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Written submission from Kinectrics Inc.

Mémoire de Kinectrics Inc.

Bruce Power

Bruce Power

Bruce Power Mid-Term Update of Licensed Activities

Rapport de mi-parcours au sujet des activités autorisées de Bruce Power

Commission Meeting

Réunion de la Commission

September 20 and 21, 2023

Le 20 et 21 septembre 2023





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August 3, 2023

Commission Secretariat
Canadian Nuclear Safety Commission
280 Slater Street
P.O. Box 1046, Station B
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Commission Meeting, Public Meeting on Bruce Power Mid-term Update on Licensed Activities at the Bruce Nuclear Site

Dear Commission Secretariat,

The purpose of this letter is to express Kinectrics' support for Bruce Power's continued operation under Power Reactor Operating Licence (PROL) 18.02/2028.

Kinectrics is a proudly Canadian company, committed to sustainable, long-term global growth. We provide complete life cycle management solutions to the electricity industry, 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, the United States, Germany, Denmark, Romania, United Kingdom and India. We operate over 30 laboratories including CNSC-licensed nuclear facilities and employ more than 1,200 staff, 70% of whom have technical, science or engineering degrees.

At Kinectrics, we invest in state-of-the-art facilities and tools to provide the best and most comprehensive services to our customers. Our laboratories provide testing facilities for a broad range of areas in support of the nuclear industry, including materials analysis, nuclear radiation safety, and chemical analysis. Our world-class experts deliver services including project management and controls, design engineering, nuclear safety analysis and licensing, fitness-for-service and operational support, specialized assessment services, and life cycle management for the long life, functionally critical reactor components such as Fuel Channels, Feeders, and Steam Generators. In addition to supporting Bruce Power in these areas, we provide similar services to major nuclear and non-nuclear utilities with over 200 clients in North America, Europe, the Middle East and Asia. We also provide the broader electricity industry with Transmission & Distribution testing services including electrical transformer testing and renewable energy grid interconnection.



At Kinectrics, our core principle is "No task is so important that we cannot make the effort to do it safely". We have extensive experience working closely with Bruce Power and confirm they share our core principle. Based on our experience, it is clearly evident that safety is Bruce Power's number one value and we have confidence in their commitment to maintain and operate the Bruce A and B Nuclear Generating Stations safely and reliably.

Kinectrics provides a broad range of services to Bruce Power which contribute to continued safe operations. For example:

- Bruce A and B Periodic Safety Reviews in support of major component replacement, asset management and life extension.
- Development and deployment of specialized tools to inspect the reactor core and Station infrastructure.
- Provision of sensors and sensing apparatus to monitor effluents and discharges from the plant.
- Chemical and other analyses of plant data.
- Metallurgical and materials analyses on metal, alloy, concrete and similar structures used in plant operations.
- Deterministic and probabilistic safety assessments in support of the design and licensing bases for the Stations.
- Provision and qualification of safety-related components where the original equipment manufacturer no longer fabricates to the necessary nuclear quality assurance standards.
- Dosimetry and other assessment services to characterize personal radiation safety for Bruce Power staff and the public.

In providing these services to Bruce Power, Kinectrics staff interface with Bruce Power staff across their nuclear organization. Approximately 70% of our staff are engaged in services directly or indirectly contributing to safe operation of the Bruce A and B stations. Kinectrics has over 200 full-time staff working either at the Bruce Site, Teeswater, Kincardine or its KI North facility in Tiverton. Kinectrics staff who work at the Bruce Power site are trained in, and adhere to, Bruce Power's rigorous procedures in nuclear, conventional and radiation safety and environmental protection. With our extensive experience working closely with Bruce Power, we can attest that Bruce Power's effective management of their facilities provides a safe work environment for our staff and we have confidence in their commitment to maintain and operate under their operating licence.



Continuous improvement programs, such as Bruce Power's "You can count on me" initiative, ensure high safety standards are maintained. Evidence of Bruce Power's continuous improvement culture is demonstrated through their commitment to self-reflection and awareness, including their frequent participation with Kinectrics in joint quality review and lessons learned meetings. Bruce Power openly shares and seeks operating experience through formal industry forums such as those facilitated by CANDU Owners Group and routinely go beyond formal forums to share project specific experience with other utilities and vendors.

With respect to the protection of the environment, Kinectrics supports Bruce Power by providing analytical and environmental services that support environmental assessments and monitoring programs. Through the provision of these services for Bruce Power, we affirm they uphold their mandate to continuously monitor discharges while working to minimize environmental impacts.

Kinectrics is a proud member of the Canadian Council for Aboriginal Business (CCAB), which aims to strengthen the relationship between Aboriginal and non-Aboriginal peoples, businesses, and communities. In this regard, we are pleased to work with Bruce Power, which is also a member of the CCAB and has demonstrated a strong commitment to Aboriginal 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 and understanding their principles and safety culture, we are confident that Bruce Power is capable of safely operating its stations safely over the remaining licence period. On this basis, Kinectrics supports Bruce Power's continued operation until September 30, 2028. If you have any questions or require clarification, please do not hesitate to contact me at 416.207.6511 or david.harris@kinectrics.com.

Sincerely,

David Harris

President and CEO

The Hours

Kinectrics Inc.