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February 25, 2014

Mr. H. Singh The Public Utilities Board 400 - 330 Portage Avenue WINNIPEG, Manitoba R3C 0C4

Dear Mr. Singh:

RE: MANITOBA HYDRO NFAT SUBMISSION

Please find attached the following witness curriculum vitae for the following witnesses:

<u>Introductory Remarks</u> Mr. Scott Thompson, President & CEO

<u>Overview</u> Mr. Ed Wojczynski, Division Manager, Portfolio Projects Management

Load Forecasting and DSM Panel

Mr. Ed Wojczynski, Division Manager, Portfolio Projects Management Mr. Lloyd Kuczek, Vice-President, Customer Care & Energy Conservation Ms. Lois Morrison, Division Manager, Consumer Marketing & Sales Mr. Dale Friesen, Division Manager, Industrial & Commercial Solutions Mr. Ian Page, Division Manager, Corporate Planning & Strategic Review Ms. Ingrid Rohmund, Director, Energy Analysis and Planning, EnerNOC Inc.

We will file additional cv's and witness panel information as the Manitoba Hydro witness panels are finalized.

Yours truly,

MANITOBA HYDRO LAW DIVISION

Per: MBoyd

MARLA D. BOYD Barrister and Solicitor



PROFESSIONAL EDUCATION:

Honors Business Administration Chartered Accountant

PROFESSIONAL AFFILIATIONS:

Member - Board of Directors - Canadian Gas Association Member - Board of Directors - Canadian Electricity Association Member - Executive Committee - CIGRE Canada Member - SHED Oversight Committee Member - Yes! Winnipeg Investor Council Member - Winnipeg Chamber of Commerce

President and Chief Executive Officer, Manitoba Hydro
Executive Vice-President, Finance, Regulatory Affairs & Energy Supply & Chief
Financial Officer, Fortis BC Holdings Inc. (formerly Terasen Inc.)
Vice-President, Regulatory Affairs & Chief Financial Officer, Terasen Gas Inc.
Vice-President and Chief Financial Officer, Terasen Gas Inc.
Vice-President, Finance and Regulatory Affairs, Terasen Gas Inc.
Controller and Director of Finance & Strategic Planning, Terasen Gas Inc. (formerly
BC Gas Utility Limited)
Principal (National Director of Value Management), Ernst & Young Management
Consultants, Vancouver
Consulting Manager, Ernst & Young Management Consultants, Riyadh, Saudi
Arabia
Senior Consultant, Ernst & Young Management Consultants, Vancouver and
London, Canada
Audit Manager, Clarkson Gordon, London, Ontario



EMPLOYEE NAME: E. (Eduard) Wojczynski

PROFESSIONAL EDUCATION:

Western Executive Program, University of Western Ontario, October 1997
Utility Finance Course, EXNET, January 1997
Utility Planning, University of California, February 1989
M.Sc. Electrical Engineering (Power Systems), University of Saskatchewan, 1984
B.Sc. Electrical Engineering, Dean's Honour List, University of Manitoba, 1975

PROFESSIONAL AFFILIATIONS:

Association of Professional Engineers and Geoscientists of the Province of Manitoba (APEGM) Institute of Electrical and Electronics Engineers (IEEE) Canadian Hydropower Association (CHA), Past Chair Board of Directors, former Chair of Working Groups (Species at Risk, Regulatory Processes) International Hydropower Association (IHA), Chair of Working Group Environment Canada – Species at Risk Advisory Committee Formerly: ArcticNet Board of Directors, Wuskwatim Power Limited Partnership Board of Directors, Climate Change National Electricity Table and Integrative Group, Mid-Continent Area Power Pool – Reserve Requirement Task Force, Canadian Electricity Association – Generation Planning Sub-Section, DFO National Science Advisory Council

2009 - Present	Manager of Portfolio Projects Management Division, Manitoba Hydro
2007 - 2009	Manager of Power Projects Development Division, Manitoba Hydro
2001 - 2007	Manager of Power Planning & Development Division, Manitoba Hydro
2000 - 2001	Manager of Power Planning & Operations Division, Manitoba Hydro
1990 - 2000	Manager of Resource Planning & Market Analysis Department, Manitoba Hydro
1985 - 1990	Generation Evaluation Engineer, Manitoba Hydro
1982 – 1985	Station Design Engineer, Transmission and Stations Department, Manitoba Hydro
1979 – 1981	Research Associate, Canadian Electrical Association Project Power System Research
	Group, University of Saskatchewan
1977 – 1978	Teaching and Research Assistant, Laser Optical Research Laboratory, Department of
	Electrical Engineering, University of Manitoba
1975 – 1977	Geophysical Exploration Engineer, Schlumberger Ltd., Paris (based in South-East
	Asia)



EMPLOYEE NAME: L. J. (Lloyd) Kuczek

PROFESSIONAL EDUCATION:

Masters in Business Administration, I.H. Asper School of Business, University of Manitoba, 1990 Bachelor of Science, Electrical Engineering, University of Manitoba, 1977 Banff Leadership Excellence Training, The Banff Centre

PROFESSIONAL AFFILIATIONS:

Manitoba Hydro Association of Professional Engineers Association of Professional Engineers and Geoscientists of the Province of Manitoba Canadian Electricity Association, Customer Council member Canadian Gas Association, Standing Committee on Sustainable Growth member Energy Technology and Innovation Canada, Steering Committee member

2012 - Present	Vice-President, Customer Care & Energy Conservation, Manitoba Hydro
2010 - 2012	Vice-President, Customer Care & Marketing, Manitoba Hydro
2000 - 2010	Division Manager, Consumer Marketing & Sales, Manitoba Hydro
1999 - 2000	Manager, Export Power Marketing, Manitoba Hydro
1996 - 1999	Senior Power Marketer, Manitoba Hydro
1988 – 1996	Regulatory & Contract Specialist, Manitoba Hydro
1981 – 1988	Section Head – Controls Maintenance Engineer, Manitoba Hydro
1979 – 1981	Product Development Project Engineer, Bristol Aerospace
1977 – 1978	Engineer



EMPLOYEE NAME: L. K. (Lois) Morrison

PROFESSIONAL EDUCATION:

Leading Strategically, Banff School of Learning – 2007 Bachelor of Commerce, University of Manitoba – 1989

PROFESSIONAL AFFILIATIONS:

Steering Committee Member, Climate Change Connection (of Manitoba)

2010 - Present	Division Manager, Consumer Marketing and Sales, Manitoba Hydro
2007 - 2010	Division Manager, Business Support Services, Manitoba Hydro
2003 - 2007	Manager, Marketing Programs, Manitoba Hydro
1997 – 2003	Supervisor, Power Smart Planning & Market Research Section, Manitoba Hydro
1994 - 1997	Program Evaluation Officer, Power Smart Planning & Market Research Section,
	Manitoba Hydro
1991 – 1994	Program Planner/Evaluation Analyst, Power Smart Planning & Market Research
	Section, Manitoba Hydro
1989 – 1991	Marketing Trainee, Manitoba Hydro



EMPLOYEE NAME: D. R. (Dale) Friesen

PROFESSIONAL EDUCATION:

Bachelor of Science - Mechanical Engineering, University of Manitoba - 1986

PROFESSIONAL AFFILIATIONS:

Professional Engineer – Association of Professional Engineers and Geologists of the Province of Manitoba (registered member) Steering Committee on Performance, Energy Efficiency and Renewables, Canadian Standards Association (member)

2011 – Present	Division Manager, Industrial & Commercial Solutions, Manitoba Hydro
2008 - 2010	Business Initiatives Manager, Industrial & Commercial Solutions, Manitoba Hydro
1999 - 2007	General Manager, Meridium Power Inc, Subsidiary - Manitoba Hydro
1995 – 1998	Industrial Motor Systems Engineer, Industrial Energy Management, Manitoba Hydro
1992 - 1994	Industrial Motor Program Engineer, Industrial Energy Management, Manitoba Hydro
1987 – 1991	Plant Engineer, Tupperware Manufacturing, Premark International Inc.
1986 – 1990	Engineer/Operator, Lottery Ticket Production, Pollard Banknote Ltd.



PROFESSIONAL EDUCATION:

Certified Management Accountant, Manitoba - 2007 Master's of Business Administration (Finance), University of Manitoba - 1982 Bachelor of Science, University of Manitoba - 1980 Canadian Securities Course

PROFESSIONAL AFFILIATIONS:

Chair, Manitoba Hydro Planning Resource Committee; Member, Province of Manitoba Electric Transportation Advisory Committee, Province of Manitoba Electric Bus Project Steering Committee Board Member – Centre for Emerging Renewable Energy

2011 – Present	Division Manager, Corporate Planning and Strategic Review, Manitoba Hydro
2009	Division Manager, Corporate Strategic Review, Manitoba Hydro
2008	Department Manager, Accounting Research and Compliance, Manitoba Hydro
1993	Department Manager, Financial Planning, Manitoba Hydro
1988	Supervisor, Financial Planning Department, Manitoba Hydro
1987	Financial Consultant, Manitoba Hydro
1983	Financial Analyst, Fisheries and Oceans Canada

INGRID ROHMUND – Director, Energy Analysis and Planning

QUALIFICATIONS

- Over 25 years of experience conducting and managing large-scale research and consulting engagements for the energy industry
- Recognized expert in energy-efficiency (EE) and demand-response (DR) planning, load forecasting, energy and technology modeling, and market assessment
- Expertise in residential, commercial and industrial energy-use practices and the application of end-use technologies

PROFESSIONAL EXPERIENCE

Ms. Rohmund leads the Energy Analysis and Planning practice. She directs projects in the areas of EE and DR that include market assessments, end-use forecasting, resource potential assessment, program design, strategic planning, and business strategy. She has been the project director on more than 40 potential studies conducted by EnerNOC in the past five years, including studies for Seattle City Light, Los Angeles Department of Water and Power, TVA, Ameren, PacifiCorp, the State of New Jersey, and the State of Hawaii.

Ms. Rohmund has more than 25 years of experience modeling and performing statistical analysis of energy use at the national, regional, and utility service-area levels to understand how customers use energy today and to estimate how that is likely to change as a result of demographics, technology advances and innovation, building codes and equipment standards, and utility programs. In support of these analyses, she has executed dozens of large-scale market research efforts for utilities across the U.S. Ms. Rohmund has also directed development of several software tools, including end-use forecasting models, energy-analysis software, building simulation software and technology assessment software.

EMPLOYMENT HISTORY

- Director and Practice Lead-Energy Analysis and Planning, EnerNOC Inc., Walnut Creek, CA, 2011 Present
- Vice President, Global Energy Partners, LLC, Walnut Creek, CA, 2007 2010
- Practice Director, Energy Insights, Framingham, MA, 2006 2007
- Associate Vice President, EPRI Solutions, Knoxville, TN, 2005 2006
- Vice President of Research, Primen, Boulder, CO, 2000 2004
- Economist and Principal, Regional Economic Research, Inc., San Diego, CA (now Itron), 1986 1999

EDUCATION

- University of California, Irvine, M.B.A., 1989
- University of California, San Diego, B.A. in Economics and Political Science, 1982

SELECTED PUBLICATIONS AND REPORTS

- Ameren Missouri DSM Market Potential Study, December 2013
- "Factors Affecting Electricity Consumption in the U.S. (2010-2035)," *IEE Report,* March 2013.
 <u>http://www.edisonfoundation.net/iee/Documents/IEE_FactorsAffectingUSElecConsumption_Final.pdf</u>
- Seattle City Light Conservation Potential Assessment, 2013 (forthcoming) and May 2012

- Avista Utilities Electricity Conservation Potential Assessment, May 2013 and August 2011; Avista Utilities Natural Gas Conservation Potential Assessment, April 2012
- Ameren Illinois DSM Market Potential Study, May 2013
- Vectren Electric Energy Efficiency Market Potential Study and Action Plan, January 2013
- Indianapolis Power & Lighting Energy Efficiency Market Potential Study and Action Plan, December 2012
- Citizens Energy Group Natural Gas Energy Efficiency Market Potential Study and Action Plan, December 2012
- Tennessee Valley Authority Energy Efficiency and Demand Response Potential Assessment, January 2012
- State of New Jersey Energy Efficiency Market Potential Assessment. 2012.
- EE and DR Potential Study for Midwest ISO, November 2011
- State of New Mexico Potential Study, June 2011
- "Assessment of Electricity Savings in the U.S. Achievable through New Appliance/Equipment Efficiency Standards and Building Efficiency Codes (2010 - 2025)", *Institute for Electric Efficiency, May* 2011
- Energy Efficiency Potential Study for Consolidated Edison Company of New York, Inc., Volumes 1-5, Global Report #1269, March 2010
- AmerenUE Demand Side Management (DSM) Market Potential Study, Volumes 1-4, Global Report #1287, January 2010
- "A National Assessment of Demand Response Potential", *Federal Energy Regulatory Commission*, June 2009. With The Brattle Group and Freeman Sullivan & Company. <u>http://www.ferc.gov/legal/staff-reports/06-09-demand-response.pdf</u>
- "Assessment of Achievable Potential from Energy Efficiency and Demand Response Programs in the U.S. (2010-2030)", *Electric Power Research Institute, Technical Report 1016987*, January 2009. http://www.epri.com/search/Pages/results.aspx?k=Assessment%20of%20Achievable%20Potential%20f rom%20Energy%20Efficiency%20and%20Demand%20Response%20Programs%20in%20the%20U.S. %20(2010-2030)%E2%80%9D%2C%20Electric%20Power%20Research%20Institute%2C%20Technical%20Repor t%201016987%2C%20January%202009
- Conservation Potential Assessment for Inland Power and Light, Global Report #1275, December 2009
- Assessment of Demand Response Potential for Portland General Electric, March 2009. With the Brattle Group.
- Assessment of DR Options for BPA. With The Brattle Group. Prepared for the Bonneville Power Administration, October 2008
- Jump Starting the BPA Demand Response Initiative: An Action Plan. With The Brattle Group. Prepared for the Bonneville Power Administration, November 2008
- "Commercial Building Energy Efficiency Technologies Guidebook," *Electric Power Research Institute, Technical Report 1016112,* April 2008
- Commercial Market Segmentation Study, Reliant Energy, August 2001
- Commercial Load Shapes and EUIs, Sacramento Municipal Utilities District, September 1996
- Commercial and Industrial Study, Florida Power & Light, May 1996
- Commercial End-Use Survey—Load Shapes and Final Report, PG&E, April 1996

- Commercial Load Shapes and EUIs, Georgia Power Company, January 2996
- Commercial and Small Industrial Data Development, Final Report and COMMEND Implementation, Interstate Power Company, 1996
- 1994 Commercial Energy-Use Survey, Final Report. Hawaiian Electric Company, August 1995
- Market Assessment and DSM Potential, Northern States Power Company, August 1995
- C&I Data Development and COMMMEND Implementation, New England Electric System, March 1995
- Commercial Energy-Use Survey Final Report, Houston Lighting and Power, March 1995
- "Drivers of Electricity Growth and the Role of Utility Demand-Side Management". With Barakat and Chamberlin. *EPRI, TR-102639,* August 1993
- Commercial End-Use Load Shape Modeling, PG&E, August 1993
- Commercial End-Use Load Shape System, FP&L, July 1991
- 1988 Commercial Survey Analysis, Wisconsin Electric Power Company, April 1990
- Commercial Cooking Market Potential, SCE, April 1989
- "Cool Storage and Cogeneration Options in Commercial Buildings", EPRI June 1988
- "Commercial End-Use Data Development Handbook", EPRI EM-5703, April 1988

ENERGY ANALYSIS SOFTWARE

- *LoadMAP,* Load Management Analysis and Planning tool, for end-use forecasting and DSM planning, 2007 present
- EnergySim, Energy analysis and simulation tool for commercial facilities.
- EnergyShape, EPRI Solutions' web-based load shape library and toolkit. Ongoing
- COMMEND, EPRI's Commercial End-Use Energy Forecasting Model, 1986 1995
- REEPS, EPRI's Residential End-Use Energy Planning System, 1990-1995
- SitePro, RER's Site Analysis Software, 1993-1998
- COOLAID and COMTECH, EPRI's technology screening tools for cool storage and HVAC systems, 1986 – 1994

MULTICLIENT RESEARCH REPORTS

- "Customer Concerns about Climate Changes", *Energy Insights,* Framingham, MA, EI208237, August 2007
- "Crossing the Void: Customers Logging on to Utility Web Sites for Power Outage Information, EI207641, July 2007
- "Time-Based Pricing Programs: Creating a Favorable Customer Response", *Energy Insights,* Framingham, MA, EI207309, June 2007
- "Desire for Predictability Driving Adoption of Fixed Bills", *Energy Insights,* Framingham, MA, El206470, May 2007
- "Energy Efficiency and Demand Response: Two Separate Efforts or Two Ends of a Continuum?", *Energy Insights,* Framingham, MA, EI206183, April 2007
- "Residential Energy Efficiency Programs: Are Consumer Rebates Necessary", *Energy Insights,* Framingham, MA, El204714, December 2006

- "Consumer Reaction to Rising Energy Prices", *Energy Insights,* Framingham, MA, EI204155, November 2006
- "Are Consumers Ready to Plug in to the Future of Hybrid Electric Vehicles", *Energy Insights,* Framingham, MA, El203493, September 2006
- "Web Self Service for Residential Customers", EPRI Solutions/Primen, CI-SR-24-06, July 2006
- "Load Forecasting Benchmarking and Best Practices Study", *EPRI Solutions/Primen*, EU-LF-01-05, March 2006
- "Trends in Residential Energy Use", EPRI Solutions/Primen, EU-SR-12-04, May 2005
- "Energy Market Profiles: A Reference Guide to Residential, Commercial and Manufacturing End-Use Data", *EPRI Solutions/Primen*, EU-SR-05-02, March 2003
- "Load Profiling Benchmarking", EPRI Solutions/Primen, EU-LPF-02-02, September 2002
- "The Impact of Consumer Electronics on Household Energy Use", *EPRI Solutions/Primen*, EU-PP-07-02, September 2002
- "You've Got a Great Product! Now Who's Going to Buy It?", *EPRI Solutions/Primen*, EU-PP-04-02, June 2002
- "Digital Loads, Today and Tomorrow", EPRI Solutions/Primen, EU-PP-03-02, May 2002
- "A Visual Overview of U.S. Commercial Sector Energy Use", *EPRI Solutions/Primen*, EU-PP-02-02, April 2002
- "The Size and Characteristics of the C/I Market for Energy Equipment Services", *EPRI Solutions/Primen*, EU-PP-01-02, March 2002
- "National Energy DataMart Business Study, Multiclient study, May 1999