Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

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CMD: 24-H110

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A Licence Amendment

Application by Bruce Power, Ontario Power Generation and New Brunswick Power for the Amendment of their Power Reactor Operating Licences to implement REGDOC-2.2.3, *Personnel Certification, Volume III*: *Certification of Reactor Facility Workers*, Version 2

Hearing in writing based solely on written submissions

Scheduled for:
January 2025

Submitted by:

CNSC Staff

Une modification de permis

Demande de Bruce Power, Ontario Power Generation et New Brunswick Power pour la modification de permis d'exploitation d'un réacteur de puissance afin de mettre en œuvre le REGDOC-2.2.3, *Accréditation du personnel, tome III : Accréditation des travailleurs des installations dotées de réacteurs, version 2*

Audience fondée uniquement sur des mémoires

Prévue pour :
Janvier 2025

Soumise par :

Le personnel de la CCSN

e-Doc 7099925 (WORD)
e-Doc 7416511 (PDF)

Summary

This CMD presents information about the following matters of regulatory interest with respect to Ontario Power Generation, Bruce Power, and New Brunswick Power:

- Amendment to Licence Condition 2.4 of the Bruce Nuclear Generating Stations A and B Power Reactor Operating Licence (PROL) (PROL 18.03/2028)
- Amendment to Licence Condition 2.3 of the Darlington Nuclear Generating Station PROL (PROL 13.04/2025)
- Amendment to Licence Condition 2.4 of the Pickering Nuclear Generating Station PROL (PROL 48.01/2028)
- Amendment to Licence Condition 2.4 of the Point Lepreau Nuclear Generating Station PROL (PROL 17.00/2032)

CNSC staff recommend the Commission take the following actions:

- Amend the Licence Conditions of the PROLs listed above to replace REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants*, Version 1 with REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Reactor Facility Workers,* Version 2

The following items are attached:

- Current licences
- Proposed licences

Résumé

Le présent CMD présente de l'information sur un ensemble de questions d'ordre réglementaire concernant Bruce Power, Ontario Power Generation et Énergie Nouveau-Brunswick :

- Modification de la condition de permis 2.4 du Permis d'exploitation d'un réacteur de puissance (PERP) pour les centrales nucléaires de Bruce-A et de Bruce-B (PERP 18.03/2028)
- Modification de la condition de permis 2.3 du PERP de la centrale nucléaire Darlington (PERP 13.04/2025)
- Modification de la condition de permis 2.4 du PERP de la centrale nucléaire Pickering (PERP 48.01/2028)
- Modification de la condition de permis 2.4 du PERP de la centrale nucléaire Point Lepreau (PERP 17.00/2032)

La Commission pourrait considérer prendre les mesures suivantes :

- Modification de la condition de permis des PERP énumérés ci-dessus pour remplacer REGDOC-2.2.3, Accréditation du personnel, tome III : Accréditation des personnes qui travaillent dans des centrales nucléaires, version 1 par le REGDOC-2.2.3, *Accréditation du personnel, tome III : Accréditation des travailleurs des installations dotées de réacteurs, version 2*

Les pièces suivantes sont jointes :

- Permis actuels
- Permis proposés

Signed/signé le

2024-11-28

Digitally signed by Viktorov, Alexandre
DN: C=CA, O=GC, OU=CNSC-CCSN, CN="Viktorov, Alexandre"
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Directeur général

Direction de la réglementation des centrales nucléaires

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TABLE OF CONTENTS

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LAND ACKNOWLEDGEMENT

The Canadian Nuclear Safety Commission (CNSC) is committed to building and strengthening trust and advancing reconciliation with Indigenous Nations and communities. It is important to give recognition and thanks to the land and the Indigenous peoples that the CNSC works with across Canada.

The CNSC aims to be an open, culturally sensitive, respectful organization that engages in open and transparent dialogue, partnership, and collaboration with Indigenous Nations and communities. The CNSC envisions its staff as being active listeners who understand the role they play in advancing reconciliation and acknowledges that they have a lot to learn from Indigenous peoples and their perspectives.

The Darlington and Pickering sites lie within the lands and waters of the Michi Saagiig Anishinaabeg, the Gunshot Treaty (1877-88), the Williams Treaties (1923), and the Williams Treaties First Nations Settlement Agreement (2018). The Bruce site lies within the Traditional and Treaty Territory of the Saugeen Ojibway Nation (SON), and the traditional harvesting areas of the Métis Nation of Ontario (MNO) region 7 and the Historic Saugeen Métis (HSM). The Point Lepreau site lies within the traditional territory covered by the Peace and Friendship Treaties with the Wolastoqey, Peskotomuhkati and Mi’gmaq peoples.

PLAIN LANGUAGE SUMMARY

In June 2023, the Commission approved REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Reactor Facility Workers*, Version 2 for publication and use (CMD 23-M22 [1], [2]). This document outlines the requirements and guidance set by the Canadian Nuclear Safety Commission (CNSC) for the certification of reactor facility workers.

In October 2023, the Canadian Nuclear Safety Commission (CNSC) published REGDOC-2.2.3, Volume III, Version 2, which replaced the previous Version 1. At present, all operating power reactor licensees are required to adhere to REGDOC-2.2.3, Volume III, Version 1 in accordance with a Licence Condition (LC) under their Power Reactor Operating Licences (PROLs), Gentilly-2 holds a decommissioning licence that references RD-204: *Certification of Persons Working at Nuclear Power Plants*; no changes to the licence conditions for Gentilly-2 are being sought at this time.

To implement the revised REGDOC-2.2.3, an amendment to the LCs of all PROLs will be necessary. This involves updating LC number 2.4 for PROLs associated with Bruce A and B, Point Lepreau, and Pickering, and Licence Condition number 2.3 for the Darlington PROL.

REGDOC-2.2.3, Volume III, Version 2 represents a shift from the previous prescriptive regulatory approach, introducing several new processes to address emerging regulatory expectations. Consequently, the industry will need time to update their governance structures and fully implement the changes outlined in the new REGDOC-2.2.3 Volume III.

In February 2024, nuclear power plant licensees submitted requests to amend their licences to incorporate REGDOC-2.2.3, Volume III, Version 2 [3,4,5]. Bruce Power and New Brunswick Power (NB Power) submitted their implementation plans in March 2024 [6,7] and Ontario Power Generation (OPG) submitted their implementation plans in April 2024 [8].

CNSC staff have reviewed the licensees' applications for amending their PROLs and determined that the requests are acceptable, comply with regulatory requirements, and will improve safety. CNSC staff are confident that the licensees will meet all requirements of REGDOC-2.2.3 Volume III, Version 2 and will be prepared to manage the relevant programs and processes starting January 31, 2025.

PART ONE

This Commission Member Document (CMD) is presented in two parts.

Part 1 of this CMD includes:

1. An overview of the matter being presented;
2. Overall conclusions and overall recommendations;
3. General discussion pertaining to the regulatory and technical basis;
4. Discussion about other matters of regulatory interest; and
5. Addenda material that complements items 1 through 4.

Part 2 of this CMD provides all available information pertaining directly to the current and proposed licence.

1. OVERVIEW

1.1 Background

In June 2023, the Commission approved REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Reactor Facility Workers*, Version 2 ("Version 2") for publication and use. This new version replaced REGDOC 2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants*, Version 1 ("Version 1"). Version 2 outlines the requirements and guidance to ensure that power reactor facility workers seeking CNSC certification, or renewal of such certification, are qualified for their roles. The specific positions requiring certified workers are listed in the applicable PROLs (Part 2 of this CMD).

It is expected that Version 2 be implemented within a reasonable timeframe. Workers in training should be selected, trained, and examined under the revised regulatory framework before undergoing CNSC certification. The updates in Version 2 also include many regulatory improvements that will enable CNSC staff to manage the personnel certification process and oversee licensee compliance more effectively.

1.2 Highlights

The implementation of CNSC regulatory documents typically involves updating Licence Conditions Handbooks (LCH) during licensing renewals and requesting ongoing implementation plans from licensees, which are then incorporated into the LCH. However, the implementation of REGDOC-2.2.3, Volume III, Version 2 differs as it is referenced within a LC in all PROLs, and therefore a licence amendment is required to amend the LC.

In February 2024, Bruce Power, OPG, and NB Power submitted requests to amend their licences to include REGDOC-2.2.3, Volume III, Version 2, replacing REGDOC-2.2.3*,* Version 1 [3,4,5]. The proposed licence changes are detailed in part 2 of this CMD.

The licensees also submitted their implementation plans. Their submissions are summarized below:

- Bruce Power: Submitted March 27, 2024, with implementation from June 2024 to January 2025 [6].
- NB Power: Submitted March 28, 2024, with implementation in September 2024 [7].
- OPG: Submitted April 25, 2024, with no specific dates provided [8].

In response to these submissions, CNSC staff requested that licensees provide a unified implementation date to ensure consistency across all licensees and facilities. A coordinated approach will facilitate a smoother transition to the new regulatory framework and ensure all licensees are aligned. Standardizing implementation is important for several reasons:

- Ensuring fairness and equivalence of the personnel certification scheme.
- Setting consistent legal precedents for personnel certification decisions.
- Avoiding complications in worker transfers and legal appeals.
- Implementing recent GBA+ improvements uniformly across all sites.
- Efficiently managing the significant undertaking of updating certification titles and issuing new certificates.

On September 19, 2024, the licensees confirmed their readiness for aligned implementation, stating that Version 2 will be fully in effect by January 31st, 2025. They also provided the additional requested documentation [10,11,12] as follows:

- Revised versions of their previously submitted detailed plans, which now include:
  - References to REGDOC-2.2.3, Volume III, Version 2 requirements, detailing the new or modified programs and processes that need to be implemented.
  - A brief description of the licensee programs and processes to be implemented or modified, along with a summary of the required changes.
  - Planned implementation dates for these changes.
- A copy or summary of any gap analysis conducted to identify the changes needed for full compliance with REGDOC-2.2.3, Volume III Version 2.

The requests for a licence amendment submitted by the licensees indicate that the licensees have conducted a gap analysis to identify the differences between the two versions of REGDOC-2.2.3, Volume III and to determine what programs and processes need to be modified or created. CNSC staff have determined that the licensees have provided all requested information regarding the changes needed to address the identified gaps.

1.3 Overall Conclusions

CNSC staff have reviewed the licensees' applications for amending their PROLs and have determined that these requests are acceptable, meet regulatory requirements, and will improve safety. Staff are confident that licensees will meet all of the requirements outlined in REGDOC-2.2.3, Volume III, Version 2 and will be prepared to manage the relevant programs and processes starting January 31, 2025.

1.4 Overall Recommendations

CNSC staff recommend that the Commission:

Amend the Licence Conditions of the PROLs identified in Appendix C to replace REGDOC-2.2.3*, Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants*, Version 1 with REGDOC-2.2.3*, Personnel Certification, Volume III: Certification of Reactor Facility Workers*, Version 2.

2. Environmental Protection Review

CNSC staff have reviewed the application under the NSCA and have concluded that, given that the nature of the proposed licence amendment, which pertains to the certification of workers, there is no impact to the environment and an environmental assessment is not needed.

3. General Assessment of SCAs

CNSC staff review and assess an applicant's proposed measures and controls. Although CNSC's staff assessment of the application considers all SCAs, only the SCA that is relevant in providing a good overall indication of how regulatory requirements will be met by applicants are covered in this CMD.

3.1 Human Performance Management SCA

3.1.1 Discussion

In October 2023, the CNSC published REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Reactor Facility Workers*, Version 2, which replaced the previous REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants*, Version 1.

Key changes documented in REGDOC- 2.2.3, Vol III, Version 2 include:

- A shift to performance-based, technology-neutral requirements.
- Introduction of a unified certification scheme for all shift supervisors.
- Removal of certain training topics, aligning with REGDOC-2.2.2 *Personnel Training*, Version 2.
- Alignment with the latest fitness-for-duty requirements, including drug and alcohol testing.
- Elimination of validity periods for knowledge-based certification exams.
- Adoption of a simplified, universal quarterly minimum shift requirement.
- Documentation of standardized application processes.
- Introduction of new processes to enhance efficiency, including personnel transfers.
- Addition of guidance to address longstanding regulatory interpretation issues.

Since the regulatory changes documented in Version 2 offer licensees the flexibility to adopt best practices and address operational issues, licensees' staff are keen to see the updated framework put into place. However, implementing all program improvements made possible by the introduction of performance-based requirements will require comprehensive analyses spanning several months. Therefore, CNSC staff expect the minimum requirements to be met, and for licensees to be compliant with Version 2, by the time the PROLs are amended, while further improvements can be made over time based on site-specific resources. The CNSC's compliance verification program allows for the flexibility required to support this transition. Compliance verification will be conducted as new programs and processes are implemented.

3.1.2 Regulatory focus

Licensees have submitted comprehensive gap analyses and adequate implementation plans, including scheduled milestones [10,11,12]. All licensees will be ready to comply with Version 2 by the deadlines outlined in their plans, ensuring they meet the January 31, 2025 target PROL amendment date.

Personnel certification requirements apply retroactively from the date of application for certification or certification renewal. Therefore, some candidates will be presented for certification in the next three to five years who may have been selected and trained under different or both versions of REGDOC-2.2.3 Volume III.

CNSC staff recommend that candidates who obtained qualifications under Version 1 be recognized as compliant under Version 2.

- The CNSC receives between 125 and 150 applications annually for power reactor personnel alone and referring all candidates needing recognition to the Commission would create an additional administrative burden.

To provide ECOs and DOs with an effective, but temporary means of managing these special cases, CNSC staff propose the Licence Condition be amended to state that workers who began an applicable initial training program in accordance with the requirements outlined in REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants*, before January 31, 2025, may continue to be certified under requirements of this version until January 31, 2030.

Given the comprehensive modernization of REGDOC-2.2.3 Volume III, the LCHs will require other modifications. The LCHs were amended over time to document interim solutions to regulatory gaps until REGDOC-2.2.3 Volume III could be revised. These stop-gap measures are no longer required post-revision and should be deleted.

The LCHs will be updated along with the licence amendment on January 31st, 2025 after commission approval.

3.1.3 Proposed Improvements

CNSC staff anticipates that REGDOC-2.2.3, Volume III, Version 2 will enhance both regulatory oversight and licensee operations in several ways:

- Facilitating the submission of compliant personnel certification applications.
- Supporting and ensuring licensee compliance.
- Reducing administrative and regulatory burdens by simplifying overly complex requirements.
- Clarifying terminology and regulatory interpretations.
- Addressing known regulatory issues, such as those related to shift managers.
- Implementing new standard processes to reflect contemporary employment practices, including personnel transfers between reactor facilities and post-retirement employment of certified workers.
- Mitigating candidate recruitment and retention challenges previously noted and only partially addressed in Version 1.

3.1.4 Conclusion

In summary, the introduction of REGDOC-2.2.3, Volume III, Version 2 marks a pivotal shift towards a more efficient and flexible regulatory framework for the Human Performance SCA. The proposed Licence Condition will facilitate a smooth adaptation period, ensuring that workers certified under previous regulations are acknowledged while aligning with the new standards.

4. Indigenous and Public Consultation and Engagement

4.1 Indigenous Consultation and Engagement

The common-law duty to consult with Indigenous Nations and communities applies when the Crown contemplates actions that may adversely affect potential or established Indigenous and/or treaty rights. The CNSC ensures that all of its licence decisions under the NSCA uphold the honour of the Crown and consider Indigenous peoples' potential or established Indigenous and/or treaty rights pursuant to section 35 of the *Constitution Act, 1982*.

CNSC staff are committed to building long-term relationships with Indigenous Nations and communities who have interest in CNSC-regulated facilities within their traditional and/or treaty territories. The CNSC's Indigenous engagement practices include sharing information, discussing topics of interest, seeking feedback and input on CNSC processes, and providing opportunities to participate in environmental monitoring. The CNSC also provides funding support (through the CNSC's Participant Funding Program) for Indigenous peoples to meaningfully participate in Commission proceedings and ongoing regulatory activities.

4.1.1 Conclusion

Based on the information provided in the application, CNSC staff have determined that the proposed licence amendments will not cause an adverse impact on potential or established Aboriginal or treaty rights.
Therefore, the duty to consult does not apply to these proposed amendments.

4.2 CNSC Public Consultation and Engagement

The NSCA mandates the CNSC to disseminate objective scientific, technical and regulatory information to the public concerning its activities and the activities it regulates. CNSC staff fulfill this mandate in a variety of ways, including hosting in-person and virtual information sessions and through annual regulatory reports.

During development of the REGDOC itself, the draft REGDOC was posted for public comment for 106 days. Any comments received during that time were considered in preparing the final version of the REGDOC.

4.2.1 Conclusion

CNSC staff will do public communications about the amendments as it pertains to Commission communications updates.

5. OTHER MATTERS OF REGULATORY INTEREST

No other matters of regulatory interest are relevant to this CMD.

6. OVERALL CONCLUSIONS AND RECOMMENDATIONS

CNSC staff's assessment of the licensees' submissions determined that the application complies with the regulatory requirements. CNSC staff recommend that the Commission:

- Amend the Licence Condition of the PROLs identified in Appendix C to replace REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants,* Version 1 with REGDOC-2.2.3*, Personnel Certification, Volume III: Certification of Reactor Facility Workers*, Version 2

REFERENCES

1. CNSC Commission Member Document, CMD 23-M22, Submission from CNSC staff on REGDOC-2.2.3, Volume III, Version 2, June 2023 (e-Doc 7008773)
2. CNSC Commission Document, Minutes of June 28, 2023 Commission Meeting, September 2023 (e-Doc 7123934)
3. NBP Letter, S. Bagshaw to D. Saumure, "Application to Amend the Point Lepreau Nuclear Generating Station Power Operating Licence - PROL 17.00/2032", February 9, 2024 (e-Doc 7218940)
4. BP Letter, M. Burton to D. Saumure, "Application for the Amendment of the Nuclear Power Reactor Operating Licence, Bruce Nuclear Generating Stations A and B", February 14, 2024 (e-Doc 7222244)
5. OPG Letter, S. Gregoris to D. Saumure, "Application to Amend the Darlington and Pickering Nuclear Generating Station Power Reactor Operating Licences, 13.03/2025 and 48.01/2028 Respectively", February 15, 2024 (e-Doc 7223643)
6. BP Letter, M. Burton to K. Lun, "Bruce A and Bruce B: Implementation of REGDOC-2.2.3, Volume III, Version 2", March 27, 2024 (e-Doc 7251411)
7. NBP Letter, S. Bagshaw to A. Bulkan, "NB Power REGDOC 2.2.3, Personnel Certification, Volume III, Certification of Reactor Facility Workers, Version 2: Implementation Plan in Support of Licence Amendment Request", Mach 28, 2024 (e-Doc 7252290)
8. OPG Letter, S. Gregoris to A. Mathai and R. Richardson, "OPG – Implementation of REGDOC-2.2.3, Personnel Certification, Volume III: Certification of Reactor Facility Workers, Version 2", April 25, 2024 (e-Doc 7270107)
9. CNSC Email, B. Torrie to B. Barron, "Implementation of REGDOC-2.2.3, Personnel Certification, Vol. III: Certification of Reactor Facility Workers, Version 2 – CTAG AI 2024-1-2", July 18, 2024 (e-Doc 7325000)
10. OPG Email, B. Barron to B. Torrie, "OPG - Implementation of REGDOC-2.2.3, Personnel Certification, Volume III: Certification of Reactor Facility Workers, Version 2", September 17, 2024 (e-Doc 7371870)
11. PLNGS Email, R. Sears to B. Torrie, "PLGS - REGDOC 2.2.3, VOL III, Version 2 - GAP analysis closure plan", September 19, 2024 (e-Doc 7371873)
12. BP Email, J. Smith to B. Torrie, "Bruce Power RegDoc 2.2.3 vol III V. 2 Implementation submission", September 19, 2024 (e-Doc 7371889)

Glossary

For definitions of terms used in this document, see *REGDOC-3.6, Glossary of CNSC Terminology*, which includes terms and definitions used in the *Nuclear Safety and Control Act* and the *Regulations* made under it, and in *CNSC regulatory documents* and other publications.

A. BASIS FOR THE RECOMMENDATION(S)

A.1 Regulatory Basis

The regulatory basis for the matters that are relevant to this CMD are as follows:

- *Nuclear Safety and Control Act*, subsection 24(2)
- *General Nuclear Safety and Control Regulations*, section 6
- Power Reactor Operation Licence, Bruce Nuclear Generating Stations A and B, PROL 18.03/2028
- Power Reactor Operation Licence, Darlington Nuclear Generating Station, PROL 13.04/2025
- Power Reactor Operation Licence, Pickering Nuclear Generating Station, PROL 48.01/2028
- Power Reactor Operation Licence, Point Lepreau Nuclear Generating Station, PROL 17.00/2032

A.2 Detailed Summary of CNSC Assessment of Application

CNSC's staff assessment of the licence amendment application included a completeness check, a sufficiency check, and a technical assessment against regulatory requirements. The completeness check verified whether the application included the prescribed information in accordance with the *Nuclear Safety and Control Act* and applicable regulations. For all facilities (i.e., Class I and Class II facilities), it is important to consider and address all licence application requirements within the applicable CNSC regulations.

The sufficiency check verified whether the application included sufficient and quality information in order for CNSC staff to conduct the technical assessment. The technical assessment verified whether the application included adequate safety and control measures to address CNSC requirements. Documents originally submitted as part of the application were revised, updated, or replaced over the course of the assessment to address CNSC requirements.

Pursuant to Section 3 of the *General Nuclear Safety and Control Regulations* Licences – General Application Requirements	**Location in Application or Supporting Document(s) as Noted by Bruce Power, OPG and NB Power**	**Complete?**	**Sufficient?**	**Adequate?**
(1) An application for a licence shall contain the following information:		Y		

Pursuant to Section 3 of the *General Nuclear Safety and Control Regulations* Licences – General Application Requirements	**Location in Application or Supporting Document(s) as Noted by Bruce Power, OPG and NB Power**	**Complete?**	**Sufficient?**	**Adequate?**
(a) The applicant's name and business address;		Y		
(b) The activity to be licensed and its purpose;		Y		
(c) A description and the results of any test, analysis or calculation performed to substantiate the information included in the application;		Y		
(d) The applicant's organizational management structure insofar as it may bear on the applicant's compliance with the paragraphs 24(4)(a) and (b) of the NSCA and the regulations made under it, including the internal allocation of functions, responsibilities and authority;		Y		
(e) Any other information required by the paragraphs 24(4)(a) and (b) of the NSCA or the regulations made under it for the activity to be licensed and the nuclear substance, nuclear facility, prescribed equipment or prescribed information to be encompassed by the licence.		Y		

A.2 Technical Basis

The technical basis for the recommendations presented in this CMD are listed in the table

Applicable Standards and Codes per Safety and Control Area

SCA	Document Title	Sufficient?	Adequate?
Human Performance Management	▪ REGDOC-2.2.3*, Personnel Certification, Volume III: Certification of Reactor Facility Workers*, Version 2 ▪ REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power*	Y	

B. SAFETY AND CONTROL AREA FRAMEWORK

B.1 Safety and Control Areas Defined

The safety and control areas identified in section 2.2 and discussed in summary in sections 3.1 is the specific area of regulatory interest for this CMD.

The following table provides a high-level definition of each SCA. The specific areas within each SCA are to be identified by the CMD preparation team in the respective areas within section 3 of this CMD.

SAFETY AND CONTROL AREA FRAMEWORK		
Functional Area	**Safety and Control Area**	**Definition**
Management	Management System	Covers the framework which establishes the processes and programs required to ensure an organization achieves its safety objectives and continuously monitors its performance against these objectives and fostering a healthy safety culture.
	Human Performance Management	Covers activities that enable effective human performance through the development and implementation of processes that ensure that a sufficient number of licensee personnel are in all relevant job areas and have the necessary knowledge, skills, procedures and tools in place to safely carry out their duties.
	Operating Performance	Includes an overall review of the conduct of the licensed activities and the activities that enable effective performance.
Facility and Equipment	Safety Analysis	Covers maintenance of the safety analysis that supports that overall safety case for the facility. Safety analysis is a systematic evaluation of the potential hazards associated with the conduct of a proposed activity or facility and considers the effectiveness of preventive measures and strategies in reducing the effects of such hazards.
	Physical Design	Relates to activities that impact on the ability of systems, components and structures to meet and maintain their design basis given new information arising over time and taking changes in the external environment into account.

SAFETY AND CONTROL AREA FRAMEWORK		
Functional Area	**Safety and Control Area**	**Definition**
	Fitness for Service	Covers activities that impact on the physical condition of systems, components and structures to ensure that they remain effective over time. This area includes programs that ensure all equipment is available to perform its intended design function when called upon to do so.
Core Control Processes	Radiation Protection	Covers the implementation of a radiation protection program in accordance with the *Radiation Protection Regulations*. This program must ensure that contamination levels and radiation doses received by individuals are monitored and controlled and maintained ALARA.
	Conventional Health and Safety	Covers the implementation of a program to manage workplace safety hazards and to protect workers.
	Environmental Protection	Covers programs that identify, control and monitor all releases of radioactive and hazardous substances and effects on the environment from facilities or as the result of licensed activities.
	Emergency Management and Fire Protection	Covers emergency plans and emergency preparedness programs which exist for emergencies and for non-routine conditions. This also includes any results of participation in exercises.
	Waste Management	Covers internal waste-related programs which form part of the facility's operations up to the point where the waste is removed from the facility to a separate waste management facility. This area also covers the planning for decommissioning.
	Security	Covers the programs required to implement and support the security requirements stipulated in the regulations, the licence, orders, or expectations for the facility or activity.
	Safeguards and Non-Proliferation	Covers the programs and activities required for the successful implementation of the obligations arising from the

SAFETY AND CONTROL AREA FRAMEWORK		
Functional Area	**Safety and Control Area**	**Definition**
		Canada/International Atomic Energy Agency (IAEA) safeguards agreements, as well as all other measures arising from the *Treaty on the Non-Proliferation of Nuclear Weapons*.
	Packaging and Transport	Covers programs for the safe packaging and transport of nuclear substances and radiation devices to and from the licensed facility.

B.2 Specific Areas for this Facility Type

The following table identifies the specific areas that comprise Human Performance Management SCA identified for this CMD:

SPECIFIC AREAS FOR THIS FACILITY TYPE		
Functional Area	**Safety and Control Area**	**Specific Areas**
Management	Human Performance Management	13. Human Performance Programs 14. Personnel Training 15. Personnel Certification 16. Work Organization and Job Design 17. Fitness for Duty

PART 2

Part 2 of this CMD provides all relevant information pertaining directly to the licence, including:

6. The current licence;

7. Any proposed changes to the conditions, licensing period, or formatting of an existing licence;

8. The proposed licence

CURRENT LICENCES

This appendix includes the following current licences:

- Power Reactor Operation Licence, Bruce Nuclear Generating Stations A and B, PROL 18.03/2028
- Power Reactor Operation Licence, Darlington Nuclear Generating Station, PROL 13.04/2025
- Power Reactor Operation Licence, Pickering Nuclear Generating Station, PROL 48.01/2028
- Power Reactor Operation Licence, Point Lepreau Nuclear Generating Station, PROL 17.00/2032

PROPOSED LICENCE CHANGES

Overview

Currently, licensees (Bruce Power, OPG and NB Power) are required to meet REGDOC-2.2.3 Volume III, Version 1 as a Licence Condition (LC) under the Safety and Control Area Human (SCA) Performance Management in all Power Reactor Operating Licences (PROLs). To implement REGDOC-2.2.3 Volume III, Version 2, all PROLs will require an amendment to the appropriate LC, identified below, to replace REGDOC-2.2.3 Volume III, Version 1 with REGDOC-2.2.3 Volume III, Version 2.

Licence Conditions

Over time, licensees adopted different names for the positions designated for CNSC certification, in some cases retaining legacy terms established under the Atomic Energy Control Board (AECB) when AECB staff would "authorize" personnel to perform their duties. Consequently, the actual titles of the designated positions at power reactor facilities vary depending on the licensee and facility. REGDOC-2.2.3 Volume III establishes a generic terminology regrouping designated positions of equivalent type and associating the generic positions with the actual, site-specific positions. To ensure the designated positions are staffed with duly certified workers, it is important for LCs to designate the correct positions in accordance with REGDOC-2.2.3 Volume III. The following is a complete list of each licensee, and the current and proposed LC under the SCA Human Performance Management:

1. Bruce Power – REGDOC-2.2.3, Volume III, Version 1 is referenced in LC 2.4 of PROL 18.03/2028

    a. Current

> The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF PERSONS WORKING AT NUCLEAR POWER.
>
> Persons appointed to the following positions require certification:
>
> (i) authorized health physicist;
>
> (ii) authorized nuclear operator;
>
> (iii) control room shift supervisor;
>
> (iv) Unit 0 control room operator; and
>
> (v) shift manager.

    b. Proposed

The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document **REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF REACTOR FACILITY WORKERS, VERSION 2. Workers who began an applicable initial training program in accordance with the requirements outlined in REGDOC-2.2.3, Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants, before January 31, 2025, may continue to be certified under requirements of this version until January 31, 2030.**

Persons appointed to the following positions require certification:

(i) authorized health physicist;

(ii) authorized nuclear operator;

(iii) control room shift supervisor;

(iv) Unit 0 control room operator; and

(v) shift manager.

2. OPG Darlington – REGDOC-2.2.3, Volume III, Version 1 is referenced in LC 2.3 of PROL 13.04/2025

    a. Current

The licensee shall implement and maintain training programs for workers. The certification process and supporting examinations and tests shall be conducted in accordance with CNSC regulatory document REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF PERSONS WORKING AT NUCLEAR POWER PLANTS.

Persons appointed to the following positions require certification:

(i) Responsible Health Physicist;

(ii) Shift Manager;

(iii) Control Room Shift Supervisor;

(iv) Authorized Nuclear Operator; and

(v) Unit 0 Control Room Operator.

    b. Proposed

The licensee shall implement and maintain training programs for workers. The certification process and supporting examinations and tests shall be conducted in accordance with CNSC regulatory document **REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF REACTOR FACILITY WORKERS, VERSION 2. Workers who began an applicable initial training program in accordance with the requirements outlined in REGDOC-2.2.3, Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants, before January 31, 2025, may continue to be certified under requirements of this version until January 31, 2030.**

Persons appointed to the following positions require certification:

(i) Responsible Health Physicist;

(ii) Shift Manager;

(iii) Control Room Shift Supervisor;

(iv) Authorized Nuclear Operator; and

(v) Unit 0 Control Room Operator.

3. OPG Pickering – REGDOC-2.2.3, Volume III, Version 1 is referenced in LC 2.4 of PROL 48.01/2028

    a. Current

The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF PERSONS WORKING AT NUCLEAR POWER PLANTS.

Persons appointed to the following positions require certification:

(i) Responsible Health Physicist;

(ii) Shift Manager;

(iii) Control Room Shift Supervisor; and

(iv) Authorized Nuclear Operator.

    b. Proposed

The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document **REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF REACTOR FACILITY WORKERS, VERSION 2. Workers who began an applicable initial training program in accordance with the requirements outlined in REGDOC-2.2.3, Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants, before January 31, 2025, may continue to be certified under requirements of this version until January 31, 2030.**

Persons appointed to the following positions require certification:

(i) Responsible Health Physicist;

(ii) Shift Manager;

(iii) Control Room Shift Supervisor; and

(iv) Authorized Nuclear Operator.

4. NB Power – REGDOC-2.2.3, Volume III, Version 1 is referenced in LC 2.4 of PROL 17.00/2032

    a. Current

The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF PERSONS WORKING AT NUCLEAR POWER PLANTS.

Persons appointed to the following positions require certification:

(i) Senior Health Physicist;

(ii) Shift Supervisor; and

(iii) Control Room Operator.

    b. Proposed

The licensee shall implement and maintain certification programs in accordance with CNSC regulatory document **REGDOC-2.2.3, PERSONNEL CERTIFICATION, VOLUME III: CERTIFICATION OF REACTOR FACILITY WORKERS, VERSION 2. Workers who began an applicable initial training program in accordance with the requirements outlined in REGDOC-2.2.3, Personnel Certification, Volume III: Certification of Persons Working at Nuclear Power Plants, before January 31, 2025, may continue to be certified under requirements of this version until January 31, 2030.**

Persons appointed to the following positions require certification:

(i) Senior Health Physicist;

(ii) Shift Supervisor; and

(iii) Control Room Operator.