Black & McDonald Limited was founded in 1921 as a partnership between William J. McDonald and William R. Black; they established the company’s long-standing commitment to fairness, quality, its people and its clients. In 1946, following the passing of William R. Black, the ownership of the company was consolidated within the McDonald family who manage it to this day.

The company has followed a planned course of diversification and expansion, combining growth and financial stability with ongoing investment in our people, and a willingness to pioneer new business opportunities.

Black & McDonald remains a privately owned company, an integrated, multi-trade prime contractor serving government, utilities, institutions, industry and commerce across Canada and the United States. The company has over 4,500 employees working out of a network of more than 25 offices.

Black & McDonald’s philosophy of conducting business is based upon the core values of its founder, William John McDonald. They have stood the test of time …

• Do the job right regardless
• Talk to the customers regularly, confirm their satisfaction
• Make the price fair and reasonable
• A deal is a good one, only when it is good for both parties
• Live up to your promises
• Treat employees with respect
• Complete jobs promptly
• Invoice promptly, fairly, and in detail

When there’s Zero Tolerance for error, Nuclear operators look to Black & McDonald to ensure Best Practices are utilized for Safety, Quality, Human Performance and Production. With over 14.7 million manhours of Nuclear work experience, we have a proven track record for customer success.
For Black & McDonald, our performance of nuclear services has a clear priority over schedule, cost and production. Black & McDonald strictly follows a nuclear safety culture including individual and management commitment to safety and management systems which promote: accountability, a questioning attitude, communication, conservative decision making, continuous improvement, safe work processes, problem identification & resolution, and an environment for raising concerns.

We are proud to share our 2013 Health & Safety achievements of our Power Generation group:

- IHSA Outcomes - Gold
- DNGS Projects - 2 Directors Awards
- DNGS Outage - 4 Outage Cups
- PNGS Outage - 4 Outage Cups
- PNGS - 3 Outage Cups
- 2013 manhours - 855,207
- Lost Time Incidents - Zero
- 2013 Total Recordable Incidents - 0.23
- 2011-2013 Total Recordable Incidents - 0.96
- 2011-2013 Lost Time Incident Free - 3 years @ 2.7M manhours

**CORPORATE COMMITMENT**

Black & McDonald Limited believes that all incidents can be prevented and the goal of zero incidents is achievable. The relentless pursuit of health and safety excellence and the path to zero incidents requires active cooperation with all workers toward the integration of our safety management system into everything we do to continuously improve.

**Quality**

Successful quality programs have been implemented since 1978 on Black & McDonald projects in mechanical, electrical, instrumentation, utility and civil applications meeting applicable project-specific standards of CSA, ASME, ISO, TSSA, federal, provincial and corporate requirements, and the following standards:

- CSA N286-05, Management System Requirements for Nuclear Power Plants (for Engineering, Procurement and Construction)
- CSA Z299.1, Quality Assurance Programs - Category 1
- SA N285.0, Class 1,2,3,4, & Class 6 (Fabrication, Installation, Repair, Modification of code items and supports)
- SA B31 (ASME Section 1, Section VIII, B31.1, B31.3, B31.5, B31.9)
- SA W47.1, Division 2, Certification of Companies for Fusion Welding of Steel
- SA W47.2, Division 2.1 Certification of Companies for Fusion Welding of Aluminum
- SO 9001-2008, Quality Management System – Requirements

**QUALITY PROGRAM REGISTRATIONS:**

- CSA N283.0 & B51 Programs registered in the Provinces of ON, QC, and NB
- CSA W47.1/W47.2 Welding operations registered with the Canadian Welding Bureau
Human Performance/Training

B&M has trained and experienced nuclear employees – with extensive knowledge, strong skill sets and proven leadership capabilities. Our extensive network of training programs and facilities ensures our people are well versed in the latest industry best-practices.

Black & McDonald is a proactive, self-critical organization with an established Human Performance Program designed to promote high standards of work execution. We use our own experiences and lessons learned from other organizations in our program of continuous improvement to minimize the frequency of events and mitigate their impact.

In 2013, Black & McDonald was accepted into the World Association of Nuclear Operators (WANO) opening the door to further lessons learned and best practices in the nuclear industry.

Environmental Responsibility

At Black & McDonald, environmental responsibility is much more than compliance with legislation or participation in renewable energy projects for monetary gain. True responsibility is demonstrated by proactive efforts to minimize the environmental impacts caused by the activities of our organization.

The impacts of our environmental initiatives are real and quantifiable and while there is no immediate payback, Black & McDonald views the investment in these initiatives as a cost of being a socially responsible member of the Canadian nuclear and construction industry.
Outage Services and Refurbishment Experience

Black & McDonald has demonstrated excellence in our ability to staff, plan, execute, and turnover outage and refurbishment scopes of work at nearly every Nuclear Power Plant across Canada.

Examples include:
- ECI Check valve Inspection
- Boiler Open/Close
- Boiler Waterlancing Support
- Temporary Power / Lighting
- Bleed Cooler Open/Close
- Outage Asbestos Abatement
- Welding Support
- Jig Saw / Vault Repairs
- IMS Support

MECHANICAL

From full system replacement to mechanical modifications and refurbishment scopes of work!!
- System Equipment Modifications and Installations
- Piping, Pipe Supports, Valves
- Housing, Rigging
- High Pressure Service Water
- RTD Trunk Cable Replacement
- Reactor Building Work
- Valve Replacement / Repair
- Turbine Hall Work - Condenser Expansion Joint Inspection and Replacement Fuel Handling/Fuelling Machine Repairs & Modifications
- Fuelling Machine Vault Support Work
- Liquid Zone Heat Exchanger Inspection and Repair
- Moderator Heat Exchanger Inspection Support
- Shut Down Cooling HX, Remove & Replace
- Condenser Cooling Water Pump Overhaul

ELECTRICAL

From High Voltage, transformers, electrical systems, testing, modifications to cable, tray and conduit installations, Black & McDonald has trained, capable tradesmen and the supervision to get the job done right every time.
- Power System Assessment & Upgrades
- System Equipment Removal & Installation
- Transformer / Switchgear / Breaker / Motor Replacements
- Fire Detection Installation
- Substation Modification / Installation
- Generating Station Modification
- Relay Protection Upgrades
- Lighting / Installation / Retrofits
- Electrical Grounding
- Commercial / Industrial Building Electrical
- Code Compliance
- Instrumentation and Control

CIVIL

Fully capable and fully trained workforce for all Civil/ Structural/Architectural needs.
- Scaffolding
- Earthworks, Concrete
- Excavations / Foundations
- New Buildings and Renovations
- Substations
- Site Improvements

MAINTENANCE

Black & McDonald consistently proves its ability to lower and stabilize operating costs, contribute to productivity gains, maintain environmental conditions, and extend equipment life. Our operations and maintenance programs are tailored to client facility needs and the supply and management of on-site operations and maintenance staff. Our maintenance operations include computerized maintenance management software, materials purchasing and technical training and safety programs.
Engineering & Design Services

Black & McDonald has teaming agreements in place and the ability to provide full Engineering Services in partnership with this team. Our Engineering team utilizes the latest industry practices and BIM modeling software to create virtual 3D models for our diverse clientele before committing to a solution. This helps reduce costs and time before construction even starts and ensures that our clients’ needs are satisfied.

We provide our customers with:

- Engineering support for fabrication and projects
- Detailed fabrication drawings
- Modular engineering
- Development of standardized products
- Materials obsolescence program
- Creation of a standard product methods catalogue

Procurement

Black & McDonald’s comprehensive Quality Assurance program allows full procurement capability for nuclear and conventional materials in all code classifications. This, combined with our experienced EPC staff members and “best in class” materials management and inventory control, save our customers time and money, and offer:

- Purchasing of materials to meet nuclear and conventional requirements
- Development of purchasing specifications to meet code requirements
- Traceability assurance and configuration management
- Inventory and coordinated warehousing aligned to material quality level and code requirements
- Material staging and just-in-time delivery by work package aligned with client schedule requirements: materials obsolescence program

Construction

Our experience includes over 14.7 million manhours of nuclear construction projects, modifications, fabrication, outage and maintenance services at nuclear power generating plants across Canada.

- Steam Generator services, e.g. boiler open-close, waterblasting
- Construction and tie-in of large stand-by Auxiliary Power Systems
- Design, fabrication & installation of Calandria Vault mock-up
- Removal and replacement of RSW / RCW valves and piping
- Refurbishment of pressure boundary systems
- Supply and installation of new construction change room facilities
- Feeder chafing shield modifications
- Site security optimization

FOR CLIENTS WHO DEMAND REAL TURNKEY RESULTS.
There's only one way at Black & McDonald. The right way.

Black & McDonald is known as a reliable and flexible contractor. With a team of over 4,500 strong, Black & McDonald lives and breathes the ultimate in safety, quality and high performance along with engineering excellence, best of class fabrication, and unprecedented customer service. Delivering the right solution in the right way at the right price is driven by an ongoing attitude of unwavering integrity and proud tradition.

Everyone at Black & McDonald knows that continued success depends on the ability to deliver innovation and exceed client expectations. It continually rests on the shoulders of each and every member of the team.

Black & McDonald:

- Committed to Nuclear Safety
- Ethics in Business
- Dedicated Nuclear Services Division
- Privately-Owned Canadian Contractor
- Multi-Trade & Multi-Discipline
- In-House Training Programs
- 4500 Employees, Many 3rd Generation
- Licensed in all Canadian Provinces & Territories and 10 US States
- Delivering Excellence in Nuclear Services for Nearly 2 Decades

Anything less is not the Black & McDonald way.