



Oral Presentation

Submission from the Canadian Nuclear Association (CNA)

In the Matter of

Bruce Power Inc. – Bruce A and B Nuclear Generating Station

Request for a ten-year renewal of its Nuclear Power Reactor Operating Licence for the Bruce A and B Nuclear Generating Station

Commission Public Hearing – Part 2

May 28-31, 2018

Exposé oral

Mémoire de l'Association nucléaire canadienne (ANC)

À l'égard de

Bruce Power Inc. - Centrale nucléaire de Bruce A et Bruce B

Demande de renouvellement, pour une période de dix ans, de son permis d'exploitation d'un réacteur nucléaire de puissance à la centrale nucléaire de Bruce A et Bruce B

Audience publique de la Commission – Partie 2

28-31 mai 2018

April 16, 2018

Canadian Nuclear Safety Commission
c/o Louise Levert, Secretariat
280 Slater St. PO Box 1046
Ottawa, Ontario K1P 5S9

Re: Canadian Nuclear Association Intervention Regarding Bruce Power's application to renew its Nuclear Power Reactor Licence for the Bruce Nuclear Generating Stations A and B.

The Canadian Nuclear Association (CNA) has approximately 100 members, representing over 70,000 Canadians employed directly or indirectly in exploring and mining uranium, generating electricity, advancing nuclear medicine and promoting Canada's worldwide leadership in science and technology innovation.

The CNA is pleased to have this opportunity to offer its support for Bruce Power's application to renew its Nuclear Power Reactor Licence for a period of 10 years. Since being formed in 2001, Bruce Power has proven to be a world class operator with an engaged, well trained staff who focus on Safety First. Bruce Power has led the way with innovative technologies and its investments in people and equipment over the last 17 years have lead to increased reliability and output.

The Province of Ontario has expressed its confidence in Bruce Power through its Long-Term Energy Plan, which included 6400 MW from Bruce Power as an integral part of Ontario's electricity future. This has enabled Bruce Power to develop an Asset Management and Major Component Replacement Plan to ensure the site continues to supply safe, reliable power for years to come. A ten-year operating license provides a sufficient window to focus on those plans, while still allowing strong oversight through ongoing inspections and public annual reviews.

The CNA believes that past performance is a good indicator of future performance. Bruce Power has had a very strong performance in all pillars of nuclear safety (reactor safety, industrial safety, radiation safety and environmental safety). Investing in plant assets leads to safe, reliable operations. Between 2013 and 2017, approximately \$1.9B was invested in improvements. This led to improved reliability, which is demonstrated by reduced forced loss rates and increased output.

The nuclear industry is one of the safest industries in Canada and Bruce Power is a leader in this area. Bruce Power has an extremely low Industrial Safety Accident Rate compared to industry standards and benchmarking against other industries. Not content to rest on this exemplary record, Bruce Power has recently embarked on a renewed focus on safety to ensure these high standards are maintained.

Innovations in radiation safety have led to reduction in collective radiation exposure by 200 rem over the last two years and personal contamination events have decreased since 2013. Bruce Power's performance in personal contamination events is in the top decile in the global nuclear industry.

Bruce Power's commitment to environmental safety includes being registered for the newest version of ISO 14001 standard for Environmental Management Systems and continued implementation of CSA N288 series of Standards and Guidelines on environmental management of nuclear facilities. Continuous improvement and environmental stewardship are also key principles in Bruce Power's Environmental Policy. 2016 monitoring showed 1.6 microsieverts per year, which is 0.16% of the safe allowable limit to the public.



Not only is Bruce Power's nuclear safety performance is closely monitored by on-site CNSC staff and ongoing CNSC inspections, Bruce Power also has a Nuclear Safety Review Board each quarter. In addition, an Operational Safety and Review Team (OSART) mission from the International Atomic Energy Agency was held at Bruce B in 2015, with an IAEA follow up in 2017. The World Association of Nuclear Operators also conducted a peer review of Bruce Power in 2016. These international peer reviews are a vital part of Bruce Power's continuous improvement program.

During the last licensing period, Bruce Power invested significant resources in ensuring plant, worker and public safety. Post-Fukushima plant modifications have added additional layers of safety, including improved emergency preparedness, additional emergency mitigation equipment and increased response capability. These measures were tested through Huron Resolve, a provincial-level exercise held over five days in 2016. Over 30 agencies and 1000 people participated. One of the two new back-up Emergency Management Centres was activated, as was the Crisis Management Team, including the CEO and other members of the Executive Team. Emergency mitigating equipment was successfully deployed, and emergency transportation response procedures were tested. Of course, we all hope these measures are never needed, but it is reassuring to know that emergency procedures have been tested.

Bruce Power recognizes that its site is located on the traditional territories of Indigenous Peoples and is committed to active and ongoing dialogue to better understand First Nations and metis way of life. To that end, Bruce Power has formal Protocol Agreements in place covering regulatory engagement, capacity building and community development. Bruce Power has invested in capacity funding to assist local First Nations in areas such as employment, business opportunities, economic development education and training.

Bruce Power supports an Indigenous Employees Network and has created an Indigenous Community Investment Fund. In 2018, Bruce Power created an Indigenous Relations Suppliers Network. These efforts have been recognized with a Gold Level recertification for Progressive Aboriginal Relations by the Canadian Council for Aboriginal Relations.

Bruce Power is the largest employer in the region, supporting 22,000 direct and indirect jobs, as well as annual additional 5000 direct and indirect jobs during Major Component Replacement. Bruce Power's employees, including the Executive Team, live in the community and the company actively encourages its employees to give back to the community through volunteering and participating in community activities. Bruce Power has a substantial sponsorship program with specific focus on health, safety and the environment.

In conclusion, the CNA believes that Bruce Power has clearly demonstrated operational excellence, a commitment to health safety and the environment. We strongly support Bruce Power's request for a 10-year licence.

The CNA is a strong believer in the CNSC's open, transparent public hearing process. The CNA has had the opportunity to appear before the CNSC with respect to other licensing hearings and we request the opportunity to make an oral presentation before the Commission.

Please feel free to contact me directly should you have questions or require additional information.

Sincerely



Steve Coupland
Director, Regulatory and Environmental Affairs
Canadian Nuclear Association