



Oral Presentation

Submission from the Power Workers' Union

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 du Syndicat des travailleurs et travailleuses du secteur énergétique

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

Canadian Nuclear Safety Commission Regarding Renewal of Bruce A and B Nuclear Generating Station Operating Licences (2018)

**REQUEST TO INTERVENE and WRITTEN SUBMISSIONS
of the Power Workers' Union**

SUMMARY: The Power Workers' Union ("PWU") requests to intervene at Part II of the Canadian Nuclear Safety Commission's ("CNSC" or the "Commission") public hearing in respect of Bruce Power's application to renew its Nuclear Power Reactor Operating Licence for the Bruce Nuclear Generating Stations (NGS) A and B for a period of 10 years.

The PWU seeks to intervene by way of this written submission, and also to make an oral presentation at the public hearing.

The PWU supports the analysis and conclusions of CNSC Staff as set out in CMD 18-H4 dated February 28, 2018. Specifically, the PWU supports the conclusions of CNSC Staff that, in view of Bruce Power's operating performance and acceptability of its programs, Bruce Power is qualified to operate Bruce Nuclear Generating Station A and B, and that it will make adequate provision for the protection of the environment, the health and safety of persons, and for the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

A. *The Power Workers' Union ("PWU")*

1. The PWU represents approximately 2700 regular workers employed at the Bruce NGS site, and an additional 1000 incremental staff that may be on site during outages. The PWU has been the bargaining agent for the majority of employees of Bruce Power since Bruce Power became the operator of Bruce NGS. Prior to that, the PWU was the bargaining agent for the majority of the employees of Ontario Power Generation Inc. (and before that, Ontario Hydro), for more than fifty years. The employees represented by the PWU at the Bruce Site work in all facets of the facility, including operations, administration, maintenance, security, projects and modifications, and first line supervisors. PWU members represent the "front line" of the day-to-day operations of the facility. The vast majority of PWU represented employees at the Bruce Site live with their families in the immediate surrounding community.

B. *Participation of the PWU in the Nuclear Regulatory Process*

2. The PWU appreciates the opportunity to address the CNSC in its important task of considering the Bruce A and B NGS Operating licence renewal. The safety of the workers it represents through the safe operation of the facility is the foremost concern of the PWU. The PWU welcomes the CNSC in the exercise of its legislative mandate. The exercise of this mandate is fundamental to the maintenance of a safe and healthy workplace and community for our members.
3. The PWU has been an active participant in the regulatory oversight of nuclear safety issues arising from the management and operation of generating facilities in the province of Ontario. Specifically, the PWU was a participant in the environmental assessment hearing conducted by the CNSC into the restart of Units 3 and 4 at Bruce A, in the hearing conducted by the CNSC into Bruce Power's application for a licence amendment to permit the restart of the Bruce A units, and in various relicensing applications for Bruce NGS. The PWU has also made presentations to the federal Environmental Assessment Review Panel regarding nuclear fuel waste, to the Atomic Energy Control Board ("AECB") with respect to accountability in nuclear performance, to the Ontario Legislature Select Committee on Ontario Hydro Nuclear affairs, to the CNSC with respect to the environmental assessments and various relicensing applications at the Pickering and Darlington nuclear facilities (for example, the Darlington renewal applications in 2007 and 2015, the Darlington refurbishment and renewal application in 2012, and the 2013 Pickering NGSs A and B renewal applications).

C. *Nuclear Safety Today*

4. Directly or indirectly, any issue in relation to potential adverse environmental impact from the refurbishment and operation of the facility will also cause a potential adverse impact on the safety and health of PWU-represented workers at Bruce NGSs A and B. Whether arising from the design, condition, or operation of equipment, or from work policies, processes or practices, any deficiency which creates the potential of a significant adverse environmental impact will be felt first by PWU members. The PWU has no interest in, and refuses to permit its members to be exposed to accident, injury or illness from either conventional or nuclear hazards.
5. The health and safety of the PWU's members on the job has been the one issue above all others that have dominated the PWU's focus throughout its more than 60-year history. The PWU has sought aggressively to play a role in the decision-making in the workplace to positively impact the

working lives of its members. The experience of the PWU has varied with different employers in different work places. At the Bruce site, the experience of the PWU in this regard has been positive. We continuously look for ways to improve and the greatest opportunities come from the involvement of Worker Representatives in Health and Safety–related committees and investigations. Due in part to the PWU’s concerted efforts, Bruce NGSs A and B have excellent health and safety records. The PWU supports Bruce Power’s application and the analysis undertaken and the conclusions reached in the CNSC staff’s submission CMD 18-H4.

D. PWU Supports the CNSC Staff’s Reports Regarding the Bruce A and B Licence Renewal Applications

6. The current Bruce A and B power reactor operating licence, PROL 18.00/2020 expires on May 31, 2020. Bruce Power submitted a licence renewal application two years prior to expiry of the current licence (i.e., 2018) in order to obtain the Commission’s approval needed to refurbish its units (as development of the refurbishment plans requires a significant lead time). Bruce Power has requested a renewal licence period of ten (10) years which encompasses operation as well as activities related to refurbishment (which will be referred to as Major Component Replacement or MCR) of Units 3 to 8, which is planned to begin in 2020.
7. The PWU submits that CNSC staff reviewed the appropriate issues, considered the appropriate evidence and reached the appropriate conclusions. Specifically,
 - the application contained information sufficient to demonstrate that Bruce Power’s programs meet the legal requirements for a Power Reactor Operating Licence (CMD 18-H4, p. ii);
 - CNSC Staff concluded that Bruce Power programs met or exceeded CNSC requirements in all of the fourteen safety areas (CMD 18-H4, p. 4).
 - Bruce Power has implemented the safety and control areas (“SCAs”) safely. During the current licence period, there were no serious process system failures, the availability of special safety systems was acceptable, and doses to workers and the public were well below regulatory limits. Risk to the public and workers have been kept low (CMD 18-H4, p. 4). In 2016, Bruce A had a “fully satisfactory” rating and Bruce B has a satisfactory rating.
 - In support of its application, Bruce Power performed a periodic safety review (“PSR”) for its Major Component Replacement (“MCR”) of Units 3 to 8, the purpose of which was to confirm and enhance the safety case for MCR. CNSC staff accepted the PSR, concluding that the PSR met regulatory requirements and expectations. Bruce Power has

undertaken to implement the improvements identified in the PSR and to submit a PSR during the next licensing period (CMD 18-H4, s. 3.1 and p. 1).

- CNSC's staff conducted an environmental assessment and concluded that the licensee will make adequate provision for the protection of the environment and health of persons (CMD 18-H4, p. 2).

E. Additional Considerations

8. The PWU raises the following issues for the consideration of the CNSC.

1. Joint Health and Safety Committees

9. The PWU is actively engaged in health and safety activities at the Bruce site. PWU, Society of United Professionals and Bruce Power leadership sit on the Joint Policy Committee on Health and Safety which sets safety policy, makes recommendations on safety initiatives, and establishes working groups to address priority issues. In addition to the Joint Policy Committee, the following additional health and safety committees were agreed to by the PWU and Bruce Power through collective bargaining several years ago:

- **Local Joint Health and Safety Committees** – The local Joint Health and Safety Committees (JHSC) are the centrepiece of the PWU and Bruce Power health and safety framework. They are committees mandated by law to which the PWU appoints 50% of the Members. The PWU JHSC Members are assisted by local PWU Leadership and PWU H&S Staff. JHSC membership and training for PWU JHSC Members in excess of legal requirements have been negotiated.
- **Joint Health and Safety Working Committee** - This committee consists of senior representatives from Bruce Power, the PWU and the Society of United Professionals. The role of this committee is to carry out the work programs as per the Joint Policy Committee, and function as a resource for the several on-site joint health and safety committees.
- **Joint Committee on Radiation Protection** - The PWU participates in a number of permanent committees with members of Bruce Power management with the purpose of addressing radiation protection issues. The Joint Committee on Radiation Protection reviews radiation protection performance and provides recommendations to the station general manager with respect to

employee and public safety in relation to the radiation safety program.

- **PWU Health & Safety Committee Support** - The PWU Health and Safety staff Officer meets with the local Chief Stewards and PWU JHSC members at the Bruce site on a regular basis. The purpose of these meetings is to ensure that the local joint health and safety committee members are kept updated on issues from the Joint Working Committee and to assist with any current issues that the local joint health and safety committee members bring forward for discussion.
10. Work through these committees has been positive. Safety issues are treated with seriousness, and the committees have a good record of cooperative action to resolve issues as they arise.
 11. The attention that health and safety issues has received through the committees and on the shop floor has borne fruit through improved health and safety performance of the facility as a whole. For example, Bruce Power's Radiation Safety SCA improved to "fully satisfactory" for both Bruce A and B in 2016.
 12. In a large and complex facility operated by humans it will not be possible to entirely eliminate health and safety incidents. Rather the goal is to strive for continuous improvement of health and safety performance, to learn from each incident, and to implement measures to prevent reoccurrence. In 2014 and 2015 Bruce Power's Conventional Health and Safety SCA was rated "fully satisfactory". In 2016 that rating was reduced to "satisfactory" for Bruce B because of a lost time accident. There was another lost time accident at Bruce B in 2017. The PWU was actively involved in the root cause investigations of those accidents. Those accidents are understood and corrective measures in place. Bruce Power and the PWU are currently negotiating an agreement to provide accident investigation training for PWU representatives, and to enshrine PWU participation in accident investigations.

2. Management Systems

13. The PWU notes that Bruce Power has implemented and maintained a safe and effective management system, including a healthy safety culture and security culture. In particular, the PWU observes and agrees with CNSC Staff's comments regarding safety culture at Bruce Power. Bruce Power has been pro-active in undertaking a site-wide Nuclear Safety Culture Assessment. CNSC Staff observed this process and found improvements over the prior assessment (p. 35). PWU members participated in this assessment and Bruce Power engaged in post-assessment dialogue with the PWU.

3. Human Performance Systems

14. Of particular importance to the PWU is the robust Human Performance Program implemented by Bruce Power. As the CNSC Staff notes, Bruce Power has a number of individual programs that impact human performance, implemented with the support of the PWU. The PWU will continue to be actively involved in the development and review of additional human performance program reviews. The PWU supports CNSC staff's conclusion that Bruce Power's human performance program addresses the fundamental principles that the CNSC considers necessary to support human performance (p. 39).
15. The PWU supports the CNSC Staff's conclusion that the safe operation of the plant is maintained by Bruce Power's procedures in respect of hours of work and its Fitness for Duty assessment procedures. The PWU has actively participated in the CNSC's stakeholder consultation process on hours of work and fitness for duty programs, including preparing submissions on draft regulatory documents and attending in-person stakeholder meetings with the CNSC. The PWU intends to continue to participate in the CNSC's stakeholder consultation process and to work with Bruce Power on these issues.

(a) Minimum shift complement

16. The PWU is aware of issues raised regarding the sufficiency of the complement of qualified Operators to maintain the safe operation of the facilities under all conditions. The PWU understands that Bruce Power has made serious efforts to increase the number of total available qualified operators. The PWU is confident that the CNSC staff will be well positioned to make a determination as to whether any legitimate safety issues are raised by the hours of work and complement issue during the licence period, as well as the appropriate means by which any deficiencies may be addressed.

(b) Hours of work

17. The PWU has worked closely with Bruce Power to develop a strategy for managing worker fatigue. Bruce Power has procedures that control the number of hours worked by workers who perform safety-sensitive work. Many of these workers are part of the minimum shift complement.
18. The PWU was actively engaged as a stakeholder in the development of REGDOC 2.2.4 *Human Performance Management – Fitness for Duty: Managing Worker Fatigue*, which was published in March 2017. The PWU has also been engaged in the ongoing implementation of this regulatory document and of Bruce Power's fatigue avoidance programs.

19. The PWU agrees that Bruce Power has taken steps to reduce hours of work and factors that led to workers' fatigue, and notes despite the number of non-compliances related to limits of hours of work, Bruce Power did not identify any events at Bruce A and B that were directly attributed to workers who were fatigued. It supports the CNSC's continued monitoring.

4. Fitness for Duty/Drug and Alcohol Testing

20. The PWU acknowledges that the CNSC approved REGDOC 2.2.4 *Fitness for Duty Volume II: Managing Alcohol and Drug Use* in November 2017 which includes alcohol and drug testing requirements. The PWU actively participated in the stakeholder engagement process for this regulatory document, and vigorously opposes random drug testing as an unnecessary violation of employees' constitutional rights.
21. Bruce Power, working with the PWU, has developed a robust and sophisticated fitness for duty process over the last 40-50 years. In addition to policies that prohibit staff from working while impaired, supervisors are trained in continuous behaviour and observation systems to look for and identify the signs of safety-significant behavioural changes associated with substance dependency and substance impairment.
22. In nuclear facilities, there are the sophisticated systems to catch and deal with fitness for duty issues (not just impairment from drugs or alcohol, but for any other reason, from emotional upset to sleep deprivation) that has worked well for decades. The collection of bodily fluids is intrusive and cannot be carried out by the state without a compelling need to do so. There is no factual basis of substance abuse problems at Bruce Power to justify this intrusion.
23. The PWU has filed a grievance and will oppose the implementation of this unconstitutional regulatory document, through the labour arbitration process and in the courts.

5. Worker Training

24. The PWU recognizes the benefits that a high emphasis on continuous improvements to the levels of skills and training for its members can provide. This is true, both for the safe and efficient operation of the facility, and also for the level of dedication and fulfillment of its members in the performance of their duties. As a result, the PWU has long encouraged Bruce Power to maintain an aggressive program of worker training and certification.
25. The PWU, its staff and its local members have a great deal of knowledge and experience, both with respect to the type of training that is required in the workplace. The PWU independently conducts health and safety

training for worker committee members and other health and safety activists.

26. The PWU notes that CNSC staff concluded that Bruce Power's training programs were defined, designed, developed, evaluated and managed in accordance with regulatory requirements, as were initial certification and requalification testing programs (p. 40-42).

6. MCR Process

27. The PWU and Bruce Power negotiated a Letter of Understanding, 'LOU-0024 - Units 3 - 8 Refurbishment Agreement', which will remain in effect through the duration of Units 3-8 Refurbishment. The LOU establishes a Steering Committee with Bruce Power, the PWU and the Building Trades Unions as well as establishing a commissioning/maintenance team.

Conclusion

28. In conclusion, the PWU supports the analysis and conclusions of CNSC Staff as set out in CMD 18-H4 dated February 28, 2018. In light of Bruce Power's performance during the current licence period, as well as the programs and resources in place, Bruce Power is qualified to operate the Bruce site. Bruce Power has made adequate provision for the health and safety of persons, protection of the environment, and maintenance of national security and measures required to implement international obligations to which Canada has agreed. This licence renewal does not require an environmental assessment under the *Canadian Environmental Assessment Act* because the renewal of an operating licence under the NSCA is excluded from assessment under the CEAA.