



**CMD 26-H104.11**

Date: 2026-05-07

**Written Submission from  
Kinectrics**

**Mémoire de  
Kinectrics**

In the matter of

À l'égard du

**Bruce Power**

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**Bruce Power**

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Application to amend the licensing basis for Bruce A and B nuclear generating stations to increase reactor power limits

Demande visant à modifier le fondement d'autorisation des centrales nucléaires de Bruce-A et B afin d'augmenter les limites de puissance des réacteurs

**Hearing in Writing**

**Audience par écrit**

July 2026

Juillet 2026



May 6<sup>th</sup>, 2026

Commission Secretariat  
Canadian Nuclear Safety Commission  
280 Slater Street  
P.O. Box 1046, Station B  
Ottawa, Ontario  
K1P 5S9

**Hearing in Writing on Bruce Power's Application to Amend the Licensing Basis for Bruce A and B Nuclear Generating Stations to Increase Reactor Power Limits**

Dear Commission Secretariat,

The purpose of this letter is to express Kinectrics' support for Bruce Power's application to amend the licensing basis of the Power Reactor Operating Licence (PROL) for the Bruce A and Bruce B Nuclear Generating Stations (NGSs) to increase the Reactor Power Limits (RPLs). The amendment seeks to increase the RPLs to 95.5% Full Power (FP) for Bruce A and 96.0% FP for Bruce B, including the associated channel and bundle power limits, as part of Bruce Power's Project 2030 to increase the power output available from the Bruce Power Nuclear site.

Kinectrics is a proudly Canadian company committed to supporting the safe, reliable, and sustainable generation of electricity in Canada and internationally. We provide complete life cycle management solutions to the electricity industry, supporting the deployment, licensing, and continued safe operation of nuclear generating facilities, working with our customers to fight climate change and save lives through clean electricity generation and medical isotope production.

Our headquarters are in Etobicoke, Ontario with offices in Pickering, downtown Toronto, Bruce County, and internationally, including the United States, Germany, Denmark, Romania, the United Kingdom, and India. We operate over 30 laboratories, including Canadian Nuclear Safety Commission-licensed nuclear facilities, and employ more than 1,300 staff, approximately 70% of whom have technical, science or engineering degrees.



Ontario faces increasing demands on its energy supply due to both population growth and a commitment to meeting rigorous carbon reduction targets. According to the Independent Electricity System Operator (IESO), the province will need approximately 17.8 GW of new nuclear capacity to meet future electricity demands sustainably. Project 2030 is positioned to help fulfill this essential requirement, by increasing the BNGS site net peak capability to upwards of 7,000 MW through asset optimization and innovative solutions. We share Bruce Power's vision that Project 2030 will have many benefits to the province, economy, and environment, which include ensuring a reliable, cost-effective supply of baseload electricity in Ontario, reducing CO<sub>2</sub> emissions, and extending the need for skilled jobs.

Kinectrics is committed to the safe operation of nuclear generating stations in Canada and around the world. Kinectrics has a long working relationship with Bruce Power and provides a broad range of services to Bruce Power which contribute to the continued safe operation of Bruce A and Bruce B and has undertaken several projects to support increasing reactor power. These projects include:

- Performed scoping analysis to assess the feasibility of post-refurbishment operation of Bruce A and Bruce B units at increased RPLs.
- Prepared Safety Analysis Impact Reports to systematically define and confirm the scope of the deterministic safety analyses and assessments required to support operation at increased RPLs.
- Developed the thermal hydraulic and reactor physics models for use in safety analysis at increased RPLs.
- Performed deterministic safety analyses and assessments to support operation at increased RPLs, including loss of low, control failures, neutron overpower protection, large break Loss of Coolant Accident (LOCA), feedwater and steam supply system failures, and maintenance cooling system failures.
- Provided consolidated program and technical management support to Bruce Power to ensure effective coordination, consistency, technical integration and risk management.
- Reviewed and identified potential impacts and changes to the Safety Report, Safe Operating Envelope, and Probabilistic Safety Assessments as a result of increased RPLs.
- Performed operational analyses and assessments to determine the impact of increased RPLs on normal operation.



- Prepared conceptual engineering reports which determined required design changes to plant systems to enable operation at increased RPLs. Kinectrics continues to support several of the identified modifications as they progress through the Engineering Change Control process.

Kinectrics is a proud member of the Canadian Council for Indigenous Business (CCIB), which aims to strengthen the relationship between Indigenous and non-Indigenous peoples, businesses, and communities. In this regard, we are pleased to work with Bruce Power, which is also a member of the CCIB and has demonstrated a strong commitment to Indigenous communities. Bruce Power and its supplier partners created an Indigenous Relations Supplier Network (IRSN) to further strengthen their relationships with local Indigenous communities and, with our expanding presence in Bruce County, Kinectrics is also a member of the IRSN.

In summary, by working closely with Bruce Power, particularly on Project 2030, and understanding their principles and safety culture, we are confident that Bruce Power has undertaken a systematic and comprehensive review of the impacts associated with increasing the RPLs. In addition, expanding the role and capacity of nuclear energy generation will play a crucial role in achieving Ontario's climate change and energy stability goals, reducing the province's reliance on carbon-emitting sources and meeting projected growth needs responsibly. On this basis, Kinectrics supports Bruce Power's application to amend the PROL to increase the RPLs.

Sincerely,

John D'Angelo  
Chief Nuclear Officer  
Kinectrics Inc.