



Australian Government
Nuclear Safety Committee

Reference: R24/08875

6 December 2024

Dr Gillian Hirth AO
Chief Executive Officer
ARPANSA
619 Lower Plenty Road
Yallambie VIC 3085, Australia

Nuclear Safety Committee

Advice to the CEO of ARPANSA

Dear Dr Hirth,

I refer to your request during the November 12th-13th 2024 NSC meeting for the Committee to provide you with advice on the following matters:

Nuclear Safety Committee Review of the 2021 OPAL PSSR RAR

The Committee's advice is provided in the Appendix to this letter. This advice has been prepared with support from the ARPANSA secretariat.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Tamie Weaver'.

Dr Tamie Weaver

Chair of the Nuclear Safety Committee

an advisory body to the CEO of ARPANSA established under the ARPANS Act 1998

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Appendix

Advice from the NSC to the CEO of ARPANSA

Nuclear Safety Committee Review of the 2021 OPAL PSSR RAR

Summary review

The CEO of ARPANSA requested that the NSC review ARPANSA's 2021 OPAL Periodic Safety and Security Review (PSSR) Regulatory Assessment Report (RAR). The NSC was provided with terms of reference (TOR) for their review. Three items were within the scope of the NSC's review:

- 1. The NSC review should focus on whether ARPANSA's regulatory assessment report (RAR) meets its overall goal. This goal was to determine whether ANSTO's 2021 OPAL PSSR report aligns with and meets the objectives in ARPANSA's PSSR guide.*
- 2. The review should cover whether the conclusions and key messages that are to be delivered by the RAR to the ARPANSA decision makers are clearly presented.*
- 3. The review should also provide feedback that sufficient consideration has been given to each of the areas in the RAR.*

This document provides the outcomes of the NSC's review.

General comments

The Committee identified review findings which apply to ARPANSA's PSSR RAR in general. The Committee feels more specific comments would not be relevant while ARPANSA's RAR is in its current state, and without reviewing ANSTO's PSSR report, which was not part of the provided information.

The general findings identified by the Committee include that:

- The NSC acknowledges the significant work that has gone into this assessment and recognises the large scale and complexity of the task. The NSC encourages ARPANSA and ANSTO to work more closely together to assist in clarifying expectations and in the development of clear and concise reports. This would mutually benefit the workloads of both those producing and reviewing these reports.
- The RAR could be more concise. There are instances where information is included that is not germane to the purpose of the review. Examples include discussion of the number of pages reviewed and the number of reviewers completing the task. This is useful information to provide to decision-makers but should be provided separately to the review itself.

- In some cases, conclusions in the RAR are presented without a clear weighing up of evidence to explain how assessors arrive at their conclusions. Including these discussions would be beneficial to demonstrate how evidence provided by assessors in the RAR supports the conclusions made. This also results in a lack of clear narrative to the RAR, making it difficult for decision-makers to understand, draw conclusions, and take action based on reading the RAR.
- It is not evident that a method has been in place to bring together, and holistically assess, the conclusions made by the separate individuals undertaking this review. This impacts upon the clarity and coherence of the RAR.
- The RAR would benefit from clearly identifying which safety factors ARPANSA consider to be of greatest safety significance, to clearly demonstrate a graded approach to the assessment. This would assist the decision maker in understanding the approach taken by assessors.
- The Committee noted the RAR had not been through internal quality review prior to its provision to the Committee, and quality issues are present in the document. Examples include issues such as presentation of included graphs where the y-axis is unlabelled, scales vary, and titles/captions do not provide sufficient information for the reader to understand what is being presented.
- It is currently unclear who the intended target audience is for the RAR; this should be clearly identified, and the document should also be clear to less specialist readers. The readability of the document could be enhanced by improving its structure, reducing repetition of information, including a clear weighing of evidence (as mentioned above) and having a consistent style and clear narrative throughout. This would make it easier for a reader to understand how ARPANSA came to conclude that no significant safety issues are present, increasing the readers' confidence in the RAR's findings.

Conclusions

Overall, the NSC acknowledges the detailed work of the reviewers in conducting and collating the review of the OPAL PSSR. The following comments are made in relation the TOR provided:

1. The NSC cannot conclude whether ARPANSA's PSSR RAR has met its goal. This is partly due to not being able to directly compare ANSTO's PSSR report with the ARPANSA's PSSR guide. Additionally, the current RAR is not sufficiently clear in the weighing up of evidence and presenting an overall narrative to demonstrate to the NSC that ANSTO's 2021 OPAL PSSR report aligns with and meets the objectives in ARPANSA's PSSR guide.
2. Conclusions and other key messages could be more clearly presented to decision makers by being better supported and presented within a single narrative.
3. Without clarity on which factors ARPANSA consider to be of greatest safety significance, it is difficult to comment on whether each section has received sufficient consideration.