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Mr. B. Torrie  
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Canadian Nuclear Safety Commission  
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1.03.02

FILE DOSNIER	1-8-8-0
REFERRED TO RÉFÉRÉ À	Torrie, B.

Dear Mr. Torrie:

Bruce Power Comments on REGDOC 2.9.1:  
Environmental Protection, Environmental Policy, Assessments and Protection Measures

The purpose of this letter is to provide Bruce Power's comments on draft REGDOC 2.9.1: *Environmental Protection, Environmental Policy, Assessments and Protection Measures*. The draft REGDOC represents the consolidation of two documents, both numbered REGDOC 2.9.1, one regarding environmental protection policies, programs and procedures, and the other regarding environmental assessment processes.

We appreciate that with the merging of these two documents the Canadian Nuclear Safety Commission (CNSC) will have integrated all of the associated guidance. As such, the REGDOC is in keeping with the one-for-one rule under the federal government's *Red Tape Reduction Action Plan*. However, because REGDOC 2.9.1 is the consolidation of multiple documents, it will add complications in compliance with operating licences.

The REGDOC raises the following general questions and comments on the guidance provided (see Attachment A for additional details):

- References to other Regulatory Documents and Standards – REGDOC 2.9.1 attempts to paraphrase several different regulatory documents (CSA and ISO standards, and REGDOCs), which has the potential to create some inconsistencies in the terminology and interpretation of the documents. These documents are also subject to periodic review, which has the potential to further compound the number of inconsistencies over time. This should be remedied by citing, rather than paraphrasing, the regulatory documents.
- The draft REGDOC refers to “environmental assessment (EA)” to be either under CEAA 2012 or NSCA. The distinction of an environmental assessment under the CEAA 2012 and an EA under the NSCA is not clear throughout the document. This may lead to confusion and uncertainty if environmental protection reviews under

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NSCA are also being called an EA. Bruce Power suggests that the term EA should only be used when referencing the CEAA 2012, while an “EA under NSCA” should be called an “environmental protection assessment” (EPA) for clarity.

- Environmental Assessments (EAs) – Bruce Power supports the federal government’s decision to make the CNSC the sole responsible authority for nuclear projects under the *Canadian Environmental Assessment Act, 2012* and the certainty that that provides. Given the newly elected government’s plans to carry out an “immediate review” of EA processes, we would like to further reinforce our support of the CNSC’s designation as responsible authority, and the need to grandfather any changes to the Act.
- Requirements vs. Guidance – Strict requirements such as the requirement for fish toxicity testing are not typical of guidance documents, which are implemented in the ‘spirit of the law.’ Such requirements are usually captured in regulations, such as the Ontario Municipal Industrial Strategy for Abatement, *Effluent Monitoring and Effluent Limits Regulations*. If such requirements, which duplicate existing Federal and/or Provincial legislation, are to remain in the document, it needs to be clear in the REGDOC that meeting the existing Federal and/or Provincial requirements is adequate to meet the requirements of the REGDOC. This is necessary to avoid duplication (and in some cases triplication) of legal requirements. We are, however, supportive of the development of a Ministerial Regulation<sup>1</sup>, along with guidance within REGDOC 2.9.1, that would acknowledge that Bruce Power’s discharges are subject to adequate provincial regulations, and avoid duplication.
- Levels of Risk - We appreciate the recognition that there are varying levels of risk associated with nuclear facilities and activities. However, statements that “All licence applications are subject to an EA, commensurate with the scale and complexity of the environmental risks” do not entertain the possibility that no EA is required (i.e., no environmental interactions). Similarly, “for facilities with no interactions, the licensee’s ERA is considered to be complete with the characterization and the demonstration of no interaction,” but it is unclear how such a determination would be made, and for each level of risk.
- Transition from EA to ERA - Once an EA has been completed under CEAA, any follow-up monitoring would be captured under the CSA N288 series of standards (N288.4, N288.5, and N288.6) and the broader governance of Bruce Power’s ISO 14001 Environmental Management System and associated Environmental Monitoring Program (EMP). The transition from EA follow-up to the ERA and other programs should be outlined in REGDOC 2.9.1. The rigour that an ERA provides (equivalent to that of an EA) should also be acknowledged.

While it is not the central focus of the public review process, we would like to offer the following feedback on the Impact Statement that was developed for this REGDOC (see Attachment B for additional details).

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<sup>1</sup> *Regulations Establishing Conditions for Making Regulations Under Subsection 36(5.2) of the Fisheries Act*



- Impact Statement - The argument that "the CNSC must give consideration to values and principles that are difficult to quantify in a dollar value" is not a satisfactory reason for not conducting a strict quantitative assessment of the costs and benefits associated with this REGDOC. Costs should be estimated and at the expense of the federal government, as is the practice when establishing new regulatory instruments in other jurisdictions.

The 2012 amendments to CEEA were intended to bring certainty to the federal EA process. Given the recently mandated review of CEEA, industry is now in the position of being relatively uncertain about what the expectations are for current and future EAs. As such, the Impact Statement does not capture the true impacts of the proposed REGDOC, unless any changes to the EA process are grandfathered. A transition period would be inappropriate given the seasonal nature of EA work.

We strongly urge the CNSC to consult with its stakeholders to help amend the proposed REGDOC. Bruce Power believes a workshop to gather and address stakeholder issues with this current draft of REGDOC 2.9.1 would benefit all involved. We welcome the opportunity to provide the CNSC with the remainder of our comments in such a forum.

If you require further information or have any questions regarding this submission, please contact Maury Burton, Manager, Nuclear Oversight and Regulatory Affairs, at 519-361-5291, or [maury.burton@brucepower.com](mailto:maury.burton@brucepower.com).

Yours truly,

Frank Saunders  
Vice President Nuclear Oversight and Regulatory Affairs  
Bruce Power

cc: CNSC Bruce Site Office  
K. Lafrenière, CNSC Ottawa  
M. Rinker, CNSC Ottawa  
K. Owen-Whitred, CNSC Ottawa

Attach.

**Attachment A**

**Bruce Power Comments on REGDOC-2.9.1,  
*Environmental Policy, Assessments and Protection Measures***

**Bruce Power Comments on REGDOC-2.9.1,  
Environmental Policy, Assessments and Protection Measures**

- The REGDOC seems to fluctuate between ‘requirements’ and ‘guidance’ and includes some of the stricter requirements more commonly found in legislation. Also, in keeping with regulatory requirements, the REGDOC stipulates that licensees must justify how their approach meets the “regulatory requirements” if an alternate approach is being taken.
- References to the “principles of pollution prevention, precautionary principle, polluter pays, sustainable development and adaptive management” should be removed, because they underpin all of the environmental legislation (e.g., *Canadian Environmental Protection Act, Canadian Environmental Assessment Act, Fisheries Act*) the document references. Specifically mentioning these principles calls into question whether or not they are addressed, which they most definitely are.
- The phrase ‘environmental assessment’ has very specific connotations under federal and provincial EA legislation. Referring to assessments under the *Nuclear Safety and Control Act* (NSCA) as EAs has the potential to raise expectations beyond what is commensurate with the level of risk, resulting in dissatisfaction (e.g., among members of the public). These should be referred to as Environmental Protection Assessments (EPAs). It is also unclear whether there is a need to carry out an additional EPA under the NSCA in cases where an EA has been conducted under CEEA.
- We note that there is no transition period for the adoption of this REGDOC because many licensees will already be “meeting the requirements through their existing licensing basis.” This may not be practicable given the number of referenced CSA standards (CSA N288.7-15 - Groundwater protection programs at Class I nuclear facilities and uranium mines and mills) and REGDOCs (REGDOC 3.2.2 Aboriginal Consultation) that have recently been issued.
- Appendix A indicates that there are no regulated timelines for the EAs conducted by the CNSC. However, if the NSCA assessment process does constitute an EA, then there should be some assurance that a decision would be rendered within the current licensing timeframes (i.e., ~ 18 months).
- Strict requirements “for effluents released to water frequented by fish, the effluent and emissions monitoring and control shall include fish toxicity testing” are not typical of guidance documents. Strict requirements such as fish toxicity testing normally appear in a regulation, as follows:
  - Acute lethality testing is a requirement of uranium mines under the *Metal Mining Effluent Regulations*.
  - Acute lethality testing is required of nuclear power plants under the Ontario Municipal Industrial Strategy for Abatement, *Effluent Monitoring and Effluent Limits Regulations*.

In fact there are new enabling regulations<sup>2</sup> under the *Fisheries Act* that allow the Minister to issue an authorizing regulation where discharges are already subject to adequate federal or provincial legislation. Such a regulation would avoid the appearance of duplicative regulatory requirements.

- We appreciate the acknowledgement that there are varying levels of risk associated with nuclear facilities and activities. However, the grades that are identified in the statement “a graded approach, as appropriate to their circumstances,” are undefined. Also, N288.6 does not apply to some of the licensees captured in this REGDOC. There is a gap in the standards and guidance available for the conduct of ERAs for Waste Nuclear Substance Licensees and Class II licensees, for example.
- The proposed REGDOC indicates that “for facilities with no interactions, the licensee’s ERA is considered to be complete with the characterization and the demonstration of no interaction.” It is unclear how this determination would be made for ERAs and each level of risk. There is the suggestion that Screening Level Risk Assessments (and associated pathway determinations) would be appropriate for Class II facilities and facilities under the *Nuclear Substances and Radiation Devices Regulations*, however.
- It is agreed that the licensee should “use the ERA to identify substances requiring an action level.” It is further recommended that only those substances with the potential to cause significant adverse effects, be identified as requiring an action level. Also action levels should only be developed for radiological parameters, as suggested in the original guidance (G-228). The establishment of action levels for non-radiological or hazardous substances represents a deviation from the original intent, under the *Radiation Protection Regulations*.
- As indicated, “every applicant or licensee must have an ERA, commensurate with the scale and complexity of the environmental risks associated with the facility or activity; the ERA is subject to regular updates (at least every five years, and whenever significant change occurs in either the facility or activity.” However, there is no clear guidance on what constitutes a “significant change” and for each level of risk. Bruce Power notes that there is a need to manage these changes in a similar manner to what is done for Safety Reports (i.e., an analysis of record).
- The REGDOC consistently suggests that an ERA is part of an EA. This is contrary to EA theory – which has the EA as a planning process before key decisions made vs. risk based on actual emissions / chemicals of concern. There is nothing in previous or existing EA legislation that requires an ERA as part of an EA. However, we note that an ERA can be complementary and supportive to an EA or the basis for an EPA.
- There is a recommendation to benchmark the monitoring program against top performing facilities. There is a need to clarify which facilities are considered top performing and according to whom (e.g., OPEX, WANO, INPO). Also, while some

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<sup>2</sup> *Regulations Establishing Conditions for Making Regulations Under Subsection 36(5.2) of the Fisheries Act* [#].

benchmarking data is available for nuclear facilities, limited environmental data are available from other facilities.

- To avoid confusion, the REGDOC should cite the most recent version of ISO 14001. Also, there are references to 'performance indicators and targets' throughout the document that are undefined. It is unclear whether these targets and indicators are as defined under ISO 14001, or are being discussed in more general terms.

**Attachment B**

**Bruce Power Comments on the REGDOC-2.9.1,  
*Environmental Policy, Assessments and Protection Measures – Impact Statement***

## Impact Statement:

- Bruce Power supported the consolidation of responsibility for EAs under CEAA 2012 within a single responsible authority (i.e., the CNSC). Bruce Power would like to reinforce this point given the potential for CEAA to be revisited under the newly elected federal government, which is planning to carry out an “immediate” review of environmental assessment processes.

Given that EA processes will be subject to federal review, the Impact Statement cannot realistically capture the true impacts of the proposed EA processes, unless any resulting changes are grandfathered to CEAA 2012. Given the seasonal dependencies of EA work, a transition period would not allow sufficient time to respond to CEAA amendments.

- The justification for not conducting a strict quantitative assessment of the costs and benefits - “In fulfilling its mandate as a federal regulator, the CNSC must give consideration to values and principles that are difficult to quantify in dollar value, such as the need to clearly document its regulatory expectations for all Canadians, and to fulfill our responsibility under the *Nuclear Safety and Control Act* to disseminate objective scientific and regulatory information” - is inconsistent with the practices of other agencies.

Note that there are numerous examples where new regulatory requirements were clearly justified, but where the regulatory agency was still required to conduct a cost-benefit analysis to ensure that the resulting requirements are fiscally responsible. In fact, there are dedicated departments within these agencies (e.g., Environment Canada’s Economic Analysis Branch) with the capacity to conduct such analyses.

- We appreciate that “all licence applications are subject to an EA, either under the NSCA or CEAA 2012,” but would like to reiterate Bruce Power’s earlier comments on the need to consolidate the licenses of major facilities and the assessments that they are subject to under a single licence/requirement. Class II facilities or activities that are situated within the perimeter of a Class IA facility should not require any additional consideration of potential environmental effects, given the level of scrutiny they would have been subject to.
- According to the Impact Statement, “the CNSC does not expect that significant additional information will be required from applicants or licensees, nor that significant additional cost will be incurred by the applicants or licensees.” It is not clear how this conclusion could have been reached without a quantitative assessment, or how this could change if changes are made to CEAA 2012 as a result of the pending federal review.
- We note that “current licensees will be expected to prepare implementation plans and conduct gap analyses.” The guidance is not clear, or detailed enough to conduct such a comparison and the assurance that for each licensee, the implementation strategy for this regulatory document “will follow discussions and consultations between CNSC staff and the licensee” does not offer added clarity.

- Further to this, it is confusing to see BATEA – Best Available Technology Economically Achievable – discussed within the main document, but not in the Impact Statement. Whether or not technologies are BATEA is typically considered through the analyses carried out as part of the Regulatory Impact Analysis Statement development, but no such analyses have been carried out here.