

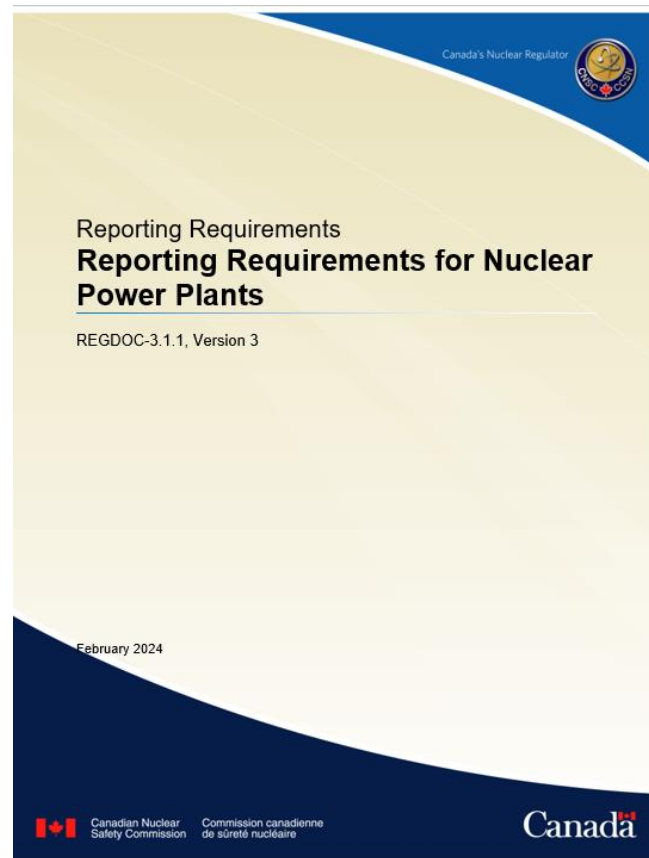


# REGDOC-3.1.1, *Reporting Requirements for Nuclear Power Plants, Version 3*

Commission Meeting  
February 21, 2024



CNSC staff are seeking Commission acceptance of REGDOC-3.1.1, *Reporting Requirements for Nuclear Power Plants*, version 3



- ➔ REGDOC-3.1.1 overview
- ➔ REGDOC-3.1.1 revision goals
- ➔ Key changes
- ➔ Consultation results
- ➔ Implementation
- ➔ Conclusion

## Objective:

Consolidates and clarifies reporting requirements found in:

- Nuclear Safety and Control Act (NSCA)
- Regulations
- REGDOCs

## Purpose:

Provides information on content and timing of reporting for scheduled reports, event reports, and notifications to the CNCS

## Scope:

Requirement for nuclear power plants

## Scheduled Reports

### Quarterly Reports

- Safety Performance Indicators
- NPP Pressure Boundaries
- NPP Personnel
- Operational Security

### Annual Reports

- Radiation Protection
- Environmental Protection
- Research and Development
- Risk and Reliability
- Fuel Monitoring & Inspection

## Event Reports & Notifications

Administrative Reports  
or Notifications

Preliminary Event Reports (PER)  
or Immediate Notifications

Detailed Event Reports (DER)



Add requirements  
from updated  
regulations

- *Radiation Protection Regulations*



Add requirements  
from new or updated  
regulatory documents

- **REGDOC-2.2.4**, *Fitness for Duty, Managing Worker Fatigue*
- **REGDOC-2.2.4**, *Fitness for Duty, Volume II, Managing Alcohol and Drug Use*



Removed requirements  
found elsewhere in the  
regulatory framework  
(Examples below)

- **REGDOC-2.4.2**, *Probabilistic Safety Assessment (PSA) for Reactor Facilities*
- **REGDOC-2.9.1**, *Environmental Principles, Assessments and Protection Measures*
- **REGDOC-2.11.2**, *Decommissioning*
- **REGDOC -2.12.3**, *Security of Nuclear Substances: Sealed Sources and Category I, II and III Nuclear Material*



## Improve clarity

- Integrate existing guidance
- Refine terminology & definitions



## Improve organization

- Re-structure reporting requirements for scheduled reports
- Modify Appendix A to improve Details of Reporting Requirements for Event Reports



## Integrate Operating Experience (OPEX)

- Update content of scheduled reports
- Update timelines for preliminary event reports
- Update and improve templates for reporting

## Changes to Scheduled Reports

- Annual reporting on radiation protection (RP)
  - align with updated *Radiation Protection Regulations*
  - move RP reporting requirement from the fourth quarter NPP Personnel report
  - includes reporting on Radiation Protection Program



## Changes to Scheduled Reports

- Quarterly reporting operational security
  - introduce reporting requirements for cyber security
  - introduce reporting requirements for special security equipment

## Changes to Event Reporting

- Modify the timeline for Preliminary Event Reports
- Introduce retraction process
- Clarify when a Detailed Event Report is needed
- Introduce new reportable events
  - fitness for Duty
  - chemical and biological hazards

## Updates to terminology & definitions

- Systems, Structures, and Components (SSCs)  
Important to Safety
  - *aligns with REGDOC-2.5.2, Design of Reactor Facilities*
- Pressure Boundary (classified systems)
  - *aligns with CSA N285.0, General requirements for pressure-retaining systems and components in CANDU nuclear power plants*
- Serious Process Failure (SPF)
  - *links SPF to fuel fitness for service*

**Version 3** was shared for consultation from April to August 2022, during which 103 comments were received from four commenters.

Topics covered by the comments included:

1

Communicating relevant events with Indigenous Nations and communities

2

Perceived increase in administrative burden

3

Opportunities for additional clarity

All commenters received a copy of the final CNSC staff responses

1

## Communicating relevant events with Indigenous Nations and communities

What we heard	How we addressed it
<ul style="list-style-type: none"> <li>Concern that REGDOC-3.1.1 doesn't identify mechanisms for licensee to use for communicating relevant reportable events to Indigenous Nations and communities</li> </ul>	<ul style="list-style-type: none"> <li>Comment will be considered during upcoming analyses of:               <ul style="list-style-type: none"> <li>REGDOC-3.2.1, <i>Public Information and Disclosure</i></li> <li>REGDOC-3.2.2, <i>Indigenous Engagement</i></li> </ul> </li> <li>CNSC staff proposed leveraging regularly scheduled meetings between CNSC staff and Indigenous Nations and communities to discuss any concerns.</li> </ul>

## 2

## Perceived increase in administrative burden

What we heard	How we addressed it
<ul style="list-style-type: none"><li>• New reporting requirements relative to version 2 are burdensome</li></ul>	<ul style="list-style-type: none"><li>• Evaluated and refined language to ensure intent and scope of reporting requirement were clear</li><li>• Confirmed that new requirements contribute to trending licensee performance or regulatory oversight</li></ul>
<ul style="list-style-type: none"><li>• Level of information required in scheduled reports is not needed</li></ul>	<ul style="list-style-type: none"><li>• Where possible reduced the scope of what needs to be reported, and changed the reporting frequency from quarterly to annually</li></ul>
<ul style="list-style-type: none"><li>• Content of detailed event reports is onerous</li></ul>	<ul style="list-style-type: none"><li>• Clarified that detailed event reports are only required for higher significance events</li></ul>

## 3

## Opportunities for additional clarity

What we heard	How we addressed it
<ul style="list-style-type: none"><li>• Additional guidance needed in many places</li></ul>	<ul style="list-style-type: none"><li>• Added guidance where suggested</li><li>• Often used text suggested by stakeholders</li></ul>
<ul style="list-style-type: none"><li>• Looking for simplified Appendix A, with less regulatory text</li></ul>	<ul style="list-style-type: none"><li>• Simplified introductory text for Appendix A</li><li>• Separated contextual regulatory text from the actual reporting provisions</li></ul>

## Should the Commission accept the REGDOC, the key features of implementation are as follows:

- Publish REGDOC-3.1.1 and associated forms on CNSC website
- Request implementation plans from licensees
- Review implementation plans and timelines
- Revise Licence Conditions Handbooks (LCHs)
- Return to Commission to request amendment to the respective Power Reactor Operating Licences (PROLs), where applicable



## **REGDOC-3.1.1, Version 3:**

- Incorporates reporting requirements from updated regulations
- Incorporates reporting requirements from new and updated REGDOCs
- Integrates operating experience
- Provides greater clarity on reporting requirements
- Supports CNSC staff in trending performance and informing regulatory oversight activities

## CNSC staff recommend:

The Commission accept **REGDOC-3.1.1, *Reporting Requirements for Nuclear Power Plants, Version 3*** for publication and use.



# Connect With Us

Thank You! Questions?



[nuclearsafety.gc.ca](http://nuclearsafety.gc.ca)



REGDOC Section	Original	Correction																																																												
Reference 13	CSA N292.3, <i>Management of Low- and Intermediate-Level Radioactive Waste</i>	Change to: CSA N292.0, <i>General principles for the management of radioactive waste and irradiated fuel</i>																																																												
Section 3.5 2(d) Section 3.5 2(i) Appendix B.1 Table D.6	Terminology ' <i>whole-body dose</i> '	Change to: ' <i>effective dose</i> '																																																												
Table D.1	<table border="1"> <thead> <tr> <th colspan="4">Collective Dose for Station:</th> </tr> <tr> <th></th> <th>Internal Dose (p-mSv)</th> <th>External Dose (p-mSv)</th> <th>Total Collective Effective Dose (p-mSv)</th> </tr> </thead> <tbody> <tr> <td>Routine operations (p-mSv)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Major Projects (p-mSv)</td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>Totals</b></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Collective Dose for Station:					Internal Dose (p-mSv)	External Dose (p-mSv)	Total Collective Effective Dose (p-mSv)	Routine operations (p-mSv)				Major Projects (p-mSv)				<b>Totals</b>				<table border="1"> <thead> <tr> <th colspan="7">Collective Dose by NPP:</th> </tr> <tr> <th rowspan="2"></th> <th colspan="3">Collective Dose by Activity (p-mSv)</th> <th colspan="2">Collective Dose by Exposure Pathway (p-mSv)</th> <th rowspan="2">Total Collective Effective Dose (p-mSv)</th> </tr> <tr> <th>Routine Operations</th> <th>Outages (including forced outages)</th> <th>Major Projects (if applicable)</th> <th>Internal Dose</th> <th>External Dose</th> </tr> </thead> <tbody> <tr> <td><b>Total<sup>1,2</sup></b></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Note 1: in the total(s), licensees should provide collective effective doses for units operating normally (may be grouped together) in a separate row(s) from units undergoing refurbishments or major projects.            Note 2: doses received in support of the licensed activities not captured as part of Note 1 should be provided in a separate row (may be grouped together).</p>	Collective Dose by NPP:								Collective Dose by Activity (p-mSv)			Collective Dose by Exposure Pathway (p-mSv)		Total Collective Effective Dose (p-mSv)	Routine Operations	Outages (including forced outages)	Major Projects (if applicable)	Internal Dose	External Dose	<b>Total<sup>1,2</sup></b>																				
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