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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-2.9.1, Environmental Protection: Environmental Assessments

The purpose of this letter is to provide the Canadian Nuclear Safety Commission (CNSC) with Bruce Power's comments on the proposed revisions to REGDOC 2.9.1. As the draft document is currently written, Bruce Power understands the proposed document's application to a nuclear power plant (NPP) as follows:

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- Initial NPP application for licence to prepare site (and subsequent licences) is covered by Part B, and
- NPP applications for licence renewal and amendments as well as applications for other licences (e.g., Class 2 licensing/relicensing, import/export of nuclear substances licensing) are covered by Part A.

Bruce Power supports Part B of this document as it effectively describes how environmental assessments (EA) will be managed by the CNSC once an activity at a nuclear facility triggers an EA under Canadian Environmental Assessment Act (CEAA) 2012. The only comments Bruce Power provides in reference to Part B are: 1) create a separate REGDOC due to differences in subject matter focus between the existing environmental protection REGDOC and the proposed revised REGDOC (i.e., the former having an environmental planning application versus the latter having an environmental program implementation and mitigation application), and 2) revise the timeline presented in Appendix D for EAs completed under CEAA 2012 via the CNSC licensing process to be consistent with the timeline presented under CEAA 2012; (i.e., an environmental assessment conducted by the Agency must be completed within 365 days¹, yet Table 4 of Appendix D indicates the CNSC can take up to 730 days).

Bruce Power has significant concerns with Part A of the proposed revisions to REGDOC 2.9.1. In essence, Bruce Power considers Part A to be vague, over reaching, and lacking clarity in its application. Part A, as it is written, is open-ended consequently creating the opportunity for misinterpretation and misapplication of the process as it

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applies to a wide variety of nuclear facility projects regardless of size and/or magnitude of environmental impacts. There is so little detail provided that Licensees could not reasonably determine the requirements in advance and would need to rely entirely on CNSC staff determination of the need. This is not in our view acceptable regulatory practice and will result in undue delays in the regulatory process as well as unnecessary and misdirected discussions on environmental issues that have already been addressed and mitigated as part of ongoing environmental programs. Part A creates regulatory uncertainty by not providing specific EA triggers or exemptions. This lack of guidance prohibits the ability to determine the extent to which this EA process applies, hence limiting the licensee's ability to determine a project's viability.

Part A fails to recognize that existing facilities have well-established environmental programs that identify an environmental risk envelope for each facility. The existing environmental risk assessment process should exempt facilities from much of the environmental process described in Part A (i.e., existing facilities would only need to engage the nine-step process if the new activity falls outside of the environmental risk envelope). Criteria need to be identified that clearly identify exemption thresholds for many low risk projects and relicensing activities, while conversely identifying triggers where the more rigorous nine-step process is required. A project or licensed activity that is exempt would then default back to the program performance review already required as part of licence renewal/amendment activities.

The CNSC makes environmental protection under the Nuclear Safety and Control Act (NSCA) synonymous with the EA process under CEAA 2012. Bruce Power acknowledges that CEAA 2012 and the associated Regulations Designating Physical Activities² require new nuclear facilities to undertake an EA under the authority of the CNSC; addressed by Part B of the REGDOC. However; there is no such requirement for licence renewal or amendments regarding existing nuclear facilities (nor other CNSC regulated activities).

The CNSC have proposed a similar CEAA-like process to those nuclear facilities specifically exempt from CEAA 2012³; further confusing the process by using the same EA descriptor. This new requirement goes beyond the NSCA requirement for making adequate provision for the protection of the environment⁴. An EA provides a comprehensive, once through, planning evaluation; not a cyclical process used to support nuclear relicensing on an ongoing basis. Bruce Power strongly recommends that Part A be removed or be rewritten to more accurately reflect the more focused NSCA requirements and not the expansive CEAA-like EA requirements. Furthermore, Part A should cease using the EA descriptor; utilizing a more appropriate descriptor such as Environmental Protection Assessment or Protection of the Environment Technical Studies to emphasize the differences between the two distinct processes.

Further to the above, the following points summarize Bruce Power's major concerns which support the overall recommendation to remove Part A, or at a minimum, rewrite and reissue the draft document:

² CEAA s.67 and SOR/2012-147 s.31-38.

³ The exemption to existing nuclear facilities does not include facilities that expand >50% of their production capacity.
⁴ NSCA s.24.4(b).



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- The "Purpose" described in Part A indicates the NSCA requires existing facilities
 to conduct an EA. While s.67 of CEAA requires the CNSC to determine that a
 nuclear facility regulated under the NSCA must not cause significant
 environmental effects, it does not specifically require an EA; rather the licensee
 is required to make adequate provision for the protection of the environment
 further noting that the NSCA does not utilize the specific term Environmental
 Assessment.
 - Bruce Power recommends Part A explicitly states that "For the purposes of licence renewal or amendments, nuclear facilities that have already successfully undertaken the EA process under CEAA are exempt from the nine step EA process described in Part A.", and
 - Part A states that Section 6(h) of the Class 1 Nuclear Facilities
 Regulations remains the requirement for relicensing and that the CNSC
 recognizes/credits nuclear facilities with existing and continually
 improving environmental programs as ongoing proof of adequate
 protection to the environment and the health and safety of persons.
- It is unclear as to what nuclear facilities and activities Part A applies or to what
 the trigger criteria are. Part A does not acknowledge that existing facilities have
 already received determinations under CEAA and have well established
 environmental management programs that are maintained, continuously
 evaluated, and improved to ensure continuous protection to the environment, the
 health and safety of persons.
 - Bruce Power recommends Part A defines criteria identifying how an existing licensee can demonstrate it already meets the requirements for environmental protection; i.e., implementation of programs already required by the General Nuclear Safety and Control Regulations (GNSCR), Class I Facility Regulations and other associated NSCA regulations.
- The nine step process described in Part A significantly expands the scope of the environmental protection requirements for nuclear facility licence renewal or amendment with little benefit to nuclear safety. For instance; EA technical studies are not part of the licence renewal or amendment process as currently defined in the regulations. Notably, a change to the regulations would be required to enact such a change to the process or requirements. The CNSC's use of Section 3(1)(m) of the GNSCR (Step 5, Part A) to add in studies required for "factors as a consideration of cumulative effects or alternative means to carry out the project" is a misuse of this section of the regulations. Application of this Section 3(1)(m) instead of providing a defined list of technical requirements in Part A will introduce subjectivity in to the scoping of technical requirements; thus leading to inconsistencies in requirements among projects.
 - Bruce Power recommends Part A defines clear and specific technical requirements to be included with the Licence Application that will satisfy the intent of Part A.



- The proposed nine step process adds a significant amount of time to the licensing process (whether it be renewals, amendments, or other regulated activities); increasing costs for licensees with no apparent benefit. Figure 1 in Appendix A identifies the determination of EA requirements occurring after the Licence Application is submitted; this is incompatible with the current licensing timelines. For example, using the approach in Appendix A coupled with the timelines presented in Appendix D (in the absence of timelines provided for the Part A approach), the relicensing process would require a minimum of 15 months and potentially more than two years compared to the current one year process (assuming no additional EA technical studies or external reviews are required). The CNSC must provide the EA determination (e.g., the EA Conclusion Report) prior to the Licence Application AND allow sufficient time for the Licensee to include any additional technical information with the Licence Application.
 - Bruce Power recommends the CNSC revise the steps presented in Appendix A to reflect how this environmental process integrates with the current licensing process, and
 - Part A must include stringent timelines for each of the nine steps.
- The nuclear industry has focused on enhancing, and unifying its approach to environmental management and protection. It has participated, with the CNSC, in the development of consensus-based standards for the environmental management of nuclear facilities, (e.g., the N288 series of standards). Surprisingly, the Part A gives very little relevance to these standards; specifically the development of an N288.6 environmental risk assessment for each facility. This environmental risk assessment series captures the environmental impacts of the NPP operations and allows any mitigating measures to be evaluated on an ongoing basis.
 - Bruce Power recommends that Part A explicitly states that "submission of a valid N288.6 compliant environmental risk assessment will satisfy the environmental protection requirement under Part A."
- The CNSC intends to combine this document with the current REGDOC 2.9.1. Environmental assessment is a separate issue/topic from ongoing environmental programs and warrants a separate document. For licensing purposes, it adds confusion to the process having this document amalgamated into the same requirements document as ongoing environmental programs. This is a significant policy change from other CNSC safety and control areas.
 - Bruce Power recommends making this document REGDOC 2.9.2 Environmental Protection: Environmental Assessments.

⁵ The N288.6 environmental risk assessment is reviewed on a minimum of a five year cycle or when major changes to the operations occur; i.e., refurbishment of nuclear reactor units.



As the next step, Bruce Power recommends that the CNSC coordinate a Stakeholders' workshop to facilitate a better understanding among stakeholders on the purpose of the REGDOC and how to best present this information. Upon completion of the workshop, Bruce Power recommends that the REGDOC be rewritten and reissued as a separate draft REGDOC.

In closing, the comments provided above are primarily related to Part A and how it may be applied to the relicensing process for NPPs. The proposed revisions to REGDOC 2.9.1 fail to recognize that existing NPPs have already undertaken a CEAA (or equivalent) process, well established environmental management programs, and committed significant time and resources to develop consensus-based standards that make environmental management programs for nuclear facilities consistent, transparent, and continuously improving. The proposed document further fails to recognize the existence of these environmental initiatives that provide continuous and ongoing mechanisms to adequately protect the environment and the health and safety of persons. This failure to recognize the NPPs' efforts, by its absence, suggests that NPPs are lacking in this safety and control area. As the document is currently written, it will create regulatory uncertainty, undue delays, and threatens the actual feasibility and/or viability of many small improvement projects at nuclear facilities. Lastly, the proposed document is a reintroduction of the environmental assessment process under the former CEAA, effectively countering the CEAA 2012 intent to focus environmental assessments on larger and more complex projects.

If you require further information or have any questions regarding this submission, please contact Mr. Maury Burton, Department Manager, Regulatory Affairs, at (519) 361-2673, extension 15291.

Yours truly.

Frank Saunders

Vice President Nuclear Oversight and Regulatory Affairs

Bruce Power

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