

DALE FRIESEN SENIOR CONSULTANT

AREAS OF EXPERIENCE:

- Account Management and Utility Engagement
- Economic Development and Utility Rates
- Demand-Side Management Programming
- Efficient Energy Utilization and Rate Optimization
- Energy Performance Standards Development
- Project Development and Planning



EDUCATION:

• Bachelor of Science (Mechanical Engineering) - University of Manitoba (Graduated 1986)

PROFESSIONAL EXPERIENCE:

InterGroup Consultants Ltd., Winnipeg, Manitoba

2019 - Present - Senior Consultant

• For the Office of the Utilities Consumer Advocate of Alberta (2019 – Present): Dale provided analysis and strategic support for Module One of the Distribution System Inquiry (proceeding 24116) to consider the future evolution of natural gas and electric distribution in Alberta. Dale drafted information requests and information responses, presented at a technical conference, and prepared a final submission.

Meridium Energy, Winnipeg, Manitoba

2017 - Present - President

- Professional Engineer, Technical Consultant and Management Advisor providing independent guidance and services related to the efficient, productive and economic utilization of energy resources within homes, businesses and communities for provincial, national and international clients.
- Prior experience includes a well-recognized 30-year background in Demand-Side Management (DSM) consisting of program planning, development, delivery and promotion supported by customer account management, economic assessments, utility rate analysis, codes and standards development, energy efficiency regulation and integration of customersited renewable energy projects and distributed generation. This extensive experience



anchors expertise in the technical and commercial aspects of product development and business growth for new and emerging energy technologies.

Scope of Work includes;

- o Guidance on electric and natural gas utility engagement, energy utilization, rate optimization, utility service provisions and commercial/technical engagements.
- Assessment of energy performance considerations for energy efficient equipment and high-performance buildings, including energy subsystems within commercial and industrial processes and buildings.
- Evaluation of emerging energy technologies, including considerations for product development, market adoption and business start-ups.
- o Resource utilization for achievement of objectives supporting the sustainable, productive and economic consumption of energy.

· Ongoing Work includes;

- Chair of the CSA Group's Strategic Committee for Performance, Energy Efficiency and Renewables (SCOPEER), which holds responsibility for the development of energy performance standards referenced as National Standards of Canada for energyconsuming equipment and buildings.
- Assessment of Performance Benchmarking Tools for the measurement and reporting of energy performance in commercial buildings from concept/design through to postconstruction occupancy, supporting growth in the adoption of performance-based decision-making among building professionals.
- Business Case Development for a user-friendly, cloud-based energy modelling software tool to simulate energy performance and validate energy code compliance in less complex, small to medium-sized commercial buildings,
- o Technical and Management Support for development and commercialization of new motive power technologies capable of providing higher horsepower single-phase ratings for expanding commercial and agricultural applications in rural locations.
- Evaluation of Infrastructure Requirements for battery-powered, all-electric transit bus fleets being considered by North American and international transit authorities as a response to business and climate change mandates.

Manitoba Hydro, Winnipeg, Manitoba

2010 – 2017 – Division Manager, Industrial & Commercial Solutions

 Director-level responsibility for Manitoba Hydro's commercial and technical relationship with the 400-plus largest electric and natural gas energy consumers in Manitoba. Provided strategic guidance for economic development initiatives aimed at attracting and retaining commercial and industrial customers, including examination of alternative rate structures and demand-side management programming intended to enhance the competitiveness of Manitoba's commercial and industrial customers.



- Managed a Customer Service Division consisting of 25 plus account managers, economic
 development specialists and administrative staff, along with 35 40 engineers, technicians
 and energy-utilization specialists supporting residential, commercial and industrial DSM
 programming, electric and natural gas service inquiries, contractual commercial business
 relationships, demand-side management activities, power quality analysis, and renewable
 customer-sited, distributed generation.
- Dale participated in regulatory proceedings before the Manitoba Public Utilities Board and testified as an expert witness on demand-side management, industrial rates (i.e. including time-of-use rates), industrial load growth, electric service extensions, distributed generation, emerging energy technologies and end-use consumption for the electric utility. He supported the development of materials and evidence pertinent to various rate applications and public utility board hearings regarding electric and natural gas rates, utility demand-side management plans and other proceedings. Dale testified at the 2012/13 and 2013/14 Needs For and Alternatives To (NFAT) hearing undertaken by the Manitoba Public Utilities Board (PUB) to review Manitoba Hydro's development plan for major northern hydraulic generation.

Specific areas of accountability included;

- o Divisional operations and fiscal management related to key and major account management, commercial and technical agreements, customer service policy, service reliability, power quality, service extensions and upgrades, alternative rate structures, energy efficiency, emerging technologies and customer-focused residential, commercial and industrial demand-side management programs.
- Additional duties encompassed consultation and support for load forecasting, resource planning, rate design and customer policy review, along with provision of technical support and witness testimony for public rate hearings and coordination of government interaction on energy conservation and climate change initiatives.
- o Provided strategic leadership and oversight for Manitoba Hydro's collaboration with CSA Group and other industry associations on initiatives supporting Federal and Provincial objectives for sustainability and climate change action, such as the Pan Canadian Framework on Clean Growth and Climate Change.

Manitoba Hydro, Winnipeg, Manitoba

2008 – 2010 – Business Initiatives Manager

- Developed non-regulated, for-profit initiatives designed to provide specialized energy-related services to large commercial and industrial customers using Manitoba Hydro's in-house technical and project management expertise, with specific emphasis on services related to the installation and maintenance of high voltage customer-owned equipment, power protection backup generators, etc.
- Designed and implemented alternative utility rate structures to address the impact of the global downturn on Manitoba-based energy-intensive industrial operations during the 2008/09 global recession and oversaw the development of demand-side management initiatives aimed at improving the energy efficiency, productivity and competitiveness of Manitoba industries.



Meridium Power Inc (Manitoba Hydro Subsidiary), Winnipeg, Manitoba

1999 – 2007 – General Manager

- Developed and implemented business plan for the formation and operation of a wholly-owned Canadian subsidiary of Manitoba Hydro dedicated to the development and commercialization of innovative electric motor and generator technologies targeting agricultural, commercial and industrial applications.
- Overall responsibility for operation and fiscal management of engineering, marketing/sales, service and support functions for a Canada-wide network of distributors and agents targeting markets requiring motive power for higher horsepower agricultural applications, such as irrigation, and battery-free power protection for critical commercial/industrial applications requiring high quality uninterruptible service.

Manitoba Hydro, Winnipeg, Manitoba

1995 – 1998 – Senior Motor Systems Engineer

- Developed, implemented and delivered industrial energy efficiency programs for large commercial and industrial customers in Manitoba, including provision of technical expertise to assist customer with design, procurement and operation of energy efficient electric motor systems and driven-equipment.
- Worked actively with CSA Group to develop standardized test methods and minimum energy performance standards for electric motors and motor-driven systems adopted across North America by manufacturers and regulators.

Manitoba Hydro, Winnipeg, Manitoba

1992 – 1994 – Motor Program Engineer, Industrial Energy Management

- Provided technical and administrative support for Manitoba Hydro's Industrial Power Smart High Efficiency Motors Program aimed at improving the energy efficiency of electric motors installed at commercial and industrial facilities in Manitoba. Led efforts to standardize energy efficiency test methods for motors.
- Worked nationally with other Canadian utilities and global motor manufacturers to develop a coordinated approach to energy efficiency programming, resulting in Canada being the global leader in adoption of energy efficient electric motors.

PROFESSIONAL AFFILIATIONS/DEVELOPMENT:

- **Registered Professional Engineer** Association of Professional Engineers and Geologists of the Province of Manitoba (APEGM).
- **CSA Committee Chairperson** Steering Committee on Performance, Energy Efficiency and Renewables (SCOPEER), CSA Group.
 - SCOPEER facilitates the development of Standards Council of Canada (SCC) accredited CSA energy performance standards specifying test methods for determination of energy performance in equipment and systems, while also facilitating the implementation of minimum energy performance standards (MEPS) within energy efficiency guidelines,



conservation programs and government energy efficiency regulation. The work of SCOPEER actively supports the North American and global harmonization of energy performance standards for residential, commercial and industrial equipment (www.csagroup.org).

 Advisory Board Member - Red River College, Building Envelope Technology Access Centre (BETAC).

BETAC is a Natural Sciences and Engineering Research Council (NSERC) funded Technology Access Centre that provides a multi-disciplinary environment to facilitate advancements in building envelope technology that provide for greater energy efficiency and durability, while addressing the intended occupancy, service life and related climatic conditions for buildings. It is intended to enhance the capability for local companies, particularly small and medium-sized enterprise to become more productive and innovative (www.rrc.ca/betac).

• **Construction Strategic Council Member** - Red River College, School of Construction and Engineering Technologies.

The Construction Strategic Council works with Red River College to identify the needs of the construction industry and support the development of programming to facilitate the necessary skills and trades training required by the construction industry.

• President / Executive Board Member – Winnipeg South End United Soccer Club (WSEU).

Elected volunteer board and managing executive position responsible for an annual budget approaching \$1.0 million and oversight of technical and administrative staff supporting youth soccer program development and delivery within the community. WSEU is the primary coordinator and facilitator for the development and delivery of soccer programming for more than 5,000 recreational and competitive youth soccer players from ages 4 to 17 in South Winnipeg. The District association works closely with member Community Centres, youth leagues and other regional and provincial associations to champion youth soccer and provide accredited and sanctioning programming for youth and their families (www.wseu.ca).