



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

May 8, 2017

Dear Mr. Torrie:

Canadian Nuclear Association Comments on REGDOC: 2.13.1: Safeguards and Nuclear Material Accountancy

The Canadian Nuclear Association (CNA) and its members would like to thank the CNSC for an opportunity to comment on REGDOC: 2.13.1 : Safeguards and Nuclear Material Accountancy.

Industry met to conduct a collaborative review of the draft REGDOC and our comments on it are attached.

I would however, like to take this opportunity to request a workshop with the CNSC to discuss/clarify a number of issues industry raises in it our comments. Among the key points industry would like to discuss are:

- A discussion of Section 5: Installation of Safeguards Equipment. In particular, industry would like to know if it is required to pay for installation/operation of IAEA equipment. There appears to be no clarity around scope and cost sharing and this could have major cost implications for industry.
- Clarification around situations where a licensee has multiple facilities on a single site. How is this interpreted? Are materials (i.e. drawings) needed for the entire site or just the part under that particular licence?
- Clarification around unannounced IAEA inspections.
- Flexibility and clarification around implementation issues

Industry has found workshops to be a very effective way of clarifying issues and concerns leading to a clearer more effective regulatory document. Industry looks forward to a workshop on this REGDOC.

If you have questions or would like to discuss these comments further, please do not hesitate to contact me.

Sincerely,

Steve Coupland
Director, Regulatory and Environmental Affairs
Canadian Nuclear Association

Integrated Comments on draft REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification | Impact on Industry, if major comment |
|----|---------------------------------|---|--|--|--|
| 1. | Preface | The statement, “Guidance contained in this document exists to inform the applicant, to elaborate further on requirements or to provide direction to licensees and applicants on how to meet requirements. It also provides more information about how CNSC staff evaluates specific problems or data during their review of licence applications. Licensees are expected to review and consider guidance; should they choose not to follow it, they should explain how their chosen alternate approach meets regulatory requirements.” gives the impression that the guidance is a requirement. | Delete the last statement to read: “Guidance contained in this document exists to inform the applicant, to elaborate further on requirements or to provide direction to licensees and applicants on how to meet requirements. It also provides more information about how CNSC staff evaluates specific problems or data during their review of licence applications. Licensees are expected to review and consider guidance | MAJOR | Some CNSC staff interpret this statement to mean that guidance within the REGDOC is a requirement. This is not true. Guidance is not a requirement. This has major impacts on licensees in the time spent in discussion with CNSC staff as to why guidance is not followed in certain cases. |
| 2. | 1.2 | Although uranium ores are not nuclear material, and mines and mills are not within the IAEA definition of “facilities”, IAEA considers safeguards to include nuclear material <i>and</i> activities (IAEA Factsheet: IAEA Safeguards Overview), including complementary access. If mines and mills are required to have a safeguard program to address IAEA access under section 4 of the REGDOC then the Scope section should make this clear. If the intention is to exclude mines and mills from the requirements in section 4 then section 4 should be revised to expressly state this. | If the intention is to require a safeguard program to address IAEA access at mines and mills then the second paragraph of 1.2 Scope on page 1 should state “The term safeguards” refers to ...nuclear material <i>and activities initiated by the IAEA</i> , administered in Canada...” The first paragraph on page 2 should be revised to: “The following materials are not subject to inspection, verification and detailed nuclear material accountancy in Canada: ... All locations in Canada are subject to IAEA access and this includes uranium and thorium mines and mills.” If the intention is to exclude mines and mills from the REGDOC then that should be expressly stated. | <i>Request for Clarification</i> | |

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| 3. | Section 1.2 (d) | The statement “The following materials are not considered nuclear material, and as such, are not subject to safeguards in Canada: b) nuclear material in transit in Canada are not subject to safeguards” is misleading | Suggest: “materials are not subject to safeguards in Canada and remove the ‘are not considered nuclear material’ from the paragraph before the bullets. | Request for Clarification | |
| 4. | 1.3.1 | Section 30 of the GNSCR identifies situations in which safeguards reports shall be provided by licensees to the Commission. Regulatory document series 3.1, Reporting Requirements, ... | Make specific reference to other applicable regulatory documents such as REGDOC 3.1.1, Reporting Requirements for Nuclear Power Plants and REGDOC 3.1.2 | Request for Clarification | |
| 5. | 2.1.1 | <i>Using the form available on the CNSC website</i> | Include title – Request for termination. | Request for Clarification | |
| 6. | Section 3.1 (b): | Lack of clarity | Please include the definition of “1 effective kilogram”, especially for new licensees as defined in RD-336. | Request for Clarification | |
| 7. | 5 | The statement ,“As per section 30 of the GNSCR, reports shall be provided by licensees to the Commission in the event of interference with or an interruption to the operation of safeguards equipment, or the alteration, defacement or breakage of a safeguards seal, among other events” does not take into account REGDOC 3.1.1 Reporting requirements for Nuclear Power Plants. All NPPs in Canada are required to report under the requirements of REGDOC 3.1.1 in accordance with their Power Reactor Operating Licence. REGDOC 3.1.1 includes provisions required by section 30 of the GNSCR. This prevents a situation where a different reporting process will need to be | Include a statement that allows NPPs to report under REGDOC 3.1.1 and other applicable regulatory documents such as REGDOC 3.1.2 | Request for Clarification | |

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| | | developed | | | |
| 8. | 5.0 Licensees shall communicate any such events to their own security staff, where such staff exists. | Cases of damaged safeguards seals have not been communicated to Site Security in the past. What is the expected follow-up from Site Security? | Suggest rephrasing to inform Site Security for cases of damage to, theft, or sabotage of safeguards equipment only. | <i>Request for Clarification</i> | |
| 9. | 5.0 At licensee sites where safeguards seals and equipment are likely to be present, part of a licensee's safeguards program should include familiarizing all relevant persons with the requirements surrounding IAEA seals and equipment. | Please clarify what is meant by "all relevant persons". | Suggest changing "all relevant persons" to "all site staff". | <i>Request for Clarification</i> | |
| 10. | Section 5 Installation of Safeguards Equipment | Does this indicate that the licensee is required to pay for operation/installation of IAEA equipment? | Suggest clearly defining this. At who's cost? To what end? Do we install whatever they want? This seems very broad. Industry suggests that a workshop on this REGDOC would include a discussion of this issue | <i>Major</i> | Without clarity for scope and costing arrangements, this could have major economic impact on licensees. |
| 11. | Section 6 IAEA Access | The required in the following statement is confusing "provide the required access". Is the sentence just supposed to mean that you need to provide access to IAEA inspectors to your site? | Remove "required" or provide clarification of why it was included. | <i>Request for Clarification</i> | |
| 12. | 6.1 During an inspection, the licensee shall provide a list of inventory items (LII) covering material subject to inspection, and then facilitate IAEA verification of that inventory. | Not all inspection types require an LII. For instance, an Unannounced Inspection typically has no requirement for an LII. | Suggest rephrasing to state: During an Inspection, when requested by IAEA or CNSC, licensee shall provide an LII covering material subject to the inspection. | <i>Request for Clarification</i> | |

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| 13. | 6.1 Guidance | <i>The CNSC will seek to participate in all IAEA inspections in Canada, where possible.- Clarify</i> | Provide clarification or examples. | | |
| 14. | Section 6.1 | The Guidance mentions a timeline between 24 hours and a week in advance for IAEA inspections. It is unclear if this affects existing inspection protocols. | Suggest adding clear timelines for each type of inspection. | <i>Request for Clarification</i> | |
| 15. | Section 6.1 | Why are CAs and DIVs listed but not SNRIs, PIVs or UIs? Is this a change to the safeguards approach? | Please include details for these types of inspections. | <i>Request for Clarification</i> | |
| 16. | Section 6.1 | “For the inspections where samples of nuclear material are taken, at the CNSC’s request...” – does this mean we do not send samples taken to the IAEA without a request from the CNSC? How does that affect current sampling protocols? Should we request this request? | Clarification is required on the official process for sampling requests. | <i>Request for Clarification</i> | |
| 17. | 6.1 Guidance | How does CNSC requesting the acceptance of IAEA unannounced inspections contribute to the overall reduction of time spent on site by IAEA inspectors | This could be a topic of discussion on the proposed future REGDOC workshop | <i>Request for Clarification</i> | |
| 18. | 6.3 | The section on Complementary Access (CA) does not address sites with multiple facilities and different licensees. If the IAEA is visiting a licensee’s facility, it is inappropriate to then initiate a CA to any building on site under another licensee’s license. | . Need to add to the document that IAEA inspectors cannot table CAs for other licensees when on a site with multiple licensees’ facilities. | <i>Major</i> | Licensees are independent of each other and are unable to support these multiple accesses. |
| 19. | Section 6.3 | For CAs, it mentions item counting of nuclear material and examination of records. This has not been the practice for CAs in the past, is this a new requirement? What is the basis for this change? | Item counting has not been included historically. The addition of this to CA’s increases the scope almost to that of a UI. Please clarify if item counting is a new requirement for CAs. | <i>Request for Clarification</i> | |
| 20. | 6.Note that the granting of | What is meant by “short notice”? Is it the | Suggest specifying an actual time within which | <i>Request for Clarification</i> | |

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| | access may be required on short notice. | same time frame as for Complementary Access? | access to IAEA equipment is required, or “a timeframe specified by the IAEA”. | | |
| 21. | Section 6.4 (Guidance): | Licensees should inform the CNSC of training requirements necessary to access IAEA equipment through design information submissions What if equipment installed is not part of an MBA? | | <i>Request for Clarification</i> | |
| 22. | Section 7.1 | Documented results of calibration activity or measurement of nuclear material are considered source data. Are there other items outside of scale that would be subject to considering source data for calibration? | | <i>Request for Clarification</i> | |
| 23. | 7.3 Physical Inventory Taking | Industry does not see a need for including 1B material in this section as it may not be physically possible to accommodate this | Suggest specifying only Group 1A material in this section | <i>Major</i> | Including Group 1 B material would in this section would result in requirements that could not be met. |
| 24. | 7.3 CNSC may select a PIT date for the licensee based on availability of CNSC resources. | In cases where the CNSC selects the PIT date for the Licensee, is the Licensee obligated to that date, or is it negotiable? If the date selected by CNSC does not align with Licensee production commitments or resource availability, can the Licensee propose more suitable dates? | Suggest adding some wording to provide for some flexibility for the PIT date to accommodate the licensee’s availability as well as the CNSC’s. | <i>Request for Clarification</i> | |
| 25. | Section 7.4 | Reports on the results of such investigations shall be submitted within 30 days of the PIT, and shall include the licensees’ conclusions as to the source of ID and any correcting measures. | Please include information on how these reports need to be submitted (within 30 days the PIT). | <i>Request for Clarification</i> | |
| 26. | 7.4 | This is a new requirement which needs further clarification | Provide clarity on the details of the report and when it should be used (i.e. will we have to generate a report if the ID is a clerical error like | | |

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| | | | a transposed number for example). | | |
| 27. | Section 7.5: | CNSC will assign a Canadian obligation to that material at the time of export.” | Not always the case—perhaps the statement should be “the CNSC may assign a Canadian obligation...” | <i>Request for Clarification</i> | |
| 28. | 8 | Provision of Information <i>All information supplied to the CNSC shall be transmitted using appropriate information security measures. The CNSC’s Nuclear Materials Accountancy Reporting (NMAR) e-business ...</i> | Include statement permitting other agreed upon means to track inventory & transmit information. | MAJOR | Some licensees set up current system (SBT) with prior consent of CNSC understanding that NMAR would not need to be implemented. Without this flexibility licensees would incur significant costs without any significant improvement in safeguards |
| 29. | Section 8 | It states the ICDs/reports submitted to CNSC NMAR or encrypted email can be submitted up to and including Protected B and alternate arrangements must be made for Protected C or classified? | Please clarify the arrangements for Classified documents. | <i>Request for Clarification</i> | |
| 30. | 8.1.1 Guidance | <i>Reference to CSA N290.7 Cyber Security for NPP...</i> | CSA N290.7 is not implemented nor referenced in current LCHs of NPPs. Not expected for several years. Recommend removing reference until later version. | <i>Request for Clarification</i> | |
| 31. | 8.1.1 Licensees shall have measures in place to prevent the compromise of systems used to generate, store and transmit safeguards-relevant information. | Please confirm if this means that cyber security measures must be in place for these systems. | As cyber security is a growing concern in all industries, suggest changing “shall” to “must”. | <i>Request for Clarification</i> | |
| 32. | 8.1.1 | Electronic reporting through the NMAR e-business system will require initial setup and resources such as Microsoft Excel version changes. Licensees need to ensure they have browser compatibility with the NMAR | | <i>Request for Clarification</i> | |

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| | | website and confidence this will not change or changes will be communicated ahead of time. | | | |
| 33. | 8.1.2 | The document says the shipper shall provide a copy of the Inventory Change Document to the receiver, but does not specify the format of the ICD. Licensees may need the flexibility to change ICDs from .xml to .xls and vice versa. | Industry needs the flexibility to change ICDs from .xml to .xls and vice versa This is another topic for our workshop | Request for Clarification | |
| 34. | 8.1.2 The correcting ICD will be identical to the original, save for the date, ... | Please confirm whether this is the "Date" in field/box/label 1004 on the ICD. | Suggest specifying which label this date is referring to. | Request for Clarification | |
| 35. | 8.1.2 An inventory change is any increase or decrease in a licensee's nuclear material inventory. | It is not clear how to handle bundle separation | Suggest expanding the definition to cover element separation if it does apply. | Request for Clarification | |
| 36. | Section 8.1.2: | To note, it indicates that submitted ICDs to be corrected for Date, Batch Name, MBA, IC Type, Safeguards Status and Element Code must now be done via the Delete ICD process. | This section needs some more guidance; there have been many questions in the past about how corrections are shown on the ICDs and ledgers. Please include details for corrections for Change of Form ICDs. | Request for Clarification | |
| 37. | Section 8.1.5 P-KMPIS | Reference to Table D-1 and the specific due date should be mentioned. (Due dates are mentioned for other reports in the other sections) | Please include due dates for Table D-1. | Request for Clarification | |

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| 38. | Section 8.1.6 second paragraph | Should make reference to Table D-1 for the due date. Same comment for Section 8.1.7. | | <i>Request for Clarification</i> | |
| 39. | <p>8.2 Design information shall be updated and submitted to CNSC as soon as the decision is taken to make changes... For the construction of new facilities...preliminary design shall be submitted as soon as the decision to construct or authorize construction has been taken, whichever is earlier. An update...shall be submitted to the CNSC no later than 270 days before the start of construction. Similarly, final design information...no later than 270 days before the first receipt of nuclear material at the facility.</p> | Preliminary design is not available at the time of the decision to construct. The decision to construct happens before the start of preliminary design. Final drawings are not available 270 days before the receipt of material. Requirements in this section do not follow standard project schedule. | Suggest allowing for submission of “Approved for Construction” drawings instead of “Final” drawings, with the understanding that “Final” drawings will be submitted when available. | <i>Request for Clarification</i> | |
| 40. | Section 8.3 (4) | Who determines the “relevance of safeguard”? How? | Please include criteria in the Guidance section for this item. | <i>Request for Clarification</i> | |

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| 41. | 8.4i 2. ...current drawings of the site, a general description of each building on the site, ... | In the case where a licensee has multiple facilities on a “site” (i.e. Darlington), how does this apply? Does each facility provide a drawing of all buildings on site, and descriptions of all buildings on site, or does each only include buildings they are operating? Or, can one facility submit drawings and descriptions of buildings on behalf of another facility on the same site? | Suggest providing more flexibility in this section so that one facility can submit Additional Protocol information on behalf of another facility on the same site, such as is now done at Darlington. This would simplify the process and reduce overall effort by some licensees. | Request for Clarification | |
| 42. | 8.4 6. Information regarding Group 1B material: a. for materials exempted from safeguards pursuant to Article 37 of the Safeguards Agreement, the quantities, uses and locations of such material b. for materials exempted from safeguards pursuant to Article 36 of the Safeguards Agreement, but where the material is not yet in a non-nuclear end-use form, information regarding the quantities and uses at each location ... | Information requested: Does the CNSC have a process to notify a licensee of whether the licensee is in possession of such material, if the licensee has never requested such an exemption under Article 36 or 37? | Need to add to document that CNSC will inform licensees of exempted material being transited to them | Request for Clarification | |
| 43. | 9 | Licensees would like to see more guidance on retention of records. In particular, ICDs. | Add additional guidance on retention of records. | Request for Clarification | |
| 44. | Table D1 ICD – Next business day following the inventory change. | This time limitation requirement puts a strain on the supporting Fuel & Physics group in preparing the ICDs and associated fuel information file. | Suggest providing more flexibility in submitting an ICD, i.e. within 3 business days. | Request for Clarification | |

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| 45. | Table D2: Line 370 | “Enter the code for the shipping MBA...” – Does this mean that there is no need to receive via GA from Canadian Non-MBA facilities? | Clarification is required for the process of receiving material from non-MBA facilities. | Request for Clarification | |
| 46. | Table D4: | Fuel – Assemblies Solid Waste - Hull | Please define ‘Assemblies’, “Hulls” consistent with IAEA definitions | Request for Clarification | |
| 47. | Table D5: | It is not clear how the new isotope code “J” is to be applied | Guidance is required on when and how this new code is to be used. | Request for Clarification | |