

**Date:** December 13, 2017

**From:** W. Turner

**To:** Lucia Abellan, Environmental Assessment Officer  
Canadian Nuclear Safety Commission

**By email:** cnscc.ea-ee.ccsn@canada.ca

**Subject line:** Submission with Respect to the NPD Closure Project

**CEAA Reference number:** 80121

**Comments:**

Dear Ms. Abellan:

In accordance with the CNSC's Public Notice of November 28, 2017, attached are my initial comments from a preliminary review of CNL's draft report, *Environmental Impact Statement Nuclear Power Demonstration Closure Project*, 64-808760-ENA-004, 2017 September (CNSC Reference Number 121057E). This review focused on two issues.

- Does the draft EIS report address CNSC guidance document, *Generic Guidelines for the Preparation of an Environmental Impact Statement*?
- In its draft report, did CNL address the public's comments on the Project Description?

As I point out in the attachment, the answer to both questions is "No". This answer is disturbing because it suggests that compliance with CEAA 2012 is in jeopardy. Specifically, the answer to the second question above suggests that CNL's report is out of compliance with Section 19(1)(a) of CEAA 2012, which states:

*19 (1) The environmental assessment of a designated project must take into account the following factors: ...*

*(c) comments from the public ... that are received in accordance with this Act ...*

I am submitting these comments relatively early in the review process because CNL must be directed to withdraw the draft EIS in order to address its deficiencies. All the issues I raise in the attachment with respect to this draft report should have been addressed by CNL before they submitted their report for public review. Because the report starts off by being flawed, completing a more detailed review of the report is a waste of time. The CNSC should have verified that the report conformed with its requirements. It should not be the role of the public to point out its deficiencies.

Please instruct CNL to withdraw their draft EIS report and provide a revised report that addresses both the provisions of CNSC's *Generic Guidelines for the Preparation of an Environmental Impact Statement* and their dispositions to the comments on the Project Description. Addressing the dispositions will facilitate compliance with Section 19(1)(c) of CEAA 2012.

When the revised report is issued for public review, I will submit further comments.

Regards

W. Turner (AECL retiree)

# Comments on draft EIS for “Nuclear Power Demonstration Closure Project” (Registry Number 80121)

By W. Turner (AECL Retiree)

## 1. Introduction

I have now had a chance to complete a preliminary review of CNL’s draft EIS report on the “Nuclear Power Demonstration Closure Project” [1]. The scope of this initial review was to compare the draft report with:

- The CNSC guidance document, *Generic Guidelines for the Preparation of an Environmental Impact Statement* [2], and
- CNSC’s dispositions [3] on the comments submitted on CNL’s Project Description [4] to determine whether those dispositions had been addressed.

The details of this evaluation are presented below. To summarize, CNL’s draft EIS report fails to address both the requirements of CNSC’s EA guidance and the CNSC’s dispositions. As such, the report does not fulfill the requirements of Section 19(1)(c) of CEAA 2012 which states:

*19 (1) The environmental assessment of a designated project must take into account the following factors: ...  
(c) comments from the public ... that are received in accordance with this Act ...* [5]

Therefore, I request that the CNSC instruct CNL to withdraw this report and stipulate that CNL submit a revised report that adequately addresses both the requirements of CNSC’s own guidance with respect to the production of an EIS report, and the CNSC’s dispositions. Addressing the CNSC’s dispositions will facilitate compliance to CEAA 2012.

## 2. CNSC’s Requirements for an EIS report

The requirements to write and submit an EIS report is not specified in the *Canadian Environmental Assessment Act*. That Act specifies two reports, the *Project Description*, and the *Environmental Assessment Report* [5]. The Responsible Authority (RA) sets the requirements for all other documentation. For this undertaking, the RA is the CNSC.

The purpose of the Project Description report is to allow the RA to decide whether an EA is required under CEAA 2012. The purpose of the *Environmental Assessment Report* is to provide sufficient information for the RA to make the EA determination, which under Section 67(a) is:

*“the authority determines that the carrying out of the project is not likely to cause significant adverse environmental effects ...”* [5]

In its role as the RA, the CNSC produced its EIS guidelines [2] for the proponent to follow to ensure that, as the RA responsible for the Environmental Assessment Report, sufficient information would be available such that its EA report could be prepared. The following quotation from the *Introduction* to the CNSC document, *Generic Guidelines for the Preparation of an Environmental Impact Statement*, confirms the overall purpose of the EIS report stated above:

*The Canadian Nuclear Safety Commission (CNSC) will use the proponent’s EIS and other information received during the environmental assessment (EA) process to prepare an EA report that will inform the issuance of a decision statement by the Commission.* [2]

The following quote, also from the *Introduction*, states that the *Guidelines* specify the information to be included in proponent’s EIS report.

*“The purpose of this document is to provide information to proponents on **the requirements for the preparation of an environmental impact statement (EIS) for a designated project to be assessed pursuant to the Canadian Environmental Assessment Act, 2012 (CEAA 2012).** **This document specifies the nature, scope and extent of the information required** ...”* [emphasis added] [2]

Since these *Guidelines* specify the information to be included in the draft EIS, one would expect that contents of the draft report are checked against these provisions before being released to the public for review. That verification is one of the roles of the CNSC.

While the Project Description is not the EIS report, it does provide an early indication as to some deficiencies in the information provided by the proponent that may not meet the provisions of the *Guidelines*. Consequently, as a member of

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the public, before I review the draft EIS, I have to assume that all provisions of the *Guidelines* have been addressed. It is not my role to verify that the EIS report conforms to the CNSC’s *Guidelines*.

As discussed in Section 3 below, in their dispositions to public comments on CNL’s Project Description, the CNSC identified several deficiencies, stating the expectation that CNL would provide the information stipulated by the *Guidelines* [3]. However, in their draft EIS [4], CNL chose to ignore the CNSC’s requests.

### **3. Addressing CNSC Dispositions to Public Comments on the Project Description**

In their dispositions to several of the comments on CNL’s project description, the CNSC stated that:

*Detailed information on ... [the substance of the comment] ... will be ... **summarized in sufficient detail in the EIS** ... Sufficient information is required for CNSC staff to make scientifically defensible recommendations which inform evidence-based Commission decisions. [emphasis added] [3]*

I therefore searched for instances where CNL’s EIS report provided the “... sufficient detail ...” as required by the CNSC dispositions.

Table 1 compares the CNSC’s “Disposition Table of Public and Aboriginal Groups’ Comments on Project Description – Nuclear Power Demonstration Closure Project” [3] with what was found in the draft EIS for the project [1]. The examples were chosen to demonstrate that the draft EIS does not address all the comments included in the public submissions on the project description included on the CEAA Registry. Although the examples selected are from my submission [6], other submissions raised essentially identical issues to which the CNSC provided the same response.

As outlined in Table 1, CNL’s draft EIS for the entombment of the NPD reactor [1] does not address CNSC’s dispositions to the comments received on their Project Description document. Thus, when the initial opportunity arose, CNL chose not to address Section 19(1)(c) of CEAA 2012, quoted above.

### **4. Conclusion**

Although this evaluation against these two requirements is not exhaustive, it is indicative of a failure on the part of CNL. If they cannot consider and address the relatively simple requirements outlined above, it is questionable that the report itself addresses the other legislative and guidance as required under CEAA 2012 and the *Nuclear Safety and Control Act*.

Since CNL’s draft EIS does not address either the provisions of CNSC’s *Guidelines* or its dispositions to comments received on their project description, the CNSC has little choice but to direct CNL to withdraw their current draft and resubmit a document that addresses both the *Guidelines* [2] and the dispositions [3]

Please instruct CNL to withdraw their draft EIS report and provide a revised report that addresses both the provisions of CNSC’s *Generic Guidelines for the Preparation of an Environmental Impact Statement* [2] and their dispositions to the comments on the Project Description [3]. Addressing the dispositions will facilitate compliance with Section 19(1)(c) of CEAA 2012 [5]

### **5. References**

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- [1] CNL, *Environmental Impact Statement Nuclear Power Demonstration Closure Project*, 64-808760-ENA-004, 2017 September (CNSC Reference Number 121057E)
  - [2] CNSC, *Generic Guidelines for the Preparation of an Environmental Impact Statement pursuant to the Canadian Environmental Assessment Act, 2012*, May 2016.
  - [3] CNSC, *Disposition Table of Public and Aboriginal Groups’ Comments on Project Description – Nuclear Power Demonstration Closure Project*, (CNSC Reference Number, 118857E)
  - [4] CNL, *Project Description - NPD Closure Project*, 64-509200-ENA-003, Revision 1, 2016 March 31 (CNSC Reference number, 114473E)
  - [5] Government of Canada, *Canadian Environmental Assessment Act, 2012*, S.C. 2012, c. 19, s. 52
  - [6] William Turner to the Canadian Nuclear Safety Commission re: *Comments on the project description for the Nuclear Power Demonstration Closure Project* (CNSC Reference Number, 114830E)

**Comments on draft EIS for “Nuclear Power Demonstration Closure Project”  
(Registry Number 80121)**

**Table 1: Comparison of the draft EIS with CNSC Dispositions to Comments on the Project Description**

	<b>Comment Number (See Ref 3)</b>	<b>My Comment on the Project Description (See Ref 6)</b>	<b>CNSC Response (See Ref 3)</b>	<b>Draft EIS</b>
1.	WT-3	<p>General Comments on the Project Description (3)</p> <p>“Please provide an estimate of the timeline at which the radioactivity will meet the clearance levels required for abandonment.”</p>	<p><i>Institutional control</i></p> <p><i>With respect to institutional control, CNSC staff require that information regarding the lifecycle of the project, including the form, length, and requirements of the institutional control period and post-closure monitoring activities, be addressed in the proponent’s licensing documentation and summarized in sufficient detail in the EIS and the safety case. The length of institutional control will need to be approved by the Commission.</i></p>	<p>Apparently CNL defines the “Institutional Control phase” as:</p> <p><i>“A phase of the NPD closure project, assumed to extend at least 100 years following the Decommissioning Execution phase”</i> (see Ref 1, page 1-5)</p> <p>CNL then defines the “Post-Institutional Controls phase” as:</p> <p><i>“a phase of the NPD closure project which includes abandonment of the site after the cessation of the Institutional Controls phase; it is assumed that no further management and monitoring will take place during this phase. (see Ref 1, page 1-8)</i></p> <p>I can find no information as to the time that would be required for the residual radioactivity to meet “clearance levels required for abandonment”.</p>

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2.	WT-5	<p>General Comments on the Project Description (5)</p> <p>“What assurance can the proponent provide that the grout will fill all the cavities and provide an adequate seal to the existing walls (and structures) such that water infiltration will not occur over the whole life of the project (including the Long-term Care and Maintenance phase)?”</p>	<p><i>Detailed information on the grouting method, design and longevity of the containment structure, will be provided in the long-term safety analysis and summarized in sufficient detail in the EIS and the safety case. Sufficient information is required for CNSC staff to make scientifically defensible recommendations to inform evidence-based Commission decisions.</i></p>	<p>Although the draft EIS describes the</p> <ul style="list-style-type: none"> <li>• 4.3.1.3 Assembly of the Batch Mixing Plant</li> <li>• 4.3.1.4 Operation of the Batch Mixing Plant</li> <li>• 4.3.1.5 Disassembly of the Batch Mixing Plant</li> <li>• 4.3.1.6 Grouting of Below Grade Structure</li> </ul> <p>I can find nothing that addresses the question, “What assurance can the proponent provide that the grout will fill all the cavities and provide an adequate seal to the existing walls (and structures) such that water infiltration will not occur over the whole life of the project (including the Long-term Care and Maintenance phase)?”</p>
3.	WT-10	<p>(4) Section 3.1.1 - Project Context (Third Paragraph)</p> <p>“Please provide an estimate of the time it will take for the radioactive decay to meet the criteria for a licence to abandon.”</p>	<p><i>Please see the response to WT-3 above.</i></p>	<p>As discussed above (WT-3), the EIS provides no information on “... the time it will take for the radioactive decay to meet the criteria for a licence to abandon.”</p>

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4.	WT-11	<p>(5) Section 3.1.1 - Project Context (Fourth Paragraph)</p> <p>““As disposal options for nuclear waste within Canada are currently not available, in-situ decommissioning can safely reduce Canada’s nuclear legacy liabilities at this property.”</p> <p>... While it is true that there are no disposal options currently available, that does not mean that there will not be one at some future date. Unless it can be demonstrated that there will be no disposal option available within a reasonable timeframe (say 50 years) then the proponent has to provide a rationale as to why their recommended option has to occur by the year 2020 (four years from now). What is the rush? The inventory of radioactive substances will have had another 50 years to decay away.”</p>	<p><i>As indicated in the response to WT-1 above, the proponent’s EIS will have to document in sufficient detail the justification and rationale for the project and assess the alternative means of carrying out the project.</i></p> <p><i>With respect to costs, this comment is outside the scope of this EA, as cost information is not a requirement under CEAA 2012 and not within the CNSC’s mandate.</i></p>	<p>Except for a repeat of the assertion:</p> <p><i>“The decommissioning of NPDWF will ensure a prompt reduction of Canadian legacy long-term liabilities ...”</i></p> <p>With respect to the CNSC response, cost comparisons are outside the requirements of the CEAA.</p> <p>I can find no justification or rationale that addresses the short timeline based on an assessment of the environmental effects</p>
5.	WT-27	<p>(21) Section 6.2.1 – Fish and Fish Habitat (Second Paragraph)</p> <p>““There is the potential for radionuclide releases to groundwater from the in-situ decommissioned reactor and radionuclide migration to the Ottawa River.”</p> <p>This statement appears to indicate that there is no advantage to the environment from implementing this project. Please clarify.”</p>	<p><i>As outlined in section 4 (Project description) of the Guidelines, CNSC staff require the proponent to provide a project justification and assessment of potential project environmental effects, including the end-state and alternative means of carrying out the project, in its EIS.</i></p>	<p>The assessment of alternative means discussed in the draft EIS does not address the environmental effects of those “means”. Thus, CNL’s analysis of alternative means does not meet the requirements Section 4.2 of the CNSC <i>Guidelines</i> and therefore, Section 19(1)(g) of CEAA 2012.</p>