

2014 October 03

Mr. Brian Torrie  
Director General, Regulatory Policy Directorate  
Canadian Nuclear Safety Commission  
280 Slater Street  
P.O. Box 1046, Station B  
OTTAWA, Ontario K1P 5S9

Dear Mr. Torrie:

**Comments on Proposed REGDOC-2.3.3 – Integrated Safety Reviews**

AECL has reviewed the proposed REGDOC-2.3.3 Integrated Safety Review and has met with industry partners, Ontario Power Generation, Bruce Power, and New Brunswick Power to discuss issues, challenges, and impact of the proposed document.

AECL's version of the combined comments on the REGDOC is contained in Attachment A.

There are several major concerns and these are highlighted in bold in the attachment. In addition, there are comments on the REGDOC where revisions are required for clarity.

If you require further information or have any questions regarding this submission, please contact me as below.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'T. Arthur', written over a horizontal line.

T. Arthur, Manager  
Regulatory Affairs  
Phone: 613-584-8021  
Fax: 613-584-8031  
Email: arthurt@aecl.ca

TA/mj  
Attachment

c C. Carrier (CNSC) Consultations (CNSC)

A. Bugg  
N. Mantifel  
C.E. Taylor  
>SRC

S.K. Cotnam  
S. Mistry  
R. Walker

J.D. Garrick  
S. Needham  
>CR CNSC Site Office

R.M. Lesco  
K.L. Smith  
>CR Licensing

**Attachment A****Industry Comments on REGDOC-2.3.3, Integrated Safety Reviews**

#	Document/ Excerpt of Section	Industry Issue	Suggested Change( <i>if applicable</i> )	Major Comment/ Request for Clarification	Impact on Industry, <i>if major comment</i>
1.	General	The process that is being set up by this REGDOC is a Periodic Safety Review and this should be reflected in the document title to align with international practice.	Change the title to “Periodic Safety Reviews” to align with international practice.	Major Comment	The process that is being set up essentially follows the international practice for “Periodic Safety Review”. Given this it would be prudent to call it a “Periodic Safety Review” in line with international terminology.
2.	General	There are multiple times that the title of SSG-25 is not correct	Revise to correct title.	Request for Clarification	
3.	Preface	No reference to IAEA SSG-25	Add a reference to IAEA SSG-25 since this is a significant document in the context of the ISR. Additionally this is also a good place for the CNSC to provide rationale as to why IAEA SSG-25...i.e. internationally accepted practice, etc.	Request for Clarification	
4.	Preface	No mention of graded approach for Research Reactors seeking licence renewal or life extension.	Revise 4 <sup>th</sup> paragraph in Preface Sec 1.0 Intro and Sec 1.2 Scope to include Research Reactors.	Request for Clarification	

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5.	Preface, paragraph 6, 3 <sup>rd</sup> sentence, 1, paragraph 1 and 3.2, guidance	The word “modification” in these paragraphs is too restrictive as it implies only physical plant upgrades are acceptable in an IIP. IIP will cover a broad range of improvements which could be design changes, analysis/assessment improvements, procedures/governance, inspection, maintenance, operations, etc.	Use the word “improvement” rather than “modification”.	Major Comment	This change will improve the clarity of the document without being too prescriptive.
6.	1 paragraph 2	Adopting periodic ISRs in support of licence renewal will ensure the continued improvement of NPP safety. Past experience with life-extension projects gives the CNSC and the Canadian nuclear industry a large degree of familiarity with the ISR process. As such, the periodic application of an ISR in Canada represents an evolution of a current practice, as opposed to the adoption of a new one.	Other than being familiar with the process it would be good to say that it was also effective in achieving improvements in safety. This would provide better support to implementing this process on a periodic basis.	Request for Clarification	
7.	2, first sub- bullet 3	Objective of the ISR is to determine the adequacy and effectiveness of the ‘arrangements’ and the SSCs – 10 years is a very long time and allowance needs to be made for active programs to also manage degradation of the SSCs to maintain safety.	Replace the word “arrangements” with “programs” as we believe this is what was intended by the document. Consider adding the word “improvements” if reference to the IIP is needed to fully replace the word “arrangements”  The change in wording is believed to have the same intent but is more clear as this is a more common terminology in industry	Request for Clarification	.

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8.	3	In general, the licensee first prepares the ISR basis document which defines the scope and methodology for the ISR.	Use of "In general" might create ambiguities, suggest removal.	Request for Clarification	
9.	<b>3. Integrated Safety Review (Page 3, list item 1.)</b>	<b>The Integrated Safety review requirements are not curtailed to subsequent ISR submissions. Need to clarify that approved exemptions and deviations do not need to be addressed in subsequent ISRs. The first ISR was submitted with acceptable deviations and exemptions that were accepted by the CNSC. These should be added to the licensing basis to prevent repetition of same information in the subsequent ISRs with no added value</b>	<b>Change item 1 to read "statement of current licensing basis including exemptions and acceptable deviations (grandfather statement as applicable).</b>	<b>Major Comment</b>	<b>Significant cost to continually revisit low level safety issues that have been previously dispositioned.</b>
10.	General	The document uses the term 'findings' in a number of places where the term 'gaps' should be used instead, since a finding can be either strength or a gap. For example, Section 2 Item 4 under Guidance discusses improvements to be implemented to resolve any 'findings', but this should be 'gaps'.	Replace 'findings' with 'gaps' where 'findings' means improvements need to be implemented.	Request for Clarification	

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11.	3.2	The review is forward-looking and the operating life of the plant should be considered to identify potentially lifetime-limiting features of the plant in order to plan future modifications	Remove the wording regarding future reviews. ISR are expected on a 10 frequency and this is adequate. Additionally, lifetime-limiting features of the plant should be addressed in the IIP	Major Comment	The IIP addresses issues accordingly. It is not necessary to add additional reviews which have no impact on public safety
12.	3.3 Guidance	“The CNSC has included an additional safety factor on radiation protection; the licensee should refer to the licence conditions handbook for the scope and tasks for the review of this safety factor.” While the industry does not have any issue with this safety factor, the guidance on the scope of this safety factor should be contained in the REGDOC not in the LCH.	Provide guidance on the scope of the radiation protection safety factor in the REGDOC (this could be part of the main body or more appropriately as an Appendix).	Major Comment	The requested change is to ensure consistency in requirements for all ISRs over time and between licensees.
13.	General	After the first ISR, the requirement should be to provide updates to that ISR or the previous ISR update to incorporate significant things that have changed.  The REGDOC should not specify full scope ISRS to be done periodically on issues that have been previously dispositioned.	Include wording from section 3.3 Scope of the integrated safety review (Page 4, last paragraph) in the Introduction, purpose and section 2. on the incremental nature of follow-up ISRS	Major Comment	Significant cost to continually revisit low level safety issues that have been previously dispositioned.

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14.	3.4	It is stated, "The licensee shall specify the methodology for: 1. conducting assessments that confirm that the plant meets, and will continue to meet, the current licensing basis". Since the ISR process is complementary to the Licence application process, the licensee would have already shown that it meets the requirements of the licence. This will be duplication of work. The ISR should start with the conclusion that the plant meets its licensing basis and do assessments against guidelines and practices outside and beyond the licensing basis. It should be noted that SSG-25 is applicable for utilities that use the PSR for licence renewal, not complementary to it.	Remove this guideline.	Major Comment	This will eliminate redundant work in the ISR assessing the plant and processes against the licensing basis.

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15.	3.4/3.5	<p>There are two statements:</p> <p>3.4 (2.) conducting assessments against applicable regulatory requirements, and modern codes, standards and practices</p> <p>(3.5) It is expected that all mandatory clauses in a code or standard will be reviewed to determine if the identified requirements are met.</p> <p>It seems redundant to assess against applicable regulatory requirements (e.g., codes or clauses in the licence or Licence Conditions Handbook) since this must already be addressed and is included in the licence application. As stated above, since the ISR process is complementary to the Licence application process, the ISR should start with the conclusion that the plant meets its licensing basis.</p>	Remove the requirement to assess mandatory codes and standards.	Major Comment	This will eliminate redundant work in the ISR assessing the plant and processes against codes that are already mandatory.

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16.	3.5	As many of the modern codes, standards and practices being reviewed are not required by licence, they should be characterized as gaps rather than non-conformances.	Re-word the first paragraph of the guidance to:  “An integral element of the ISR is the assessment of the extent to which the NPP would satisfy requirements and expectations set out in CNSC regulatory requirements, and modern codes, standards and practices. A list of modern codes, standards and practices with their cut-off dates, should be established prior to any work being carried out. This ensures a common and consistent expectation for the reviews.”	Major Comment	For modern national and international codes, standards and practices that are not requirements, there is no conformance issue and gaps to these codes, standards and practices should not be treated as non-conformances. This may create a misconception for the public regarding impact on plant safety.
17.	3.5 Applicable regulatory requirements, and modern codes, standards and practices.	The assessment of sub- tier codes should be limited to the reference sections only.	Change “any applicable references in the “to any applicable sub-tier referenced sections”.	Major Comment	There is no safety benefit of doing full review of sub-tier codes. Benefit is gained by reviewing sub-tier clauses that are referenced in the primary codes. Full review of sub-tier codes constitutes an excessive regulatory burden.
18.	3.6	The licensee shall confirm that any non-compliance with the current licensing basis will be addressed as quickly as practicable.	Remove this as it is not necessary. All licensees have an S99 process for reporting and addressing these emergent issues as they arise.	Major Comment	The reporting process will be followed. No need to duplicate this in the ISR. This would add unnecessary regulatory burden.

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19.	3.6, Guidance, bullets	The bullets refer to “strengths” and “gaps” only. While this is consistent with SSG-25, later in the document in Section 6 for the IIP, reference is made to corrective actions and improvements. A gap should result in a prioritized “corrective action” that is mandatory to resolve, however, “improvements” are inherently a lower tier change that should be progressed at the discretion of the licensee. In addition, with the current wording for “gaps”, the requirement could be interpreted to mean that minor deviations from industry practice (regardless of their impact on safety) are high priority items that need to be addressed. While industry practice alignment as much as practicable is desirable, absolute alignment may not be reasonable or achievable.	Suggest removing “or industry practices”.	Major Comment	Resolution of minor deviations from industry practice should only be an improvement action that the licensees may or may not implement depending on resourcing, costs, etc. This REGDOC should not be viewed as a vehicle for obtaining alignment of those practices where it may not be appropriate to do so.
20.	3. ISR, 4. Performance of the ISR 5. GAR 6. IIP	These documents require CNSC review or acceptance. Need to clarify in these sections that it is actually CNSC staff and not the Commission.	Replace “CNSC” with “CNSC staff” where requirements are quoted in these sections.	Request for Clarification	

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21.	5	It is stated that the GAR shall present the 'results' of the ISR, both strengths and gaps. Should 'results' be 'findings' as previously defined in this document?	Ensure consistent treatment of terminology	Request for Clarification	
22.	5 and 6, bullet 1	Item 5, "corrective actions and safety improvements proposed for all gaps and global issues" It is not reasonable to address all gaps given that current plants cannot meet all the requirements of modern codes and standards	Change to "corrective actions, safety improvements and appropriate dispositions proposed for all gaps and global issues. "	Major Comment	The word "all" implies that all gaps are to be addressed. However this is not consistent with the intent of the IIP to be reasonable and practical. Allow the ISR methodology to determine which gaps can practically be addressed in a systematic and risk informed manner. Excessive Regulatory Burden
23.	6, Guidance, bullet 3	The statement to ensure that corrective actions and improvements that have the greatest impact on safety are completed in a timely manner is vague. Corrective actions and improvement should be progressed consistent with appropriate business planning and priority of the gap being addressed. This statement also implies that low priority gaps do not need to be addressed in a timely manner.	Modify bullet 3 from "ensure that corrective actions and improvements that have the greatest impact on safety are completed in a timely manner" to "schedule and implement corrective actions and improvements commensurate with their safety significance"	Major Comment	The statement that actions should be completed in a "timely manner" is subjective and the guidance does not apply to actions of lower priority. The proposed revision to wording is more holistic.

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24.	6	<p>The REGDOC should clarify expectations with respect to completion of corrective actions and improvements prior to the next ISR.</p> <p>Provided that the potential impact on safety is low (e.g. margins are not unduly compromised), utilities should have the flexibility to defer resolution of low priority gaps or improvements into the subsequent ISR cycles including the provision of cancellation, with regulatory acceptance, if the impact is demonstrated to be sufficiently small. This would be consistent with a graded approach.</p>	<p>Include guidance on implementation of corrective actions and improvements that are categorized as safety significant (high priority) versus low -safety significant (low priority) with respect to ISR cycles. Include a clarification that lower priority items may be deferred to subsequent ISR cycles.</p>	Major Comment	Industry will not drop safety significant corrective actions in order to complete low safety significant (low priority) corrective actions.
25.	6 Guidance	<p>There is a statement in the guidance that suggests “The IIP should be submitted to the CNSC, organized according to both safety factors and CNSC’s Safety and Control Areas.” This is unnecessary burden and should only be organized by the Safety Factors.</p>	Remove this statement from the guidance.	Major Comment	This becomes an expectation and is unnecessary administrative burden on the licensee.
26.	References	The title for Reference 1 is not correct and the report number for Reference 5 is not correct.	The correct reference is “REGDOC-3.1.1, Reporting Requirements for Nuclear Power Plants”	Request for Clarification	