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Profile

John Maissan is a widely experienced, results oriented, well organized, practical engineer. He has experience from the hands-on level to senior corporate management levels supervising multidisciplinary teams of engineers, technical, and other staff. Strengths include strong analytical capability, the ability to focus on detail, the ability to manage / coordinate large complex projects, and the ability to effectively manage human resources. He is also comfortable and effective in practical, technical field work.

Areas of Expertise

Since starting his consulting business in 2003, John has served a wide variety of wind energy clients, particularly with respect to cold temperature and icing issues in resource assessment and wind farm operations. Clients have included grid connected wind farm developers; remote mines interested in developing wind-diesel projects; utilities; and a variety of clients interested in developing or promoting northern remote community wind-diesel projects. Other projects have included the provision of comparative evaluations of electrical infrastructure options for an industrial client and the management of an energy programs delivery corporation.

Prior to starting his consulting business, John worked for 14 years for Yukon Energy, a regulated electric utility. Here he was the driving force behind a wind energy development program which gained Yukon Energy, and John in particular, national and international recognition for their ground-breaking work in wind turbine operations under cold climate and severe rime icing conditions. He also gained experience as Yukon Energy's staff project manager of two major projects valued at about $15 million and $27 million.

Prior to working for Yukon Energy and the Yukon government (3 years), John had a very successful career, spanning 15 years, as an extractive metallurgist in the mining industry. He held positions of increasing responsibility in copper-gold, copper-lead-zinc, and lead-zinc operations. This phase of his career culminated in the position of mine manager, successfully bringing a 300 ton per day underground gold mine into production.

Wind Energy Technology and Development

Experience gained in recent years includes:

1. The selection and installation of two grid connected wind turbines (Bonus 150kW in 1993 and Vestas 660kW in 2000) and the development and installation of after-market modifications to minimize the impacts of low temperatures and rime icing.
2. The development and installation of wind monitoring stations employing both heated and unheated sensing instruments, including stand-alone locations that do not have access to grid power. Also the practical interpretation of analytical data and the writing of management (and non-technical) level reports.
3. The management of feasibility studies on hybrid wind-diesel systems for two small Yukon communities served by diesel generated power only and involvement in several other wind-diesel project prefeasibility study assessments.
4. John was co-chairperson and a key organizer of the Yukon International Wind Conference held in Whitehorse, Yukon in May of 2003. This conference focused on cold climate opportunities and incorporated a wind-diesel workshop.
5. The provision of expert advice to northern industrial clients on wind resource assessment and wind farm operations in very cold and icing climates.
6. The completion of two detailed studies on community wind-diesel projects in the Canadian north including a technology review, an economic assessment of projects, and advice on practical approaches for the inexperienced developers.

Education and Professional Development

- BASc. in Chemical Engineering from the University of Waterloo in 1973
- 5 years of cooperative engineering studies in extractive metallurgy and the paper industry
- Wind energy development courses
- Negotiating skills, University of British Columbia
- Extractive metallurgy courses, McGill University
- Supervisory and Management courses throughout working career
- Safety systems courses throughout working career

Professional Memberships

- Association of Professional Engineers of Yukon
- Professional Engineers Ontario
- The Canadian Institute of Mining, Metallurgy and Petroleum

Awards

- R.J. Templin Award for outstanding contributions to the development of Canadian Wind Energy Technology – Canadian Wind Energy Association, 2001
- Governor General's Caring Canadian Award, 1996

Publications and Presentations

- Report and technical presentation on wind energy in cold and icing climates to a utility client in 2007
- Papers and presentations on wind energy development in the north, including wind-diesel projects to the Canadian Wind Energy Association conferences and a variety of energy related workshops on a regular basis since 1996, and annually in recent years
- Presentation to the Utility Wind Interest Group (USA based organization of electric utilities interested in wind power), 2000
- Presentation to Circumpolar Climate Exchange Conference, 2001
- Several educational presentations on wind energy to the public, in school classrooms, and to special interest groups
- Paper and presentation to the Canadian Institute of Mining, Metallurgy, and Petroleum, 1982

Work With First Nations

John is comfortable working with First Nation leaderships and memberships, and has been able to earn their respect**.** First Nations are major landowners in Yukon and have considerable influence on governmental and independent decision making boards. Throughout his Yukon Energy career, John has worked in cooperation with First Nations, for example carrying out wind monitoring projects and wind-diesel feasibility projects.

Professional Work History

Consulting Experience 2003 to present

Leading Edge Projects Inc. President 2003 to present

- Leading a team in a wind resource assessment program (including the assessment of icing severity) for a northern mining client
- Assistance provided to wind farm developers in icing related wind resource assessment and wind farm operational issues
- Management level guidance provided to northern industrial clients interested in developing wind-diesel projects to reduce diesel operating costs and dependence
- Detailed studies provided for clients interested in promoting and developing northern community scale wind-diesel projects, including community specific studies
- Cost estimating services for power line and on-site diesel generation options as part of a prefeasibility study for an industrial client
- Management services for a small corporation that uses staff and consultants to deliver energy related programming to the public
- Assessment of analytical data from wind monitoring projects, including the preparation of both layman and management level reports
- Assistance to corporate client on wind turbine operational issues and discussions with the turbine manufacturers on the client's behalf

- Volunteer member of the Canadian Wind Energy Association's small wind and R&D committees and Natural Resources Canada's Technical Advisory Committee on wind energy

Electric Utility Experience 1989 – 2003

Yukon Energy: Director, Technical Services 1998 – 2003

- Headed the Technical Services group (engineering, capital projects, and technical support) of Yukon Energy which included about $5 million per year of 'routine' capital work
- Led Yukon Energy team in the two-year, $14 million rebuild of a three-turbine hydro plant and office building that were destroyed by fire late in 1997. The new office building won national energy efficiency awards
- Was a key member of the team that successfully negotiated the fire loss insurance settlement
- Led the selection of, negotiations for, and the installation of a Vestas 660kW grid connected wind turbine (1999-2000). This project included the development of a number of after-market modifications to reduce the effects of rime icing.
- Managed the preliminary engineering phases of a $27 million power line and substations project in central Yukon, provided senior administrative support and oversight and led Yukon Energy staff involvement during the project construction

Yukon Energy: Senior Utility Engineer 1989 – 1998

- Was responsible for Yukon Energy's nationally recognized wind development program starting with wind monitoring in 1989
- Spearheaded the installation of a 150 kW grid-connected wind turbine in 1993
- Led the practical research and development needed to learn how to adapt wind turbines to low temperature and severe rime icing conditions
- Was a member of senior management team that successfully brought Yukon Energy from a third party operated and managed utility to a self staffed, independently operating utility on January 1, 1998
- Led and participated in several Yukon Territory Water Board regulatory hearings
- Participated in several Yukon Utilities Board rate applications, and was a member of several witness panels
- Was a key leader in the development and implementation of Power Smart energy efficiency and conservation programs, for both residential and commercial customers
- Was very involved in a substantial hydro reconnaissance program over a period of several years
- Was responsible for overseeing the technical aspects of the management contract under which the Yukon Energy Corporation's assets were being managed by an investor-owned utility

Government Experience 1986 – 1989

Yukon Government Director, Energy and Mines Branch 1986 – 1989

- Managed a staff of five delivering energy and mining related programs to the public
- Participated in intergovernmental committees, meetings, and conferences
- Participated in several government–private sector committees and collaborative initiatives

Mining Industry Experience 1973 – 1986

Mount Skukum Gold Mine (Yukon) Mine Manager 1985 – 1986

- Hired as Mill Manager, promoted to Mine Manager and successfully brought the 300 ton per day mine into production

Cyprus Anvil Mining Corporation (Yukon) Mill Manager 1984 – 1985

- Worked with a team of senior staff to engineer the necessary upgrades to the mill and bring the idle mine back into production again
- Worked with potential mine purchasers on reopening plans. The mine was successfully sold and reopened

Noranda Mines Geco Division (Ontario) Assistant Mill Superintendent 1977 – 1984

- Started as mill metallurgist responsible for the metallurgical operation of the mill
- Was responsible for a technical team of up to 4 staff
- Led intensive metallurgical testing and pilot plant work leading to a successful major mill upgrading program which significantly improved the metallurgical performance of the operation
- Authored and presented a paper on the mill upgrade to a CIM Conference in 1982

Halibury School of Mines Teacher 1975 – 1977

- Taught metallurgy and mineral processing at the Tarkwa School of Mines in Ghana, West Africa on a CIDA (Canadian International Development Agency) sponsored project

Noranda Mines Horne Division (Quebec) Technical Assistant 1973 – 1975

- Worked several work terms here before commencing as a Technical Assistant (Metallurgist) on a full time basis in 1973
- Was responsible for the metallurgical testing of ores, up to and including pilot plant level, of potential new mines – base metals, gold, uranium, fluorspar, molybdenum, etc.
- Deeply involved in the metallurgical testing and successful milling of copper smelting slag to complement the newly developed Noranda Process copper smelting technique