

May 5, 2017

NK21-CORR-00531-13567
NK29-CORR-00531-14193
NK37-CORR-00531-02772

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

Dear Mr. Torrie:

Bruce Power comments on REGDOC-2.13.1 Safeguards and Nuclear Material Accountancy

The purpose of this letter is to comment on this draft Regulatory Document, which will supersede RD-336 *Accounting and Reporting of Nuclear Material* and GD-336, *Guidance for Accounting and Reporting of Nuclear Material*.

Bruce Power appreciates the CNSC's efforts to seek stakeholder input and participated in a collaborative review of this draft along with our industry colleagues at Ontario Power Generation, New Brunswick Power, Canadian Nuclear Laboratories, SNC-Lavalin and Cameco Corporation.

That collective evaluation generated the series of comments and requests for clarification detailed in Appendix A, which is attached to this letter. It also highlighted the need for a workshop between subject matter experts from the CNSC and its licensees to clarify expectations and guidance in several areas of this current draft, including:

- Obligations regarding the installation and operation of IAEA equipment on a licensee's site.
- Time commitments associated with unannounced IAEA inspections.
- Implementation issues and the need for flexibility with regard to the format of inventory change documents.
- Obligations to provide current site drawings and building descriptions in cases where multiple licensees share a site.

NK21-CORR-00531-13567
NK29-CORR-00531-14193
NK37-CORR-00531-02772

Bruce Power Frank Saunders Vice President - Nuclear Oversight and Regulatory Affairs
P.O. Box 1540 B10 4th floor W Tiverton ON N0G 2T0
Telephone 519 361-5025 Facsimile 519 361-4559
frank.saunders@brucepower.com

Mr. B. Torrie

May 5, 2017



If you require further information or have any questions regarding this submission, please contact Steve Cannon, Senior Strategist, Regulatory Affairs, at (519) 361-6559 or steve.cannon@brucepower.com.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Frank', with the word 'for' written below it.

Frank Saunders
Vice President Nuclear Oversight and Regulatory Affairs
Bruce Power

cc: CNSC Bruce Site Office (Letter only)
K. Lafrenière, CNSC Ottawa
K. Owen-Whitred, CNSC Ottawa

Attach.

Attachment A

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|----|------------------------------------|---|--|---|--|
| 1. | Preface | The following statement in the preface gives the impression that guidance is a requirement: "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." | 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; should they choose not to follow it, they should explain how their chosen alternate approach meets regulatory requirements." | MAJOR <i>Request for Clarification</i> | 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 Scope | Although uranium ores are not nuclear material and mines and mills are not within the IAEA definition of "facilities," the 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 draft REGDOC, the Scope section should make this clear. If the intention is to exclude mines and mills from the requirements in section 4, then it should be revised to clearly express that intent. | 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 read: "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:" | <i>Request for Clarification</i> | |
| 3. | 1.2 Scope | Clarity is sought for the statement: "The following materials are not considered | Suggest amending to say: "The following materials are not considered nuclear | <i>Request for Clarification</i> | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|----|--|--|---|---|--------------------------------------|
| 4. | 1.3.1 Legislation and regulations | nuclear material, and as such, are not subject to safeguards in Canada.” Also, point ‘b’, which says “nuclear material in transit in Canada are not subject to safeguards” is misleading. | material, and as such, are not subject to safeguards in Canada: | Request for Clarification | |
| 5. | 2.1.1 Group 1A material – Full- scope safeguards | 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 applicable regulatory documents such as <i>REGDOC-3.1.1, Reporting Requirements for Nuclear Power Plants and REGDOC-3.1.2, Reporting Requirements for Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills</i> | Request for Clarification | |
| 6. | 3.1 Facilities | 3 rd paragraph. Additional clarity sought regarding “using the form available on the CNSC website.” Lack of clarity regarding point (b). | Include title – Request for termination. Please include the definition of “1 effective kilogram,” especially for new licensees as defined in <i>RD-336</i> . | Request for Clarification | |
| 7. | 5 Safeguards Equipment and Seals | 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 <i>REGDOC 3.1.1</i> , which includes provisions required by section 30 of the GNSCR. This prevents a situation where a different reporting process will need to be developed. | Include a statement that allows NPPs to report under <i>REGDOC-3.1.1</i> and other applicable regulatory documents such as <i>REGDOC-3.1.2</i> | Request for Clarification | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|---|--|--|---|---|
| 8. | 5 Safeguards Equipment and Seals | 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. | Request for Clarification | |
| 9. | 5 Safeguards Equipment and Seals | Please clarify what is meant by "all relevant persons". | Suggest changing "all relevant persons" to "all site staff." | Request for Clarification | |
| 10. | 5 Safeguards Equipment and Seals | Does this indicate 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? Industry suggests a <i>workshop</i> on this REGDOC should include a discussion of this issue. | MAJOR Request for Clarification | Without clarity for scope and costing arrangements, this could have a major economic impact on licensees. |
| 11. | 6 IAEA Access | The requirement to "provide the required access" is unclear. Is the sentence just supposed to mean that licensees need to provide access to IAEA inspectors to their site? | Remove "required" or provide clarification of why it was included. | Request for Clarification | |
| 12. | 6.1 Inspections | 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 the IAEA or CNSC, licensees shall provide an LII covering material subject to the inspection." | Request for Clarification | |
| 13. | 6.1 Inspections | Clarity is sought for the line, "For inspections where samples of nuclear material are taken, at the CNSC's request..." Does this mean licensees do not send samples taken to the IAEA without a request from the CNSC? How does that affect current sampling protocols? | Clarification is required on the official process for sampling requests. | Request for Clarification | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|--|--|--|---|---|
| 14. | 6.1 Guidance | Please clarify what is meant by the line, "The CNSC will seek to participate in all IAEA inspections in Canada, where possible." | Provide clarification or examples. | Request for Clarification | |
| 15. | 6.1 Guidance | 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. | Request for Clarification | |
| 16. | 6.1 Guidance | How does the 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 during the proposed REGDOC workshop. | Request for Clarification | |
| 17. | 6.3 Complementary access | Why are CAs and DIVs listed but not SNRLs, PIVs or UIs? Is this a change to the safeguards approach? | Please include details for these types of inspections. | Request for Clarification | |
| 18. | 6.3 Complementary access | This section 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. | Major | Licensees are independent of one other and unable to support these multiple accesses. |
| 19. | Section 6.3 Complementary access | 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. | Request for Clarification | |
| 20. | 6.4 Access to IAEA equipment | What is meant by "short notice"? Is it the same time frame as for Complementary Access? | Suggest specifying an actual time within which access to IAEA equipment is required, or "a timeframe specified by the IAEA". | Request for Clarification | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|---|--|--|---|--|
| 21. | 6.4 Guidance | Please clarify the line, "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? | | Request for Clarification | |
| 22. | 7.1 Measurement of nuclear material | Please clarify the line, "The documented results of any calibration activity or measurement of nuclear material are classified as source data and thus shall be available on request, including during IAEA inspections." Are there other items outside of scale that would be subject to considering source data for calibration? | Request for clarification of the type of items to be included. Weight scales? | Request for Clarification | |
| 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. | Suggest specifying only Group 1A material in this section. | Major | Including Group 1B material in this section would create requirements that could not be met. |
| 24. | 7.3 Physical Inventory taking | 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 the CNSC does not align with licensee production commitments or resource availability, can the licensee propose more suitable dates? | Suggest adding some wording to provide flexibility for the PIT date to accommodate the availability of licensees and the CNSC. | Request for Clarification | |
| 25. | 7.4 Inventory difference | Please clarify the final line, which reads, "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 of the PIT). | Request for Clarification | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|---|---|--|---|---|
| 26. | 7.4 Inventory difference | This is a new requirement which needs further clarification. | Provide clarity on the details of the report and when it should be used. (Licensee will have to generate a report if the ID is a clerical error like a transposed number for example). | Request for Clarification | |
| 27. | 7.5 Foreign obligations | Clarity is sought regarding the line, "...the CNSC will assign a Canadian obligation to that material at the time of export." | This is not always the case. Perhaps the statement should read, "...the CNSC may assign a Canadian obligation..." | Request for Clarification | |
| 28. | 8 Provision of Information | The statement, "All information supplied to the CNSC shall be transmitted using appropriate information security measures. The CNSC's Nuclear Materials Accountancy Reporting (NMAR) e-business ..." does not take into account existing, agreed-upon systems. | Include a statement permitting other, agreed-upon means to track inventory and transmit information. | MAJOR | Some licensees established and use a system (SBT) with prior consent of the CNSC and an understanding that NMAR would not need to be implemented. Without this flexibility, some licensees would incur significant costs without any corresponding improvement in safeguards. |
| 29. | 8 Provision of Information | Clarity is sought regarding classified documents. This draft states ICDS/reports can be submitted to the CNSC via NMAR or encrypted email up to, and including, Protected B, and alternate arrangements must be made for Protected C or classified information. | Please clarify the arrangements for classified documents. | Request for Clarification | |
| 30. | 8.1.1 Information security and electronic reporting | The draft says, "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" | Request for Clarification | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|---|---|--|---|--------------------------------------|
| 31. | 8.1.1 Information security and electronic reporting | Electronic reporting through the NIMAR 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 NIMAR website and confidence it will not change or changes will be communicated ahead of time. | | Request for Clarification | |
| 32. | 8.1.1 Guidance | The guidance refers to <i>CSA N290.7, Cyber Security for Nuclear Power Plants</i> . | CSA N290.7 is not implemented nor referenced in current LCHs of NPPs. It is not expected to be for several years. Recommend removing reference until later version. | Request for Clarification | |
| 33. | 8.1.2 Inventory change document | 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 could be a topic of discussion during the proposed REGDOC <i>workshop</i> . | Request for Clarification | |
| 34. | 8.1.2 Inventory change document | The document says, "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 Inventory change document | The draft 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 | |
| 36. | 8.1.2 Inventory change document | The document says, "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 | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|--|---|---|---|--------------------------------------|
| 37. | 8.1.5 Physical-key measurement point inventory summary | 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 | |
| 38. | 8.1.6 Reconciliation statement | The second paragraph should make reference to Table D-1 for the due date. Same comment for section 8.1.7, Obligated material inventory summary. | | Request for Clarification | |
| 39. | 8.2 Design information | 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. | Request for Clarification | |
| 40. | Section 8.3 (4) Operational information | Who determines the "relevance of safeguard"? How? | Please include criteria in the Guidance section for this item. | Request for Clarification | |
| 41. | 8.4 Information required by the Additional Protocol | Regarding point #2 and the submission of current drawings of the site and a general description of each building on the site: It is unclear how this applies in the case where multiple licensees share a site. Does each licensee provide a drawing of all buildings on site and descriptions of all buildings on site? Or, does each only include buildings they are operating? | Amend to say that licensees are only required to include buildings and descriptions of buildings they operate. | Request for Clarification | |
| 42. | 8.4 Information required by the | Regarding point #6, Information regarding Group 1B material: Does the CNSC have a process to notify a licensee of whether the | Suggest adding a line to the document saying the CNSC will inform licensees of exempted material being transited to them. | Request for Clarification | |

Bruce Power comments on REGDOC-2.13.1, Safeguards and Nuclear Material Accountancy

| # | Document/ Excerpt of Section | Industry Issue | Suggested Change (if applicable) | Major Comment/ Request for Clarification ¹ | Impact on Industry, if major comment |
|-----|--|---|---|---|--------------------------------------|
| 43. | Additional Protocol | licensee is in possession of such material, if the licensee has never requested such an exemption under Article 36 or 37? | | Request for Clarification | |
| 43. | 9 Retention of Records | 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 Reporting frequency for nuclear material accountancy reports | Regarding ICD and the frequency of reporting the next business day following the inventory change: This time requirement puts a strain on the supporting Fuel & Physics group in preparing the ICDS and associated fuel information file. | Suggest the CNSC provides more flexibility in submitting an ICD, i.e. within 3 business days. | Request for Clarification | |
| 45. | Table D2 Line 370 | "Enter the code for the shipping MBA..." – Does this mean 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" and "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 | |