



REGDOC-2.2.3, Personnel Certification, Volume II: Certification of Reactor Facility Workers, Version 2

Commission Meeting June 28, 2023



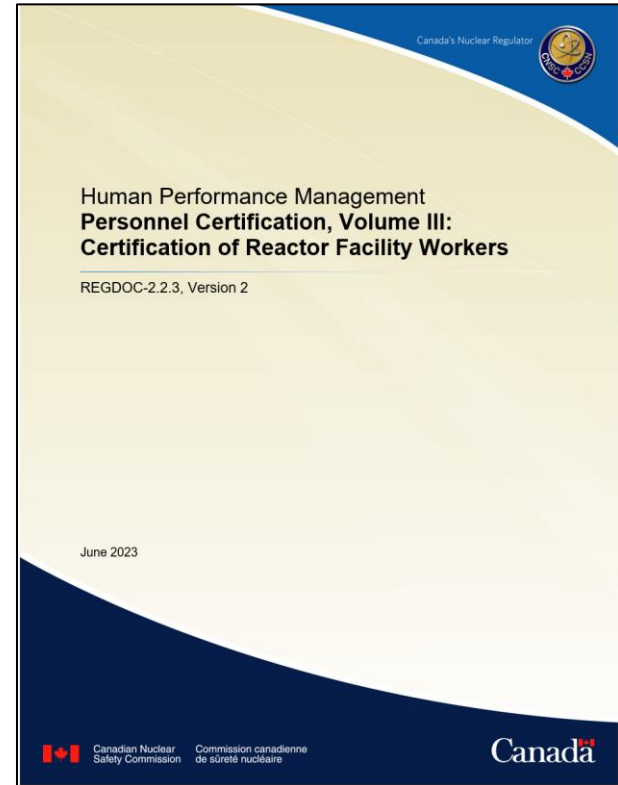


PURPOSE

Request for approval of:

REGDOC-2.2.3,

*Personnel Certification, Volume III:
Certification of Reactor Facility
Workers, Version 2*



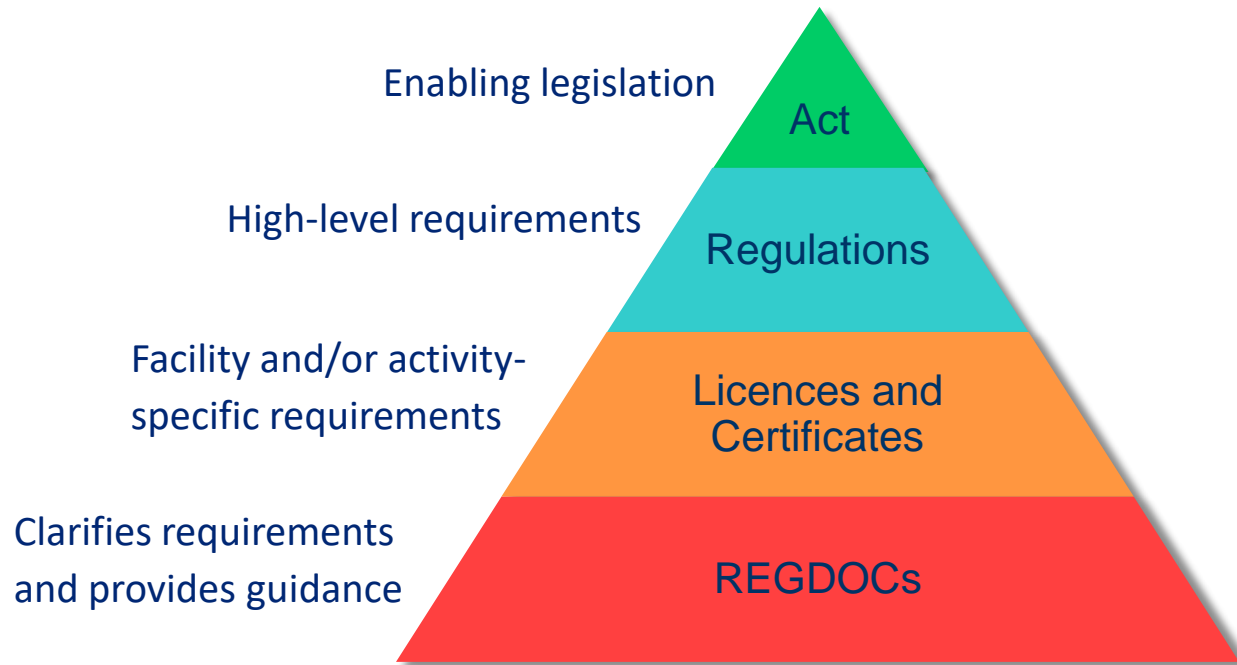


OUTLINE

- ✓ Regulatory framework
- ✓ Purpose, scope, and summary of changes to the REGDOC
- ✓ Results of public consultation
- ✓ Implementation
- ✓ Conclusion and recommendation



THE CNSC'S REGULATORY FRAMEWORK



All parts of the regulatory framework work together to articulate objectives to be met to prevent unreasonable risk to the environment, health and safety of persons and national security.



REGULATORY DOCUMENT FRAMEWORK

1.0 Regulated Facilities and Activities

- 1.1 Reactor Facilities
- 1.2 Class IB Facilities
- 1.3 Uranium Mines and Mills
- 1.4 Class II Facilities
- 1.5 Certification of Prescribed Equipment
- 1.6 Nuclear Substances and Radiation Devices

2.0 Safety and Control Areas

- 2.1 Management System
- **2.2 Human Performance Management**
- 2.3 Operating Performance
- 2.4 Safety Analysis
- 2.5 Physical Design
- 2.6 Fitness for Service
- 2.7 Radiation Protection
- 2.8 Conventional Health and Safety

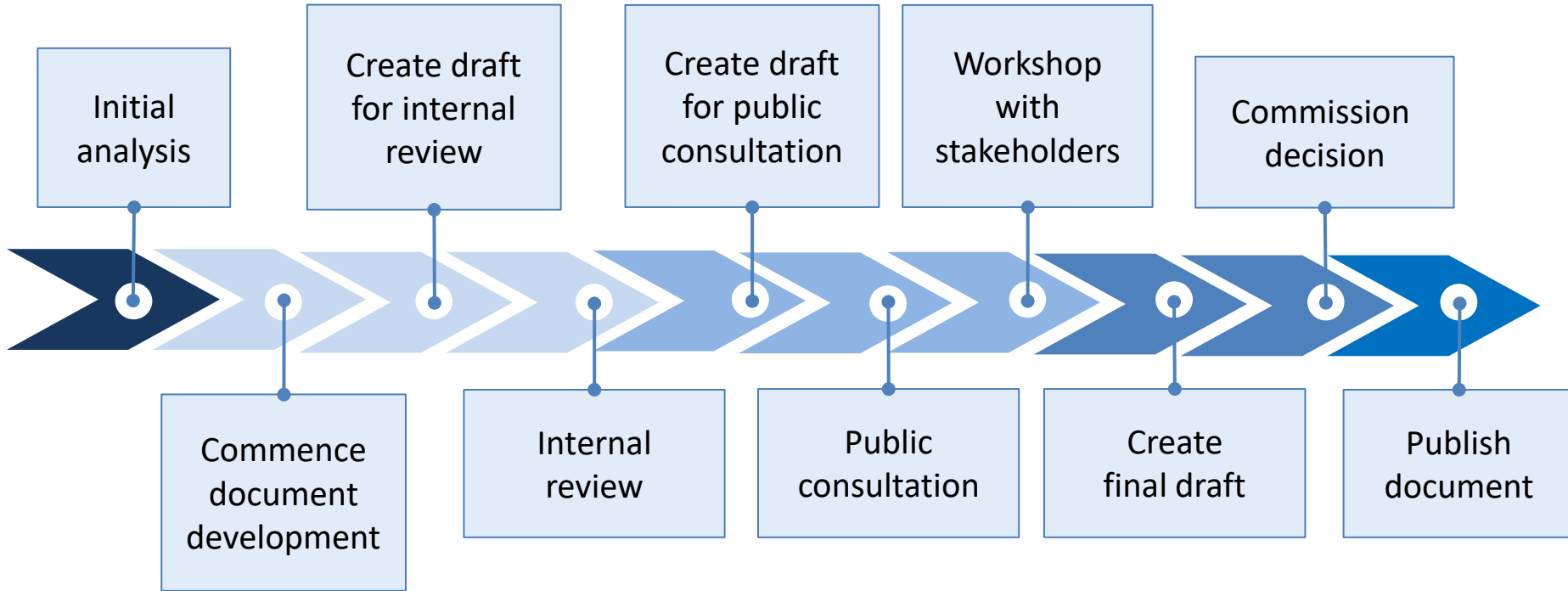
- 2.9 Environmental Protection
- 2.10 Emergency Management and Fire Protection
- 2.11 Waste Management
- 2.12 Security
- 2.13 Safeguards and Non-Proliferation
- 2.14 Packaging and Transport

3.0 Other Regulatory Areas

- 3.1 Reporting Requirements
- 3.2 Public & Indigenous Engagement
- 3.3 Financial Guarantees
- 3.4 Commission Proceedings
- 3.5 CNSC processes and practices
- 3.6 Glossary of CNSC terminology



REGDOC DEVELOPMENT PROCESS



REGDOCs are developed through an iterative development process



REGDOC-2.2.3 VOLUME III OVERVIEW

Safety objective:

Safe and competent performance from workers employed in designated positions.

Purpose:

To specify requirements and guidance pertinent to the certification of the reactor facility workers employed or seeking employment in designated positions.

Scope:

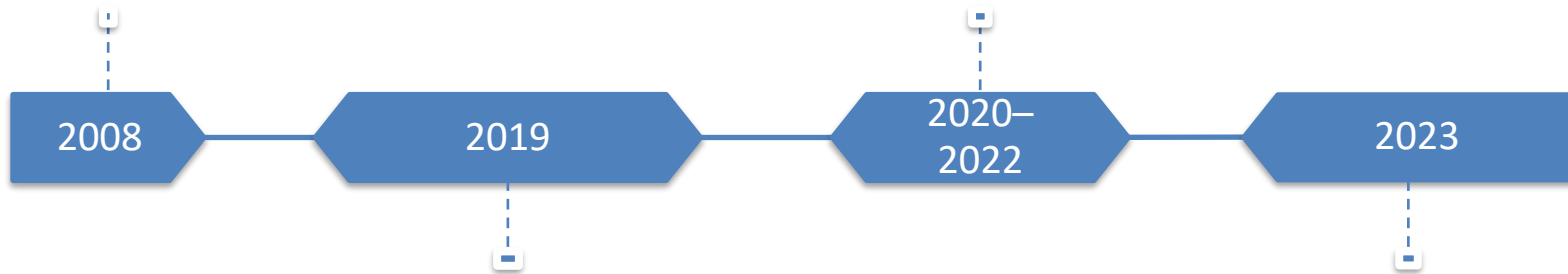
Workers seeking CNSC certification at Class IA nuclear facilities identified in licences and personnel involved in their training and evaluation.



HISTORY OF DOCUMENT

Original
Publication
as RD-204

Analysis and
development



Re-publication as
REGDOC-2.2.3 Vol III V.1
(one interim change)

Presentation of
modernized version
to the Commission



REGDOC REVISION OBJECTIVES



Balanced
Approach



Regulatory
Clarity



Regulatory
Improvements



Reduction
of Burden



Completeness



GENDER-BASED ANALYSIS PLUS (GBA+)

- GBA+ performed throughout analysis
- Examined all requirements potentially posing unnecessary barriers to candidate recruitment and retention, including:
 - Prescribed education levels and work experience which may eliminate suitable candidates
 - Defined training and exam chronology (set via exam validity periods) which impact family planning



KEY REGULATORY CHANGES 1/4

**Performance-based
technology-neutral
requirements**



- Personnel selection program replaces education and experience prerequisites
- Training systems (aka SAT) replace set training chronology and topics lists
- Technology-neutral objectives replace CANDU-centric requirements
- Technology-specific compliance schemes moved to appendices



KEY REGULATORY CHANGES 2/4

Removal of validity periods (expiry dates) from all knowledge-based certification examinations



- Reduces burden for CNSC staff and provides flexibility to licensees
- Facilitates family planning and should improve recruitment and retention
- 2-year validity period retained for simulator-based examinations



KEY REGULATORY CHANGES 3/4

**End of distinct
certification for Shift
Managers (SM) at
multi-unit sites**



- Reduces burden for both CNSC staff and licensee staffs
- Strengthens the requalification testing regime
- Resolves SM employment issues
- Integrates LCH amendments



KEY REGULATORY CHANGES 4/4

Other important changes



- Simplification of minimum shift requirement scheme eliminates burden and strengthen requirements
- Alignment with other REGDOCs
- Addition of guidance and explicit expectations to minimize regulatory interpretation issues



PUBLIC CONSULTATION

**PUBLIC
CONSULTATION**

139 comments



**July 4, 2022 –
October 18, 2022**

**FOLLOW-UP WORKSHOP
WITH COG MEMBERS**



February 16, 2023

**REGDOC-2.2.3, Vol. III
SUBMITTED TO
COMMISSION
FOR APPROVAL**



June 28, 2023



REGDOC-2.2.3 CONSULTATION FOLLOW-UP

- 1 Use of subjective and prescriptive wording
- 2 Increased site experience for Senior Health Physicists (SHP)
- 3 Minimum employment of operations personnel
- 4 Misalignment with CNSC examination guides
- 5 Applicability and implementation at new facilities
- 6 Perceived conflict with Systematic Approach to Training (SAT)



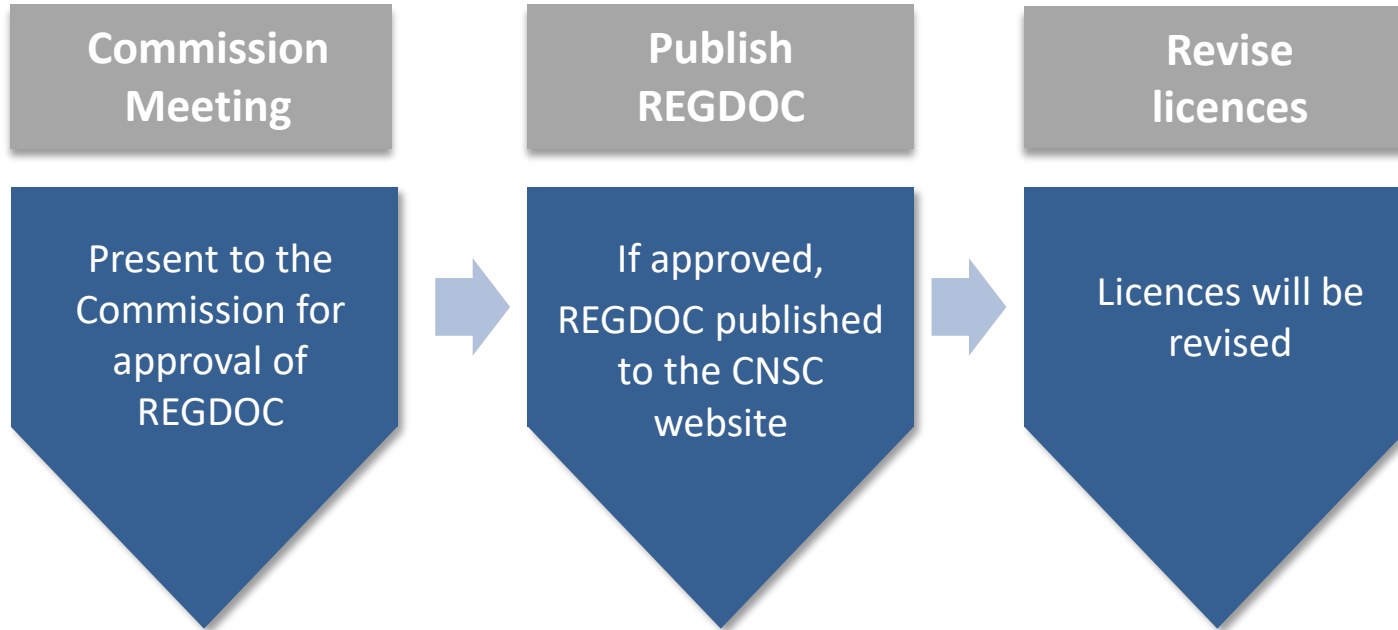
EXPECTED IMPACTS

CNSC staff anticipate positive impacts on both regulatory oversight and licensee operations.

- Standardizes existing personnel certification processes
- Reduces administrative and regulatory burden
- Clarifies regulatory interpretation and terminology
- Resolves known regulatory issues
- Improves efficiency by establishing new processes
- Improves candidate recruitment and retention



CONSISTENT APPROACH TO IMPLEMENTATION





CONCLUSION

REGDOC-2.2.3, Volume III specifies the detailed requirements and provides guidance pertinent to the certification of reactor facility workers employed in designated positions.

The document is:

- GBA+ informed
- Modern
- Flexible
- Comprehensive

Effective consultation
has resulted in a
document supported
by stakeholders.



RECOMMENDATION

CNSC staff recommend:

The Commission approve REGDOC-2.2.3, *Personnel Certification, Volume III: Certification of Reactor Facility Workers, Version 2*



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Thank You! Questions?



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Annexes

Use of subjective and prescriptive wording

Issue:
Use of subjective wording



- Terminology was carefully selected
- Performance-based approach requires qualitative metrics where quantitative metrics are unavailable or undesirable



Increased requirements for Senior Health Physicists (SHP)

Issue:

Specifying that last 6 months of prior work experience for SHPs must be gained at the hiring facility would increase staffing challenges



Change to REGDOC:

- Two (2) years of prior work experience at any reactor facility will be recognized
- The overall four (4) years is already more flexible



Minimum employment

Issue:

Revised minimum employment may cause scheduling and tracking issues and prevent meeting the quarterly minimum shift requirement



Change to REGDOC:

Revised requirement considers all work done as part of the minimum staff complement as meaningful exposure, as per the newly documented purpose of minimum employment



Misalignment with CNSC examination guides

Issue:

Some elements of the revised REGDOC do not align with the existing CNSC examination guides



- The examination guides are outdated and CANDU-centric
- Their revision will resume once REGDOC-2.2.3, Volume III is published

Applicability and implementation at new facilities

Issue:

Requirements will be a challenge to implement at new facilities, notably Small Modular Reactors (SMR)



- Already revised to be technology-neutral and less CANDU-centric
- Graded approach can be applied before and after commissioning
- New layout allows future updates



Perceived conflict with SAT programs

Issue:

Overlap with systematic approach to training (SAT) and REGDOC-2.2.2, *Personnel Training*



- Generic descriptions necessary to replace prescriptive requirements
- Performance-based safety goals will guide SAT at new facilities
- Overlap with REGDOC-2.2.2 is by design, but both are aligned