PEMBINA institute

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Wind-Diesel Workshop 2009: Building the Momentum

Speaker bios

Richard Wies

Richard Wies is currently an associate professor in the Electrical and Computer Engineering Department at the University of Alaska Fairbanks, and is a registered professional electrical engineer in the State of Alaska. He received his B.S.E.E., M.S.E.E., and Ph.D. degrees from University of Wyoming in 1992, 1995, and 1999, respectively. His areas of interest include renewable and sustainable energy systems, energy efficiency, and controls. His current research involves modeling the integration of renewable energy sources into diesel electric generation systems in rural Alaskan villages. His other research interests encompass projects related to efficient and economic operation of electric energy systems.

Liuchen Chang

Dr. Liuchen Chang joined the faculty of University of New Brunswick, Fredericton, NB in 1992 and currently is a professor at Department of Electrical and Computer Engineering. He has published over 170 refereed papers and two books. He has been Principal Investigator for several multi-disciplinary and multi-partner research grants from NSERC, SDTC, CFI, and Atlantic Innovation Fund. He is the Principal Investigator of Canadian Wind Energy Research Network. His principal research expertise and experience include distributed power generation, renewable energy conversion, and power electronic converters.

Gerald Giroux

Gerald Giroux is the Project Engineer for the Wind Energy Institute of Canada has 16 years of experience. Gerald is responsible for the development, implementation and ongoing operation of testing and technology development projects in support of WEICan's mandate.

Gerald skills include control system design and installation, computer programming and instrumentation. He has experience with execution of construction projects, the preparation of project proposal submissions, development of operational and testing procedures in accordance with technical standards applicable to wind turbine testing and certification (IEC 61400 series, CSA, etc) and measurement and instrumentation standards.

Peter Lilienthal

Dr. Peter Lilienthal is the President/CEO of HOMER® Energy and Green Island Power. He was Senior Economist with the International Programs Office at the NREL from 1990 - 2007. He has a Ph.D. in Management Science and Engineering from Stanford University. He has been active in the field of renewable and distributed energy and energy efficiency since 1978, including consulting and project development of distributed power projects. His expertise is in utility modeling and analysis. Since 1993 he has been the developer of NREL's HOMER® software, which has been used by over 31,000 energy practitioners in 191 countries.

Hon. Larry Bagnell, P.C., M.P.

Official Opposition Critic for Northern Affairs, Yukon

A graduate of the University of Toronto with a Bachelor Degree in Arts and another in Science, Mr. Bagnell's lifelong dedication to community service was recognized in 1999 with the City of Whitehorse's Volunteer of the Year Award.

Larry was first elected in 2000 and has continued to be re-elected over the years. He continues his role as the Official Opposition Critic for Northern Affairs. Larry has been a member of many Parliamentary Committees including Transport, Defence, Industry, Veterans Affairs, Justice & Human Rights, and Aboriginal Affairs

He is very proud of his achievements for the North and continues to work as hard as he is so well known for. His toughest role has just begun however, with the birth of his first child Aurora Sage, on October 29th!

David Connelly OStJ, CD, B.Comm., MBA

President and Owner of Ile Royale Enterprises. Ltd, a consulting firm and holding company. Currently residing in Yellowknife, David specializes in strategic planning and structuring.

From 1992-97 he was President and CEO of one of Canada's largest and most successful Aboriginal development corporations, the Inuvialuit Development Corporation.

David was an initial champion of wind-diesel Canada's Beaufort communities. Currently he is assisting the Yellowknife Dene First Nation in the potential development of wind energy to supply resource industries on their traditional lands. He is also a Senior Advisor to Avalon Rare Metals Inc. a potential customer of the power.

Sean Whittaker

Sean Whittaker is a professional engineer and Vice President, Policy for the Canadian Wind Energy Association (CanWEA), a not-for-profit industry association that facilitates the responsible and sustainable growth of wind energy in Canada. CanWEA's vision is to see wind energy provide 20% of Canada's electricity demand by 2025.

Within CanWEA, Sean is responsible for policy development at a provincial and federal level. Before joining CanWEA, Sean worked for six years with an Ottawa-based energy and environmental research firm. Prior to that, Sean worked in Madagascar for five years designing, building and installing windmills for community irrigation projects.

Robert McGillivray

Mr. McGillivray is responsible for leading the renewable energy business at Hydrogenics Corporation. Prior to this role, Mr. McGillivray led the sales and marketing for the commercial onsite generation electrolysis product line and has served as the Director of Corporate Development. Prior to joining Hydrogenics, Mr. McGillivray was Director of Corporate Development for Stuart Energy Systems and Senior Design Engineer at Pratt & Whitney Canada. Mr. McGillivray is a Professional Engineer, holds a Bachelor of Science in Engineering from Queen's University and an MBA from the University of Western Ontario.

Dennis Meiners

Dennis began his involvement with wind diesel systems in 1993 as the developer of the wind program for the Alaska Energy Authority. While with the Alaska Energy Authority, he addressed the barriers to the widespread implementation of wind diesel systems, and finding alternatives to diesel generation. He has been involved in projects ranging from resource assessment, site selection, feasibility, modeling, pilot projects and system implementation, along with experience in numerous technical, management and policy roles. Mr. Meiners is a director of Powercorp Alaska, and is the principle in IES, Intelligent Energy

System. IES is focused on development and implementation of community wind diesel systems. IES is currently developing four community sized wind diesel smart grid projects in Southwest Alaska. These high penetration wind diesel systems will provide heat and electricity for the Chaninik Wind Group Villages, which is a Tribal Energy Resources Development Organization.

Jito Coleman

Jito Coleman has been active in the distributed energy business for over 35 years. Green Toolbox, his consulting business is currently engaged in development of innovative renewable systems incorporating the latest SmartGrid and MicroGrid concepts. As Chief Engineer and President of Northern Power Systems from 1980-2005, Jito was instrumental in establishing the company's reputation as a world leader in remote power, and distributed generation. Jito has extensive hybrid system experience as well as specific expertise in wind turbine design and deployment, solar systems, biomass projects from anaerobic methane to wood chips, and an array of system storage components.

Alan Langworthy

Alan established Powercorp in 1988 with successful development in new control system technology for the automation and remote control of RAPS systems world-wide. These systems include remote control, high power inverter systems and the integration of renewable power sources.

Alan in recent times has been the Chief Executive Officer (CEO) of the Export Action Agenda for Renewable Energy and a founding Director of the Australian Cooperative Research Centre for Renewable Energy (ACRE). Alan was recently awarded the Clunies Ross award for excellence in the application of science and technology for the economic, social and environmental benefit of Australia.

His knowledge in wind, solar and other renewable technologies, covering both technical and economic aspects, have directed Powercorp to where it is today. He has published works covering technical, educational and commercial areas of the power generation industry.

Gavin Bates

Gavin Bates joined Powercorp as a graduate engineer in 1998. Gavin began work on SCADA screens for the monumental Denham wind/diesel project. Gavin then expanded into field service which involved cleaning flooded lead-acid battery banks. Eventually passing through several of the most important development projects for the company, he now is working as a Project Development engineer to identify and build wind/diesel and other wind projects to a point of viability around the world.

Dennis Bevington

Since 2006 Dennis Bevington has been MP for the Western Arctic, NDP Critic for Transportation, Infrastructure and Communities, Northern Development, and Arctic Sovereignty. From 1988 to 1997 Mr Bevington was Mayor, Town of Fort Smith and during that time he installed the first solar wall in the NWT on the new Recreation Center. He was the president of the NWT Association of Municipalities, sat on the Federation of Canadian Municipalities (FCM) Board of Directors, and was co-chair of the Community Energy Systems Committee. Since 1998 he is president of Stand Alone Energy Systems, a renewable energy consulting company that specializes in community energy planning and renewable energy installations. Mr Bevington was also a board member of the Federation of Canadian Municipalities Green Fund: a $500 million fund invested in communities across the country on innovative energy solutions.

Daniel Van Vliet

Daniel Van Vliet is the Manager of the Renewable Energy Projects and Off-Grid Communities at Indian and Northern Affairs Canada. Daniel is a graduate of the Environmental Studies program at Carleton

University in Ottawa and has worked for the federal government for over 10 years. He worked on various environmental issues including environmental assessment and contaminated sites management at Public Works and Government Services Canada prior to joining Indian and Northern Affairs Canada. He is currently responsible for managing the ecoENERGY for Aboriginal and Northern Communities Program.

Katherine Keith

Katherine Keith coordinates activities in the state of Alaska's Wind Diesel Application Center (WiDAC). WiDAC is a center of excellence in wind-diesel technology, which was established with partnerships between the Alaska Center for Energy and Power, NREL, and AEA. In this capacity, Katherine provides technical assistance to wind-diesel stakeholders, promotes education and training opportunities, and works to identify both near and long term research priorities. Katherine graduated from the University of Alaska, Fairbanks with an interdisciplinary degree in Renewable Energy Engineering. Her current research topics include, among others, energy storage systems, high penetration wind-diesel systems, waste heat recovery power generation, and alternative fuel transportation.

Guy Nicholson

Guy is a Chartered Engineer with 28 years experience in renewable energy. He spent a year as chief engineer on the Shetland Islands constructing and commission a wind-hydro-diesel system. He was electrical engineer for a 103 turbine wind plant - the largest in Europe. He formed Econnect in 1994 to specialize in the grid interconnection and integration of renewables building the first windfarm in Scotland. He represented the wind industry in UK and Ireland to develop new Grid Codes. Econnect is now part of Senergy with operations in Australia, New Zealand and the USA.

Martina Dabo

In her role as Program Manager of village power projects for TDX Power, Martina is overseeing the development and operation of community scale energy projects. She has over 10 years of project management experience in the energy sector; nationally and abroad. Her area of expertise is wind energy development, focusing on community size wind projects. Realizing that community energy project development requires a holistic approach, Martina utilizes her experience in regional and statewide energy planning to facilitate sustainable projects.

Martina has published several papers on wind-diesel hybrid systems and presented at national and international wind industry events.

She has a Master of Science degree in renewable energy technologies from the University of Ulster in Northern Ireland and a degree in biology. Before Martina specialized in the energy sector, she flew as pilot for the German airline Lufthansa.

Jean-Paul Pinard

JP Pinard is a wind energy prospector having installed over 30 meteorology towers in Yukon, NWT and northern BC. He graduated in mechanical engineer from the University of Waterloo in 1992. He has a Master's (2000) and a PhD (2008) in the department of Earth and Atmospheric Sciences at the University of Alberta. His PhD thesis was on wind climate in mountainous terrain of the Yukon.

JP has also installed small energy system in remote locations and is an advisor on wind energy planning for remote communities in the NWT. JP consults for various organisations, collaborates on many projects across the North as a wind energy expert. JP also volunteers much of his time to promote sustainable develop in the Yukon.

Bobby Sagoo

Bobby Sagoo has a Bachelors degree from Thapar Institute of Engineering & Technology, India and a Masters degree from the University of Saskatchewan; both in Electrical Engineering - Power Systems major. He began his career with ABB in 1996, where he worked as a protection and control engineer. Currently, Bobby is employed as the Strategic Account Manager with GE Digital Energy in Markham, Ontario. His areas of interest include Power System Protection & Control, Medium Voltage Switchgear, Renewable Generation, Energy Conservation and Microgrids.

Chris McKay

Chris McKay is presently the Product Manager for the Northwind® 100 community wind turbine. He has been with Northern Power Systems in Barre, Vermont for 8 years working on product management and product development for wind and power electronics. Previously he spent 5 years at W.L. Gore & Associates working on the development and commercialization of PEM fuel cells. He has a Bachelors degree in Chemical Engineering from the University of Pennsylvania.

Brett Pingree

Brett Pingree serves as Vice President of Sales for Northern Power Systems, one of the oldest renewable energy companies in North America, and the designer and manufacturer of the Northwind 100 wind turbine turbine.

Mr. Pingree has spent the last five years contributing to the development of the Northwind 100 business for Northern Power and has worked in a variety of roles along the way - from Project Manager, Program Manager, Channel Development Manager and Business Development Manager - to his current position as a Vice President.

Tim Weis

Tim Weis is a professional engineer and the Director of Renewable Energy and Efficiency Policy at the Pembina Institute. Tim has written numerous technical reports and development manuals on renewable energy and energy efficiency on issues at national, provincial and municipal levels as well as issues specific to First Nations' and northern contexts. He has assisted more than 20 communities at various stages of development of renewable energy projects. Tim has a Masters of Mechanical Engineering degree from the University of Alberta where he studied ice adhesion to wind turbine blades.