16 April 2015

Ontario Energy Board 2300 Yonge St., 27th Floor Toronto, ON M4P 1E4

Attn: Ms Kirsten Walli Board Secretary

By electronic filing and e-mail

Dear Ms Walli:

Re: EB-2015-0117 Natural Gas Conservation Potential Study Consultation Process – Nomination for the DSM Technical Working Group.

I write on behalf of GEC to nominate Mr. Chris Neme for a position on the DSM Technical Working Group. We believe that Mr. Neme is particularly capable of meeting the Board's criteria and the needs of intervenors. Mr. Neme has been continuously active on the audit and technical evaluation committees. He has led the conduct of all or major portions of achievable efficiency potential studies in New York, Vermont, Maine, New Jersey, Michigan, the six New England states as a whole, and Quebec. He has also critically reviewed potential studies conducted by other firms in at least half a dozen jurisdictions.

I have attached Mr. Neme's CV as well as a summary of his experience most relevant to the position.

As of the time of writing, in addition to GEC, the following non-industry stakeholders have indicated their support for Mr. Neme's nomination: APPrO, CCC, CME, ED, FRPO, IGUA, LEIN, LPMA, OGVG and SEC.

Sincerely,

David Poch Cc: interested parties

Summary of Experience Relevant to Efficiency Potential Studies

EFG staff have extensive experience and expertise with efficiency potential studies (addressing technical, economic and achievable potential), energy efficiency technologies, energy modeling and market research related to energy efficiency. Four of our five staff have more than 20 years of experience in the efficiency industry. That work has included:

- conducting efficiency potential studies and critiquing the work of others on such studies;
- developing and critiquing the work of others in developing Technical Reference Manuals (TRMs) of savings, lives and cost assumptions – all critical inputs to potential studies – for a very broad range of efficiency measures;
- conducting, supporting and/or managing evaluation studies of efficiency measure and/or program performance, including the performance of emerging technologies; and
- both designing and critiquing the design of efficiency programs based on industry best practice also important because the most criticized element of potential studies is often assumptions regarding "achievable" market penetrations of different programs/measures.

Collectively, we have worked on these issues and other related issues in more than 30 states, 4 Canadian provinces and several countries in Europe. We have also written a seminal report on common pitfalls of efficiency potential studies.¹

EFG Principal Chris Neme, our proposed member of the Ontario gas DSM Technical Working Group, has led the conduct of all or major portions of achievable efficiency potential studies in New York, Vermont, Maine, New Jersey, Michigan, the six New England states as a whole, and Quebec. He has also critically reviewed potential studies conducted by other firms in at least half a dozen jurisdictions. Chris has also led the development of or critiqued the work of other firms in the development of TRMs in nearly 10 different jurisdictions, managed recent field studies of savings potential from emerging technologies, assessed the role that efficiency measures and programs can play in deferring transmission and distribution (T&D) system investments, helped develop several award-winning efficiency program designs, led training courses on "best practices" in efficiency program design, served on a recent U.S. panel of experts on cost-effectiveness screening of efficiency, and played a significant role in shaping EM&V requirements for bidding efficiency resources into the New England capacity market. Mr. Neme also has been actively involved in Ontario natural gas DSM issues for two decades, including serving on one or more of the utilities' annual evaluation/audit committees since their inception in 2000, critiquing past utility potential studies, providing input on numerous gas DSM measure savings assumptions, and promoting more substantial and independent program evaluation.

¹ Kramer, Chris and Glenn Reed (EFG), *"Ten Pitfalls of Potential Studies"*, published by the Regulatory Assistance Project, November 2012.

CHRISTOPHER NEME, PRINCIPAL



EDUCATION

M.P.P., University of Michigan, 1986 B.A., Political Science, University of Michigan, 1985

EXPERIENCE

2010-present: Principal, Energy Futures Group, Hinesburg, VT
1999-2010: Director of Planning & Evaluation, Vermont Energy Investment Corp., Burlington, VT
1993-1999: Senior Analyst, Vermont Energy Investment Corp., Burlington, VT
1992-1993: Energy Consultant, Lawrence Berkeley National Laboratory, Gaborone, Botswana
1986-1991: Senior Policy Analyst, Center for Clean Air Policy, Washington, DC

PROFESSIONAL SUMMARY

Chris Neme leads a variety of consulting projects for clients across the United States, Canada, and Europe. He specializes in analysis of markets for energy efficiency measures and the design and evaluation of programs and policies to promote them. Prior to co-founding Energy Futures Group, he served as Director of the Vermont Energy Investment Corporation's 30-person consulting division. During his 20+ years in the energy efficiency industry, Mr. Neme has conducted or critically reviewed analyses of efficiency potential in ten states; reviewed or developed efficiency programs in more than 25 states and provinces and in Europe; and defended expert witness testimony before regulatory commissions in ten different jurisdictions. Mr. Neme has led training courses on the elements of good efficiency program design and published/presented assessments of efficiency markets, programs and policies through a variety of publications, conferences, Consortium for Energy Efficiency Committees, ENERGY STAR working groups and other forums. He recently served as Co-Chair of NEEP's EM&V Research and Evaluation Committee.

SELECTED PROJECTS

- Northeast Energy Efficiency Partnerships. Managing Regional EM&V forum project to develop savings estimates for emerging technologies. Also, leading project to assess national best practices and develop policy guidance on the use of efficiency to defer T&D investments. (2009 to present)
- **Regulatory Assistance Project U.S.** Providing on-going technical support on efficiency policy and program design, including drafting of a report on the U.S. experience using efficiency programs to defer T&D system investments; providing technical assistance to regulators in several states; and providing technical support on efficiency program planning and evaluation to Energy Foundation grantees across the U.S. (2010 to present)
- Natural Resources Defense Council (Illinois & Michigan). Critically reviewed multi-year DSM plans filed by Illinois and Michigan utilities. Drafted and defended regulatory testimony on critiques. Represent NRDC in monthly stakeholder-utility meetings to review and provide feedback on efficiency potential studies, program designs, evaluation priorities, draft evaluation reports, cost-effectiveness screening, TRM savings assumptions, and other related topics. Also, assisting with strategy for maximizing the cost-effective use of efficiency to address EPA's proposed 111(d) regulations of carbon emissions from power plants. (2010 to present)

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CHRISTOPHER NEME, PRINCIPAL

- Green Energy Coalition (Ontario). Representing a coalition of environmental groups in various regulatory proceedings. Present recommendations on DSM policies (including integrated resource planning when considering pipeline expansions), critically review and negotiate with utilities on proposed DSM Plans, serve (elected by other non-utility stakeholders) on utility Evaluation/Audit Committees which oversee an annual savings verification process and evaluation planning, and defend expert witness testimony. (1993 to present)
- **Regulatory Assistance Project Europe.** Providing on-going technical support on efficiency policy and program design to RAP and its partners in the United Kingdom, Germany, and other countries. Reviewed draft European Union policies on Energy Savings Obligations, EM&V protocols and other related issues. Drafted a policy brief on design considerations for efficiency feed-in-tariffs, a report on bidding of efficiency resources into capacity markets, and a roadmap for achieving deep retrofits in half of the residential building stock. (2009 to present)
- Vermont Public Interest Research Group. Conducted comparative analysis of the economic and environmental impacts of fuel-switching from oil/propane heating to either natural gas or super-efficient, cold climate electric heat pumps. Filed regulatory testimony on findings. (2014)
- New Hampshire Electric Co-op. Led assessment of the co-op's environmental and social responsibility programs' promotion of whole building efficiency retrofits, cold climate heat pumps and renewable energy systems. Presented recommendations to the co-op Board. (2014)
- National Association of Regulatory Utility Commissioners (NARUC). Assessed alternatives to basing state energy efficiency goals on first year savings to eliminate disincentives to invest in longer-lived (but often more expensive) measures and programs. Work was ultimately for the Michigan Public Service Commission and was used by Commission staff to establish lifetime savings metrics for utility programs it regulates. (2013)
- **California Investor-Owned Utility**. Senior advisor on EFG project to compare the cost of saved energy across ~10 leading U.S. utility portfolios. The research sought to determine if there are discernable differences in the cost of saved energy related to utility spending in specific non-incentive categories, including administration, marketing, and EM&V. (2013)
- *Green Mountain Power.* Helped develop new program to introduce ultra-efficient coldclimate heat pumps to Vermont residential and small business markets. (2012-2013)
- Ontario Power Authority. Managed jurisdictional scans of how efficiency programs leverage building efficiency labeling and disclosure requirements and how non-energy benefits are addressed in cost-effectiveness screening. Also supported staff workshop on integrated resource planning for addressing transmission and distribution (T&D) system reliability needs and the role efficiency can play in deferring T&D investments. Presented assessment of future efficiency policy and program trends for Advisory Council on Energy Efficiency. (2012-2015)
- **Ohio Sierra Club.** Filed and defended expert witness testimony on the implications of not fully bidding all efficiency resources into the PJM capacity market. Also critically reviewing First Energy's and other utilities' multi-year DSM plans. (2012)

CHRISTOPHER NEME, PRINCIPAL

SELECTED PUBLICATIONS

- "Energy Efficiency as a T&D Resource: Lessons from Recent U.S. Efforts to Use Geographically Targeted Efficiency Programs to Defer T&D Investments", published by Northeast Energy Efficiency Partnerships, January 9, 2015 (with Jim Grevatt)
- "The Resource Value Framework: Reforming Energy Efficiency Cost-Effectiveness Screening", published by the National Efficiency Screening Project, August 2014 (with Tim Woolf et al.)
- "U.S. Experience with Participation of Energy Efficiency in Electric Capacity Markets", published by the Regulatory Assistance Project, August 2014 (with Richard Cowart)
- "Alternative Michigan Energy Savings Goals to Promote Longer-Term Savings and Address Small Utility Challenges", prepared for the Michigan Public Service Commission, September 2013 (with Optimal Energy)
- "An Energy Efficiency Feed-in-Tariff: Key Policy and Design Considerations", 2013 ECEEE Summer Study Proceedings, pp. 305-315 (with Richard Cowart)
- "U.S. Experience with Efficiency as a Transmission and Distribution System Resource", published by the Regulatory Assistance Project, February 2012 (with Rich Sedano)
- "Achieving Energy Efficiency: A Global Best Practices Guide on Government Policies", published by the Regulatory Assistance Project, February 2012 (with Nancy Wasserman)
- "Residential Efficiency Retrofits: A Roadmap for the Future", published by the Regulatory Assistance Project, May 2011 (with Meg Gottstein and Blair Hamilton)
- "Is it Time to Ditch the TRC?" <u>Proceedings of ACEEE 2010 Summer Study on Energy</u> <u>Efficiency in Buildings</u>, Volume 5 (with Marty Kushler).
- "Energy Efficiency as a Resource in the ISO New England Forward Capacity Market", in *Energy Efficiency*, published on line 06 June 2010 (with Cheryl Jenkins and Shawn Enterline).
- "Shareholder Incentives for Gas DSM: Experience with One Canadian Utility", <u>Proceedings of ACEEE 2004 Summer Study Conference on Energy Efficiency in Buildings</u>, Volume 5 (with Kai Millyard).