

Point Lepreau Nuclear Generating Station PO Box 600, Lepreau, NB E5J 2S6

> TU 06374 TU 06610 PICA 17-2086

May 8, 2017

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:

Subject: NB Power Comments on REGDOC 2.13.1 - Safeguards and Nuclear Material Accountancy

The purpose of this letter is to provide NB Power's comments on REGDOC 2.13.1 - Safeguards and Nuclear Material Accountancy (Reference 1). NB Power's Point Lepreau Nuclear Generating Station (PLNGS) has collaborated with Bruce Power, Ontario Power Generation, Cameco and Canadian Nuclear Laboratories to review the proposed regulatory document in detail.

PLNGS is supportive of this initiative to develop regulatory guidance and appreciates the opportunity to provide input to strengthen the licencing process. Comments have been provided (Attachment 1) recommending changes for improving the regulatory guidance. PLNGS is particularly concerned with the language that implies Nuclear Materials Accountancy Reporting (NMAR) is a requirement. Prior discussions with the CNSC agreed that the present software Sibyl Bundle Tracker (SBT) at the plant would be installed and implemented as a suitable alternative.

If you require additional information, please contact Scott Demmons at 506-659-6557 or sdemmons@nbpower.com.

Sincerely

Brett Plummer

Vice President Nuclear and Chief Nuclear Officer

BP/SD

cc. Ben Poulet, Lisa Love-Tedjoutomo, Bruno Romanelli, Isabelle Gingras, Lee Casterton, Nina Abonasara, Joseé Giguère (CNSC - Ottawa) consultation@cnsc-ccsn.gc.ca
CNSC Site Office
Will Higgins, Wade Greenlaw, Brent Brown, Joe Valardo, Al MacDonald, Carol Murray (NBP)

Reference:

1. Website Notice: from CNCS to industry, March 7, 2017: Consultation on draft *REGDOC-2.13.1*, *Safeguards and Nuclear Material Accountancy*.

Attachment:

#	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 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; should they choose not to follow it, they should explain how their chosen alternate approach meets regulatory requirements."	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 and activities (IAEA Factsheet: IAEA Safeguards Overview), including complementary access. If mines are 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 tonuclear material and activities initiated by the IAEA, 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.	Request for Clarification	
3.	Section 1.2	The statement "The following materials are not considered	Suggest: "materials are not subject to	Request for	
	(d)	nuclear material, and as such, are not subject to safeguards in	safeguards in Canada and remove the 'are	Clarification	

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		Canada: b) nuclear material in transit in Canada are not subject to safeguards" is misleading	not considered nuclear material' from the paragraph before the bullets.		
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	Using the form available on the CNSC website	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 developed.	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	
8.	5.0	"Licensees shall communicate any such events to their own security staff, where such staff exist." 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.	5.0	"At licensee sites where safeguards seals and equipment are likely to be present, part of a licensee's safeguards program	Suggest changing "all relevant persons" to "all site staff".	Request for Clarification	

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		should include familiarizing all relevant persons with the requirements surrounding IAEA seals and equipment."			
10.	Section 5 Installation of Safeguards Equipment	Please clarify what is meant by "all relevant persons". 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 wold include a discussion of this issue	Major	Without clarity for the 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.	Request for Clarification	
12.	6.1	"During an inspection, the licensee shall provide a list of inventory items (LII) covering material subject to inspection" 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.	Request for Clarification	
13.	6.1 Guidance	The CNSC will seek to participate in all IAEA inspections in Canada, where possible Clarify	Provide clarification or examples.	Request for Clarification	
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.	Request for Clarification	
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.	Request for Clarification	
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.	Request for Clarification	

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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	Request for Clarification	
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.	Major	Licensees are independent 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.	Request for Clarification	
20.	6.4	"Note that the granting of access may be required on short notice." 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	
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?		Request for Clarification	
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?		Request for Clarification	Request for clarification of the type of items to be included. Weight scales?
23.	7.3 PIT	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	Major	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	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.	Request for Clarification	
		the Licensee obligated to that date, or is it negotiable?			

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		If the date selected by CNSC does not align with Licensee production commitments or resource availability, can the Licensee propose more suitable dates?			
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).	Request for Clarification	
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 a transposed number for example).	Request for Clarification	
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 mays assign a Canadian obligation"	Request for Clarification	
28.	8	Provision of Information All information supplied to the CNSC shall be transmitted using appropriate information security measures. The CNSC's Nuclear Materials Accountancy Reporting (NMAR) e-business	Include statement permitting other agreed upon means to tract 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.	Request for Clarification	
30.	8.1.1 Guidance	Reference to CSA N290.7 Cyber Security for NPP	CSA N290.7 is not implemented nor referenced in current LCHs of NPPs. Not expected for several years. Recommend removing reference until later version.	Request for Clarification	
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."	As cyber security is a growing concern in all industries, suggest changing "shall" to "must".	Request for Clarification	
		Please confirm if this means that cyber security measures must			

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22	8.1.1	be in place for these systems. Electronic reporting through the NMAR e-business system will		Request for	
32.	0.1.1	require initial setup and resources such as Microsoft Excel version changes. Licensees need to ensure they have browser compatibility with the NMAR website and confidence this will not change or changes will be communicated ahead of time.		Clarification	
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	
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.		Request for Clarification	
39.	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 facilitiespreliminary design shall be submitted as soon as the decision to construct or authorize	Suggest allowing for submission of "Approved for Construction" drawings instead of "Final" drawings, with the understanding that "Final" drawings will be submitted when available.	Clarification	

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		construction has been taken, whichever is earlier. An updateshall be submitted to the CNSC no later than 270 days before the start of construction. Similarly, final design informationno later than 270 days before the first receipt of nuclear material at the facility." 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			
40.	Section 8.3	not follow standard project schedule. Who determines the "relevance of safeguard"? How?	Please include criteria in the Guidance section for this item.	Request for Clarification	
41.	8.4i	"2current 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 Information required by the Additional Protocol	"current drawings of the site, 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.	This section needs to state that the Licensee is only required to include buildings and descriptions of buildings for which the licensee operates.	Request for Clarification	
43.	8.4	"6. Information regarding Group 1B material: a. for materials exempted from safeguards pursuant to Article 37	Need to add to document that CNSC will inform licensees of exempted material being	Request for Clarification	

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		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	transited to them		
44.	9	requested such an exemption under Article 36 or 37? Licensees would like to see more guidance on retention of records. In particular, ICDs.	Add additional guidance on retention of records.	Request for Clarification	
45.	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	
46.	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	
47.	Table D4:	Fuel – Assemblies Solid Waste - Hull	Please define 'Assemblies', "Hulls" consistent with IAEA definitions	Request for Clarification	
48.	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	