# Record of Decision

DEC 21-H103

In the Matter of

Applicant Bruce Power Inc.

Subject

Request for a Temporary Exemption from the Requirement under Paragraph 9(2)(b) of the Class I Nuclear Facilities Regulations for Reactor Operators Certified at Ontario Power Generation Hired into the Initial Certification Program at Bruce Power

Date of Decision

July 21, 2021

## **RECORD OF DECISION – DEC 21-H103**

Applicant: Bruce Power Inc.

Address/Location: P.O. Box 1540, Building B10, 177 Tie Road, Municipality

of Kincardine, Tiverton, Ontario, NOG 2T0

Purpose: Request for a Temporary Exemption from the

Requirement under Paragraph 9(2)(b) of the *Class I Nuclear Facilities Regulations* for Reactor Operators Certified at Ontario Power Generation Hired into the

Initial Certification Program at Bruce Power

Application received: November 30, 2020

Hearing: Public Hearing in Writing – Notice of Hearing in Writing

published on April 8, 2021

Date of decision: July 21, 2021

Panel of Commission: Dr. M. Lacroix

**Temporary Exemption: Granted** 

e-Doc 6537400 (Word) e-Doc 6593910 (PDF)

# **Table of Contents**

1.0 INTRODUCTION	1
2.0 DECISION	
3.0 ISSUES AND COMMISSION FINDINGS	. :
4.0 CONCLUSION	

#### 1.0 INTRODUCTION

- 1. Bruce Power Inc. (Bruce Power) has applied to the <u>Canadian Nuclear Safety</u> <u>Commission</u><sup>1</sup> for a temporary exemption, under section 7 of the <u>Nuclear Safety and</u> <u>Control Act</u><sup>2</sup> (NSCA), of the requirement under paragraph 9(2)(b) of the <u>Class I Nuclear Facilities Regulations</u><sup>3</sup> (CINFR) for CNSC-certified personnel from Ontario Power Generation Inc. (OPG) seeking employment and certification at Bruce Power. Paragraph 9(2)(b) of the CINFR states that, in order to be certified, employees must have "...successfully completed the applicable training program and examination referred to in the licence." Bruce Power requested that an alternate approach be accepted for sections 23.1.2(2) and 23.2.1 of <u>REGDOC-2.2.3</u>, <u>Personnel Certification</u>, <u>Volume III</u>: <u>Certification of Persons Working at Nuclear Power Plants</u> (REGDOC-2.2.3, Volume III), dealing with minimum experience and General training, respectively.
- 2. The Bruce A nuclear generating station (NGS) comprises four 750-megawatt Canada Deuterium Uranium (CANDU) reactors (Units 1-4) and their associated equipment. The Bruce B NGS comprises four 822-megawatt CANDU reactors (Units 5-8) and their associated equipment. Both Bruce A and B are owned by OPG and are located on the Bruce Nuclear Power Development site. Bruce Power has operated Bruce A and B under a lease agreement since 2001.
- 3. Bruce Power requests that reactor operators previously certified at an OPG-operated nuclear power plant (NPP), i.e. the Pickering NGS and/or Darlington NGS, require six months of additional plant experience at the NPP where certification is sought, instead of one year. Bruce Power also requests that general training, appropriate to the knowledge requirements of the position, obtained at an OPG-operated NPP be recognized as part of the initial certification program of the candidate at Bruce Power.
- 4. The current version of REGDOC-2.2.3, Volume III does not consider the potential for certified reactor operator to relocate to another NPP, and therefore does not specifically allow certifications and associated qualifications to be transferred when a certified reactor operator is hired at another NPP. CNSC staff intend to address personnel transfer requirements in the next amendment of REGDOC-2.2.3 Volume III, currently planned for 2023.
- 5. Section 7 of the NSCA states that "The Commission may, in accordance with the regulations, exempt any activity, person, class of person or quantity of a nuclear substance, temporarily or permanently, from the application of this Act or the regulations or any provision thereof." The Commission has the authority to grant an exemption from regulatory requirements if it is satisfied that the conditions of section 11 of the <u>General Nuclear Safety and Control Regulations</u><sup>4</sup> (GNSCR) are met.

<sup>&</sup>lt;sup>1</sup> The *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

<sup>&</sup>lt;sup>2</sup> Statutes of Canada (S.C.) 1997, c. 9.

<sup>&</sup>lt;sup>3</sup> Statutory Orders and Regulations (SOR)/2000-204.

<sup>&</sup>lt;sup>4</sup> SOR/2000-202.

#### Issue

- 6. In considering whether to grant the requested exemption under section 7 of the NSCA, the Commission must be satisfied, in accordance with section 11 of the GNSCR, that doing so will not:
  - a) pose an unreasonable risk to the environment or the health and safety of persons;
  - b) pose an unreasonable risk to national security; or
  - c) result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed.

#### Panel

7. Pursuant to section 22 of the NSCA, the President established a Panel of the Commission, consisting of Dr. Marcel Lacroix, to consider the application. A <u>notice of hearing in writing</u> was published on April 8, 2021 followed by a <u>revised notice</u> on May 17, 2021, inviting Indigenous peoples, members of the public and stakeholders to file written submissions. The Commission considered written submissions from Bruce Power (<u>CMD 21-H103.1</u> and <u>CMD 21-H103.1A</u>), CNSC staff (<u>CMD 21-H103</u>, <u>CMD 21-H103.A</u> and <u>CMD 21-H103.B</u>) and four intervenors.<sup>5</sup>

#### 2.0 DECISION

8. Based on its consideration of the matter, as described in more detail in the following sections of this Record of Decision, the Commission concludes that granting the section 7 exemption to Bruce Power from the requirement under paragraph 9(2)(b) of the *Class I Nuclear Facilities Regulations*, satisfies the conditions of section 11 of the GNSCR. Therefore,

pursuant to section 7 of the NSCA, the Commission temporarily exempts the reactor operators previously certified at an OPG nuclear power plant from the requirement under paragraph 9(2)(b) of the *Class I Nuclear Facilities Regulations*, as it pertains to sections 23.1.2(2) and 23.2.1 of REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants*.

9. With this decision, the Commission authorizes the use of a replacement minimum experience requirement of 6 months rather than the one-year requirement at the plant where certification is sought through the completion of a structured Learning Package, and authorizes the transfer of general training from an OPG nuclear power plant, appropriate to the knowledge requirements of the position, to meet the requirements for the completion of general training at Bruce Power.

<sup>&</sup>lt;sup>5</sup> See Appendix A for a list of interventions

#### 3.0 ISSUES AND COMMISSION FINDINGS

- 10. In making its decision, the Commission considered the information provided on this matter and sent questions to Bruce Power and CNSC staff, through CMD 21-H103Q, seeking further information. A key consideration by the Commission was the opposing views expressed by two labour unions. The Commission is satisfied with the completeness of the responses provided by Bruce Power (CMD 21-H103.1A) and CNSC staff (CMD 21-H103.B) to the questions raised by the Commission.
- 11. Persons working in positions that have a direct impact on nuclear safety at a NPP, as identified in the Power Reactor Operating Licences (PROL), must be certified in accordance with subsection 9(2) of the CINFR. Bruce Power's applicable training program and examinations are specified in the certification programs required in Licence Condition 2.4 of PROL 18.01/2028: "The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document, CNSC REGDOC-2.2.3, Personnel Certification, Volume III...".

### Nuclear Power Plant Experience

- 12. The Commission considered the request as it pertained to the minimum experience requirement as outlined in section 23.1.2(2) of REGDOC-2.2.3, Volume III: "two years of plant experience at any NPP of the same type and at least one year of additional plant experience at the NPP where certification is sought".
- 13. Bruce Power indicated that 7 candidates would benefit from its minimum experience exemption request. Bruce Power also informed that the candidates have approximately 11 years of NPP experience at OPG's Pickering and/or Darlington NPPs, including an average of approximately 3 years of experience being certified.
- 14. CNSC staff stated that the combination of Bruce Power's personalized structured Learning Package and the depth of knowledge, skills and attributes of a certified operator from an OPG-operated NPP is an acceptable level of experience that meets the intent of the REGDOC. Accordingly, CNSC staff's position is that the proposed six-month reduction in plant experience does not pose an unreasonable risk as it relates to fulfilling the minimum experience requirement as outlined in section 23.1.2(2) of REGDOC-2.2.3, Volume III.
- 15. CNSC staff explained that the six-month plant experience alternative proposed by Bruce Power would be fulfilled through the implementation of a structured Learning Package that provides exposure to operational and administrative processes that are specific to certified operators. CNSC staff is of the view that, although the proposed six-month plant familiarization is shorter than the one-year requirement, the structured Learning Package will ensure that candidates are fully prepared to undertake the initial certification program for reactor operators at Bruce Power. CNSC staff further submitted that certified reactor operators possess relevant knowledge, skills and attributes that vastly exceed those of candidates from non-certified roles.

16. The Commission is satisfied that the proposed alternate approach for meeting the requirements of section 23.1.2(2) of REGDOC-2.2.3, Volume III will have no impact on the safe operation of the Bruce Power NPPs. The Commission is satisfied that the applicable candidates have appropriate experience, and that Bruce Power has mechanisms in place to ensure that these candidates will be fully prepared to undertake the initial certification program for reactor operators. Accordingly, with regard to granting the requested exemption from the minimum experience requirement set out in REGDOC-2.2.3, Volume III, the Commission is satisfied that in granting the exemption, the conditions of section 11 of the GNSCR have been met.

## **General Training Requirements**

- 17. The Commission considered the request as it pertained to the general training requirements as outlined in section 23.2.1 of REGDOC-2.2.3, Volume III.
- 18. Bruce Power requested an alternate approach where the position knowledge requirements, outlined in section 23.2.1, obtained at an OPG-operated NPP could be considered valid at Bruce Power as part of the initial certification program of the candidate.
- 19. CNSC staff indicated that candidates would only be exempted from the general training and certification examination within the initial training program, and that they would still have to undertake the rest of the initial training program in accordance with REGDOC-2.2.3, Volume III. CNSC staff explained that all certified reactor operators receive the same general training at either Bruce Power or OPG, and that the applicable candidates have already successfully completed General training and certification examination at OPG NPPs. CNSC staff added that these candidates received continuing training, formal evaluations and requalification testing at OPG.
- 20. CNSC staff is of the view that Bruce Power's proposed approach satisfactorily addresses initial certification requirements and objectives for minimum experience and general training for reactor operators previously certified at OPG and hired into the initial training program at Bruce Power. Accordingly, CNSC staff considers that the application of an exemption for general training from the application of REGDOC-2.2.3 Volume III would have no impact on safety, and that the training will continue to be appropriate to the knowledge requirements of the position.
- 21. Based on the evidence, the Commission is satisfied that the training received at an OPG NGS is equivalent to that received and completed at a Bruce Power NGS. The Commission is of the view that acquiescing to the exemption and allowing the transfer and recognition of the acquired, appropriate knowledge at OPG to Bruce Power aligns with section 11 of the GNSR requirements. As it pertains to the general training appropriate to the knowledge requirements of the position, the Commission is of the view that the conditions of section 11 of the GNSCR have been met. The Commission is satisfied that the temporary exemption from sections 23.2.1 of REGDOC-2.2.3, Volume III for general training will have no impact on the safe operation of the Bruce Power NPPs.

#### **Interventions**

- 22. As part of its review, the Commission considered the written intervention submitted by the Society of United Professionals (CMD 21-H103.2) which was opposed to the granting of the temporary exemption request on the basis that it would reduce training and certification requirements and potentially have an impact on safety. The Commission also considered the written interventions submitted by Louis-Arthur Langlois, in CMD 21-H103.5, who raised concerns on the impact the exemption could have on elements such as systems identification nomenclature, response to emergency situations, and certification examinations.
- 23. On the other hand, the Power Workers' Union (<u>CMD 21-H103.3</u>) supported the request stating that Bruce Power's application for the temporary exemption is reasonable and would have a neutral impact on safety.
- 24. The Canadian Nuclear Association (CNA) (CMD 21-H103.4) was also supportive of the granting of the temporary exemption. The CNA is of the view that the use of an alternate approach for meeting the requirements of section 23.1.2(2) of REGDOC-2.2.3, Volume III would not cause any safety concerns. The CNA is also of the view that the applicable candidates, previously certified by OPG, would bring with them a depth of knowledge, skills and attributes ensuring that the request for a six-month reduction in NGS experience at Bruce Power would have a neutral impact on safety.
- 25. In the evidence submitted, Bruce Power and CNSC staff reported that Bruce Power's structured Learning Package is designed to provide acclimation to Bruce Power's systems identification nomenclature and adequately engrains nomenclature familiarity. Bruce Power also reported that passing the simulator skills CNSC examination is the ultimate test of performance to mitigate risk and the ability to handle emergency situations specific to Bruce NGS. Bruce Power added that this was delivered in its certification training program, its Integrated Plant Operations and the simulator skills phase.
- 26. The information provided in response to the questions in <u>CMD 21-H103Q</u> satisfactorily addressed the concerns raised by the intervenors. After considering all of the evidence, the Commission is satisfied that the exemption request and proposed alternate approach for meeting requirements aligns with the requirements of section 11 of the GNSR and candidates are prepared to undertake the certification program.

#### 4.0 CONCLUSION

27. The Commission is satisfied that granting the requested exemption, together with the use of an alternate approach for meeting the requirements of REGDOC-2.2.3, Volume III for the certification of reactor operators previously certified at OPG and hired into the initial training program at Bruce Power, will have no impact on the safe operation of the Bruce Power NPPs.

- 28. Therefore, in accordance with section 7 of the *Nuclear Safety and Control Act* and section 11 of the *General Nuclear Safety Control Regulations*, the Commission temporarily exempts Bruce Power from the requirements of paragraph 9(2)(b) of the *Class I Nuclear Facilities Regulations* for the application of:
  - section 23.1.2(2) of REGDOC-2.2.3, Volume III for minimum experience for reactor operators certified at OPG and hired into the initial certification program at Bruce Power; and
  - section 23.2.1 of REGDOC-2.2.3, Volume III for general training for reactor operators certified at OPG and hired into the initial certification program at Bruce Power.
- 29. With this decision, the Commission authorizes the use of a replacement minimum experience requirement of six months at the plant where certification is sought through the completion of a structured Learning Package, and authorizes the transfer of general training experience from OPG to Bruce Power for the completion of general training at Bruce Power.

Marcel Lacroix Lacroix Date: 2021.07.21 08:42:10 -04'00'	July 21, 2021
Marcel Lacroix	Date
Member,	
Canadian Nuclear Safety Commission	

# Appendix A – Intervenors

Intervenors –Written Submission	Document Number
Society of United Professionals	CMD 21-H103.2
Power Workers' Union	CMD 21-H103.3
Canadian Nuclear Association	CMD 21-H103.4
Louis-Arthur Langlois	CMD 21-H103.5