

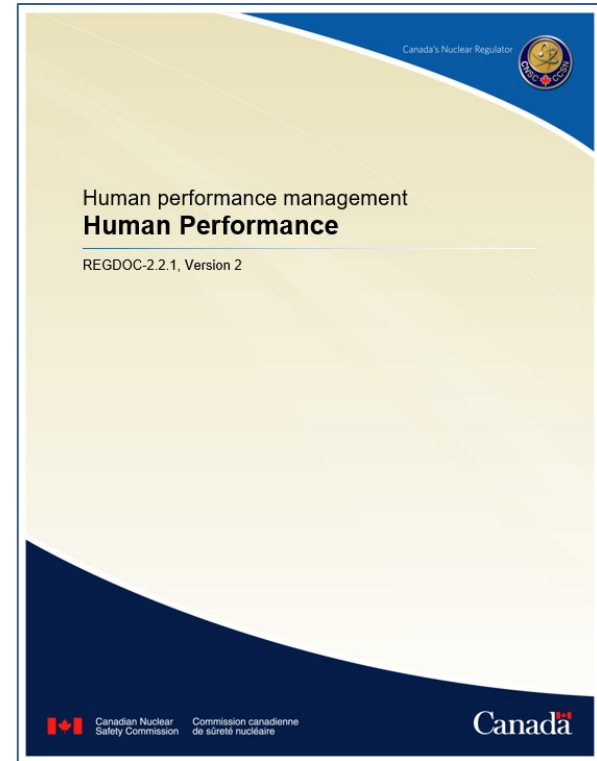


# REGDOC-2.2.1, *Human Performance*, Version 2

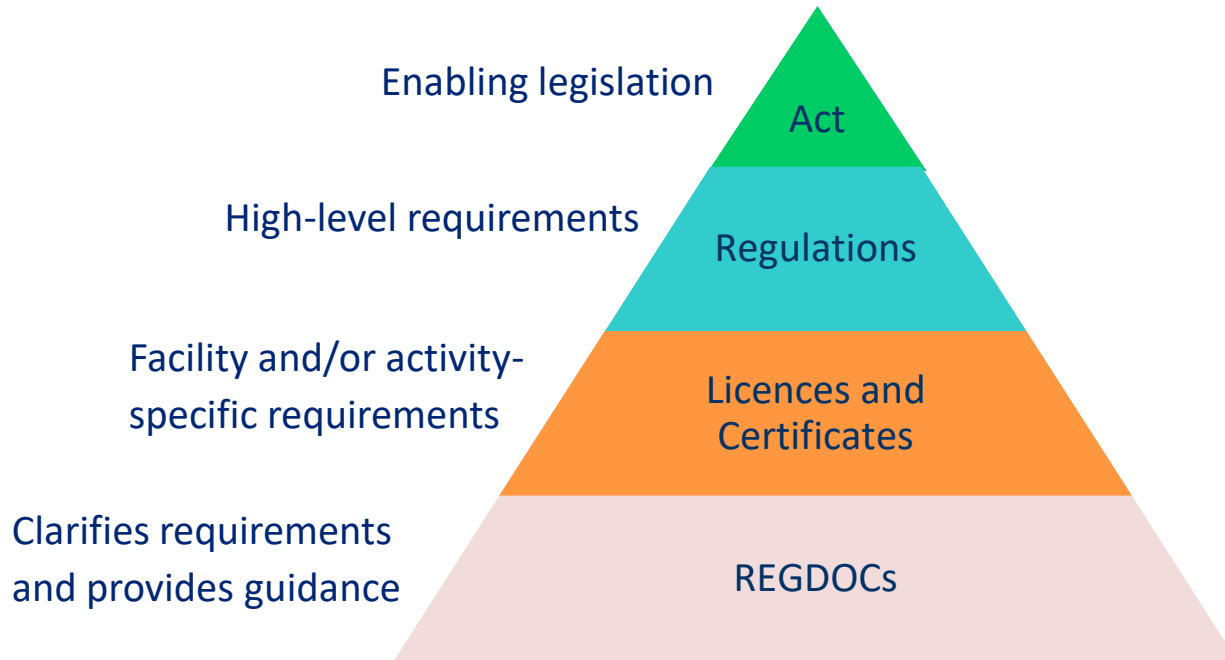
## Commission meeting: November 2, 2023



## Request acceptance of: **REGDOC-2.2.1,** *Human Performance, Version 2*



- ✓ Overview of the regulatory framework
- ✓ Summary of changes to the REGDOC
- ✓ Results of public consultation
- ✓ Implementation
- ✓ Conclusion and recommendation



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.

## 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

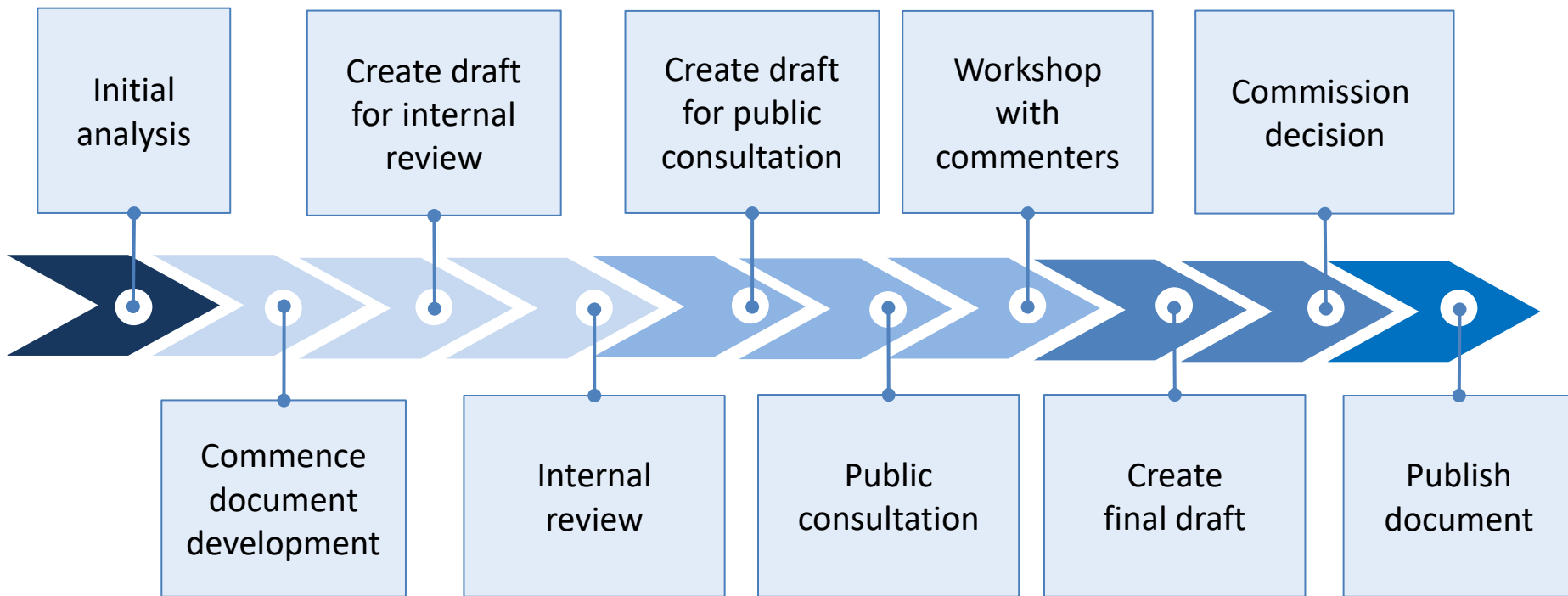
- 2.1 Management System
- **2.2 Human Performance Management**
- 2.3 Operating Performance
- 2.4 Safety Analysis
- 2.5 Physical Design
- 2.6 Fitness for Service
- 2.7 Radiation Protection
- 2.8 Conventional Health and Safety

- 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

## **Safety objective:**

Establish requirements and guidance related to how a licensee is meeting its goals related to human performance and safety.

## **Purpose:**

Provide information on how to manage, in a comprehensive, integrated manner, the factors related to humans, technology and the organization (HTO), that are associated with a licensee's human performance program.

## **Scope:**

Applicants and licensees of Class I nuclear facilities and of uranium mines and mills.



Provide  
regulatory  
clarity

- Past inspection results
- Change to the regulations



Align with  
international  
practices

- International guidance, literature and research
- Other nuclear regulators



Reflect  
Canadian  
context

- Industry principles and guidance



**Clear  
requirements  
for the human  
performance  
program**

- **Describes 4 requirements** associated with the program: document, implement, lead, and learn
- **Defines the program**, labels requirements clearly, provides illustrative guidance

## Introduction of the systemic approach

- Requires understanding of human error through systemic analysis
- Uses the internationally accepted model of “humans, technology and organization (HTO)”
- Offers flexibility in the application of the approach, using a wider lens

## Ensuring active and visible leadership

- Recognizes the role management plays in supporting human performance
- References relevant research, e.g. leadership cited as key contributor to safety
- Aligns with safety culture and management system requirements and guidance, strengthening these key areas

## A focus on continual improvement

- Focuses on fostering environment where workers are encouraged to report concerns or suggest improvements
- Supports licensees in better understanding the gaps between work as prescribed and work as done
- Offers flexibility on the measures a licensee takes to learn and improve

Version 2 was shared for consultation from August to December 2022, during which 36 comments, from 7 commenters, were received, on the following topics:

1

Human performance program

2

Just culture

3

Graded, risk-based approach

4

Systemic approach

5

Role of implementation

## The key features of implementation are as follows:

- Promote awareness among CNSC inspectors and licensees:
  - Cover key concepts associated with HTO factors
  - Provide information on ways licensees can meet requirements
  - Materials will be available on demand, post implementation
- CNSC staff will have periodic meetings with licensee groups and individual licensees to discuss implementation
- CNSC staff will request the appropriate licensees submit an implementation plan

## **CNSC staff anticipate positive impacts on both regulatory oversight and licensees' operations:**

- Clear, non-prescriptive regulatory expectations
- Alignment with leading international regulatory practices
- Continual improvement through implementation and engagement strategy

**REGDOC-2.2.1, Version 2** clarifies requirements and provides guidance for understanding and managing HTO factors to achieve safe and effective human performance.

## **CNSC staff recommend:**

The Commission accepts

**REGDOC-2.2.1, *Human Performance*, Version 2**





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Thank You! Questions?



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