Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

UNPROTECTED/NON PROTÉGÉ

SUPPLEMENTAL/COMPLÉMENTAIRE

CMD: 21-H103.A

Date signed/Signé le : 14 JUNE 2021

Reference CMD(s)/CMD(s) de référence : 21-H103, 21-H103.1, 21-H103.2

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

Demande d'exemption temporaire de l'exigence de l'alinéa 9(2)(b) du Règlement sur les installations nucléaires de catégorie I pour les opérateurs de réacteur accrédités à Ontario Power Generation qui sont embauchés dans le programme d'accréditation initiale de Bruce Power

Hearing in writing based solely on written submissions

Audience fondée uniquement sur des mémoires

Scheduled for:

July 2021

Prévue pour :

juillet 2021

Submitted by:

CNSC Staff

Soumise par :

Le personnel de la CCSN

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Summary

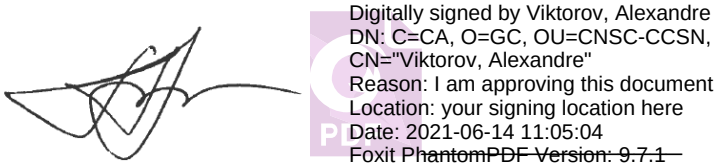
The purpose of this supplemental Commission Member Document (CMD) is to provide CNSC staff regulatory position respecting comments received from an intervention on the original CMD.

Résumé

L'objectif de ce CMD supplémentaire est de fournir la position réglementaire du personnel de la CCSN par rapports à des commentaires présentés dans une intervention sur le CMD original.

Signed/signé le

June 14, 2021/ 14 juin 2021



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Director General

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EXECUTIVE SUMMARY

The Society of United Professionals submitted an intervention, CMD 21-H103.2, in April 2021, commenting on Bruce Power's temporary exemption application. CNSC staff have reviewed the Society of United Professionals' submission and note that it focuses on the differences between the Bruce Power NPP and Ontario Power Generation's (OPG) Pickering NPP in the three categories of station layout considerations, emergency response duties and nomenclature. CNSC staff note that the differences in these three categories of plant specific knowledge for candidates previously certified at OPG and hired into the Bruce Power initial certification training program will be addressed through the Bruce Power training program for reactor operators, along with the proposed structured Learning Package. The Bruce Power training program complies with section 23 of REGDOC-2.2.3 Volume III, *Certification of Persons Working at Nuclear Power Plants*. CNSC's staff's regulatory review in respect of the points raised in CMD 21-H103.2 and on how Bruce Power's training program for reactor operators considers those points are provided in this CMD.

Since the approval of CMD 21-H103, the expected publication date of REGDOC-2.2.3, Volume III, Version 2 has been delayed. This supplementary CMD also updates the information related to its publication.

In CMD 21-H103, CNSC staff have concluded that the temporary exemption and the use of the proposed alternative approach for additional plant experience, which includes a six-month structured Learning Package, are reasonable and acceptable, and do not have an impact on Bruce Power's safety envelope. Following a review of CMD 21-H103.2, CNSC staff's conclusions in respect of this matter remain unchanged.

Referenced documents in this CMD are available to the public upon request.

1 OVERVIEW

This CMD 21-H103.A is a supplemental CMD to the *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*, CMD 21-H103. CNSC's staff's regulatory review on the points raised in the intervention from the Society of United Professionals – CMD 21-H103.2 – and on how Bruce Power's training program considers the points raised in that intervention are provided in this CMD.

This CMD also provides an update on the expected publication of version 2 of REGDOC-2.3.3, Volume III, *Certification of Persons Working at Nuclear Power Plants*.

2 CNSC STAFF'S REVIEW OF CMD 21.H103.2 AND RESPONSE

The CNSC received an intervention from the Society of United Professionals, CMD 21-H103.2, on April 23, 2021 providing comments and raising concerns about the proposed exemption as detailed in CMDs 21-H103 and 21-H103.1. The Society of United Professionals submitted points in respect of three areas:

a. Station layout considerations

b. Emergency response duties

c. Nomenclature

2.1 CNSC staff's review of the points submitted in relation to station layout considerations and emergency response duties

In accordance with section 23.1.2 of REGDOC-2.2.3, Volume III, *Certification of Persons Working at Nuclear Power Plants*, two years is the minimum plant experience requirement for a new hire with little or no operational experience to become familiar with the plant layout and understand basic operational concepts at the NPP where certification is sought. If the new hire has acquired at least two years of plant experience at another NPP of the same type, whether in a certified role or not, then in accordance with section 23.1.2(2) of REGDOC-2.2.3, Volume III, this person is required to gain at least one year of additional plant experience at the NPP where certification is sought. The minimum plant experience requirement does not qualify the nature of the plant experience and it also does not recognize the depth of knowledge, skills and attributes that a certified reactor operator from another NPP possesses.

In the case of reactor operators previously certified at OPG, Bruce Power has proposed a reduction in initial plant experience at the Bruce NPP from the prescribed one year to six months. The initial plant experience component not only focuses on shift assignments covering field operation and plant layout

considerations but it also includes a variety of basic safety, radiation protection, mechanical, electrical, instrumentation and control, reactor and turbine courses. Although Bruce Power's proposed six-month structured Learning Package is shorter, it recognizes the depth of knowledge, skills and attributes that a certified reactor operator from OPG already possesses.

Furthermore, Bruce Power's proposed structured Learning Package includes field walk downs of all general and specific Operator Field Inspections, all Emergency Field Operations and all Emergency Mitigating Equipment guides for the NPP where certification is sought. These field walk downs impart the necessary knowledge of locations and elevations for hazard assessment during emergency response, for safety systems test execution, for standard operating procedure execution and for the administration/issuing of work protection at Bruce Power.

The initial certification program contains other program elements after the initial plant experience and General training program to provide extensive candidate exposure to plant layout considerations. Of specific note are the co-piloting program, the on-the-job training (OJT) program and the simulator skills training program. Reactors operators previously certified at OPG would have to successfully complete these program elements as part of their initial certification program at Bruce Power.

2.2 CNSC staff's review of the points submitted related to nomenclature

Since all equipment, systems, procedures and panel instruments and control at the Bruce NPP are categorized according to the Bruce Power system identification, coverage of system identification and nomenclature is intrinsic to every training program and certification processes that the previously certified operators from OPG would have to complete to become certified at Bruce Power.

The proposed structured Learning Plan includes coverage of Bruce Power's specific system identification and nomenclature as part of conducting plant familiarization training and completing field walk downs. However, it is the subsequent station-specific training, simulator-based training, OJT and co-piloting that provide a certification candidate the bulk of the exposure to system identification practices and knowledge. Whether it be for training or testing on diagnosing equipment failures, identifying equipment isolation, carrying out administrative procedures or issuing maintenance activities, system identification knowledge is applied continuously throughout the certification training program in order to successfully meet the training and testing objectives.

CNSC staff have reviewed the points raised by the intervenor and have determined that the proposed six-month additional plant experience component – rather than the prescribed one-year requirement per REGDOC-2.2.3, Volume III – will have no impact on the knowledge assimilation of the Bruce Power specific system identification. It is the 24-month certification pathway following the General training program that will ensure that previously certified reactor

operators from OPG transferring to Bruce Power have fully mastered Bruce Power's system identification and nomenclature.

2.3 Summary of CNSC staff's regulatory review of points raised in CMD 20-H103.2

Based on CNSC staff's review of the points raised in the intervention in CMD 21-H103.2 and of the programs Bruce Power has in place and proposes to have in place should the Commission grant this temporary exemption, CNSC staff have determined that the points raised are satisfactorily addressed through the requirements given in the alternative approach as described in the Bruce Power submissions [1, 2] and in CMD 21-H103.

3 UPDATE ON PUBLICATION OF REGDOC-2.2.3, VOLUME III, VERSION 2

In CMD 21-H103, CNSC staff recommended that the proposed exemption be valid until the publication of REGDOC-2.2.3, Volume III, Version 2, through which CNSC staff plan to address personnel transfer requirements as proposed in this exemption request. CNSC staff submitted that the expected publication of version 2 was in 2022.

The expected publication date for REGDOC-2.2.3, Volume III, Version 2 has been revised to 2023. This revised publication date does not alter CNSC staff's recommendation that the proposed exemption be valid until such time that REGDOC-2.2.3, Volume III, Version 2 is published.

4 CONCLUSIONS

CNSC staff have reviewed the points raised by an intervenor in CMD 21-H103.2 and have concluded that Bruce Power's proposal for an alternate approach for minimum experience and general training requirements satisfactorily address the points raised in the intervention. Bruce Power's initial certification training program, which complies with REGDOC-2.2.3, Volume III and the alternative approach for meeting the additional plant experience of section 23.1.2(2) of REGDOC-2.2.3, Volume III which includes a structured Learning Package, satisfactorily addresses the elements of concern raised by the intervenor.

CNSC staff's conclusion remains unchanged, that the Commission's granting of a temporary exemption, which will authorize Bruce Power to use the proposed alternative approach for additional plant experience in respect of the initial certification training program, is reasonable and acceptable and will not have an impact on Bruce Power's safety envelope.

REFERENCES

1. Bruce Power Letter, M. Burton to M. Leblanc, "Alternate Approach for Minimum Experience and Generals Training requirements for Personnel Certified at Ontario Power Generation hired into the Initial Certification Program at Bruce Power", November 30, 2020, BP-CORR-00531-00809, e-Doc 6433624.
2. Bruce Power Letter, M. Burton to M. Leblanc, "Request for a temporary exemption under section 7 of the Nuclear Safety and Control Act and section 11 of the General Nuclear Safety and Control Regulations", March 30, 2021, BP-CORR-00531-01481, e-Doc 6527264.
3. CNSC Regulatory Document REGDOC-2.2.3, Volume III *Certification of Persons Working at Nuclear Power Plants*, September 2019.