis Lusney**

Travis Lusney Director

Power Advisory LLC 55 University Ave., Suite 605 Toronto, ON M5J 2H7 Cell: 647-680-1154

tlusney@poweradvisoryllc.com

#### **Professional History**

- · Ontario Power Authority
- · Hydro Ottawa Limited

#### Education

- Queen's University, MSc Electrical Engineering, 2007
- Queen's University, BSc Electrical Engineering, 2004

Mr. Lusney is a Professional Engineer (P.Eng) with 10 years of experience working in both the commercial and regulated areas of the electricity sector. Mr. Lusney is a knowledgeable industry leader with a focus on generation development, market assessment, policy analysis, business strategy, and risk mitigation. Mr. Lusney is a former distribution and transmission planner with a deep expertise in power system planning and resource integration.

Mr. Lusney joined Power Advisory after a position as the Senior Business Analyst of Generation Procurement at the Ontario Power Authority, where he was responsible for management and development of the Feed-In Tariff program. Prior to joining Generation Procurement, Mr. Lusney worked as a Transmission Planner in Power System Planning at the Ontario Power Authority where he was actively involved in regional transmission planning, bulk system analysis and supporting system expansion procurements and regulatory procedures. Mr. Lusney also worked for Hydro Ottawa Limited as a Distribution Engineer responsible for reliability analysis, capital budget planning, power system planning, and project management.

#### PROFESSIONAL EXPERIENCE

#### Strategic Investment and Risk Assessment

- » Developing an Ontario generation supply outlook to determine future resource needs and related future procurement processes with consideration for power system expansion. The power system outlook considered key areas of risk assessment, supply development scenarios, investment opportunities based on connection capability and project economics.
- » Advising generation developers on new competitive procurement processes and determining strategy to help ensure successful participation while reduce exposure to risk. Participated in consultation and stakeholder engagement as an expert in transmission planning, procurement design, and proposal bid development.
- » Working with renewable energy developers (mainly wind and solar PV) to plan, construct and successfully reach commercial operation for projects with long-term. Work includes assessment of project risk, investment opportunities, development strategy, solutions for connection issues and advice for securing construction approvals and permits.

- » Analyzed the Long-Term Transmission Plan (LTP) for Alberta and developed a comprehensive forecast of Capital Expenditures over the planning time period (2014-2032). The forecast includes an estimate of Development Capital Expenditures by project and region over the three time periods considered in the LTP. Estimated Capital Expenditures for General Plant and Sustainment based on the growth expectations of Alberta's transmission rate base. The analysis provides a detailed view of the long term trend for capital investment in Alberta's transmission system and includes an alternative scenario for lower economic growth and oil sand development.
- » Primary consulting resource for CanSIA's Distributed Generation Task Force (DGTF). The DGTF objective included developing a customer based generation model for solar generation after the conclusion of the Feed-In Tariff (FIT) program in Ontario (post-FIT solution), to identify transitional changes to the existing FIT program to support the post-FIT solution and to support solar market growth in the long-term. Responsible for jurisdictional review to identify best practices for customer based solar generation, technical and policy analysis to support the post-FIT solution and development of recommendation report and accompanying communication plan with key stakeholders.
- » Co-leader of Solar Development Evolution Working Group which has participation and support from key solar PV project developers, EPC firms, asset operators and owners. The mandate of the working group was to develop policy for a long-term customer centric procurement approach for solar PV generation and identify priorities for transition of the existing FIT program.
- » Modeling procurement mechanics and Ontario system characteristics for renewable energy developers to establish a strategic direction for successfully securing power purchase agreements. This work included modeling connection capability within both the distribution and transmission system and assessing attrition risk of currently contracted and under development projects.
- » Working with manufacturers of solar PV and wind generation components regarding strategic advice and solutions to meet Provincial content requirements and ultimately increase their market share.
- » Completed due diligence on project economics, connection capability and estimated generation operating performance for wind and solar PV developers as part of strategic acquisitions.
- » Constructed a quantitative project attrition model for projects with FIT PPAs to determine opportunities for future investment for clients. The model determined probabilistically which contracted FIT projects were at risk of failing to reach commercial operation and identify where new connection capacity would become available.

#### **Generation Resource Procurement and Contracting**

- » Worked as the Renewable Electricity Administrator in Nova Scotia responsible for the developing and administrating a Request For Proposal (RFP) process to procure over 300 GWh of low impact renewable energy. The process included engagement with stakeholders, development of an RFP document and Power Purchase Agreement and filing the Power Purchase Agreement for regulatory approval with the Nova Scotia Utility and Review Board On August 2nd 2012, after completing the evaluation of all 19 proposals that were submitted, the process successfully concluded with the execution of 355 GWh of contracted facilities.
- » Provided support to Non-Utility Generators (NUGs) in negotiations with the Ontario Power Authority for extension of existing Power Purchase Agreement. Support included economic dispatch analysis, development of net revenue requirement pro formas to determine contract value, leading negotiation and providing strategic advice.

- » Technical expert for procurement participation for a variety of resource developers including renewables and energy storage. Provided detailed analysis and assessment of procurement process and documentation including strategy for development of proposed projects to maximize opportunities within the Request For Proposal (RFP) and Contract in the multiple procurement processes.
- » Responsible for development and ongoing management of the standard offer Feed-In Tariff program for Renewable Energy. Involved with a wide range of stakeholders including project developers, manufactures, investors, regulatory agencies and Government. Analyzed ongoing project costs and market rates to update and maintain Feed-In Tariff price assumptions. This work included analysis of supply chain evolution, equipment providers capability and assessment of project economics.
- » Involved in domestic content development within the Feed-In Tariff program as chair of the Domestic Content Working Group. Advised and clarified expectations for project developers and manufactures in understanding the domestic content requirements.

#### **Transmission System Planning**

- » Provided strategic advice and power system analysis to generation development clients on connection capability of proposed generation projects. Assisted clients in determining optimal project location and estimation of connection cost for different interconnection options.
- » Assisted in leading engagement with distributors, transmitters and system operators for variety of clients. Engagement included determining interconnection options, assessing connection risks and establishing timelines and milestones to support overall project development.
- » Supported analysis for the Integrated Power System Plan (IPSP) dealing with bulk and regional system considerations, including reliability assessment. Developed regional integrated plans for constrained areas. Lead stakeholder consultation with local distribution companies, regulatory agencies, transmitters and local government officials to develop 10 to 20 year plans and activity coordination.
- » Represented through expert evidence and testimony the Utility Consumer Advocate Alberta during Transmission Rate Tariff hearing in front of the Alberta Utility Commission as an expert witness on transmission planning and cost allocation.
- » Advised and supported a major gas generation procurement for the Province of Ontario. Work included analysis of regional power system needs and constraints. Assisted in the development of evaluated criteria considerations.
- » Developed procedures and policy for system connection assessment under the Feed-In Tariff program, in particular lead the development of the Transmission Availability Test (TAT) and Distribution Assessment Test (DAT) used to assess connection capability. Oversaw development of custom database to support the connection assessment process and coordination with over 80 local distribution companies. Managed staff for regional system analysis as part of the Feed-In Tariff program to determine connection capability for contract awards.
- » Lead a study on Distributed Generation impacts and opportunities in the major urban centers as part of a long term energy plan. Lead analysis on behalf of the Ontario Power Authority to determine the distribution generation potential in Central and Downtown Toronto along with the associated cost to develop the distributed generation resources. Worked closely with the local distribution companies, city officials and key stakeholders in understanding specific and general barriers and benefits.

#### Distribution Reliability and Planning Assessment

- » Developed capital work planning process for Asset Management department to ensure accountability and situation and issue identification. Lead the development of the capital budget and work plan for all distribution projects including a 25 year capacity plan for Distribution rate filing. Oversaw capital project tracking and reporting metrics to ensure accountability and transparency for senior management requirements
- » Managed reliability statistical reporting as part of regulatory requirements and senior executive requests. Involved in evolution of information gathering methods and worst feeder identification. Lead reliability engineer working closely with planning, design and construction personnel in identifying issues and resolution members. Chair of the asset management committee which oversaw the expectations of future capital sustainment work and associated risk levels
- » Involved in the development of the distribution and station asset management plan as key support for current and future Distribution Rate filing.

#### **Selected Speaking Engagements**

- » Solar Ontario 2016: Moderator for panel on Ontario Electricity Market Renewal Implications for Solar Generation, May 2016
- » Clean Energy BC BC Generate 2015: Panelist on Overview of Canadian Renewable Energy Markets, November 2015
- » CanWEA 2015: Panel Member on Wind Generation Integration in Canadian Wholesale Electricity Markets, October 2015
- » Solar Ontario 2015: Panel Member on Lessons Learned for the Large Renewable Procurement, May 2015
- » Green Profit 2015: Plenary Panel Member on The Future is Now: The Economic Case for Renewables, March 2015
- » CanSIA's Solar Canada 2014: Panel Member on Setting Precedents for the Future of Solar Distributed Generation Utility Programs, December 2014
- » CanSIA's Solar Ontario 2014: Moderator on Balancing Supply: A look inside Ontario's Electricity System during Peak Demand on July 17, 2013, May 2014
- » CanSIA's Solar Ontario 2013: Presenter and Moderator on Electricity Consumer Empowerment Enabling Distributed Solar Power Generation, May 2013
- » Ontario Feed-In Tariff Forum: Panel Member on Barriers to Connection Solar Projects at the Local Level, April 2012
- » EUCI's 3rd Annual Conference on: Ontario's Feed-In Tariff, June 2011
- » 4th International Conference on Integration of Renewable and Distributed Resources, Albuquerque, December 2010
- » OSEA Community Power Conference, November 2010

#### List of Expert Testimony

Alberta Utilities Commission, Alberta Electric System Operator's 2014 General Tariff Application (Proceeding 2718), Proposed Approach for Designating Transmission Projects (February 2014)						