



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Central and Arctic Region  
Fisheries Protection Program  
867 Lakeshore Road  
Burlington, Ontario  
L7S 1A1

Région centrale et de l'Arctique  
Programme de protection des pêches  
876 chemin Lakeshore  
Burlington, Ontario  
L7S 1A1

March 6, 2017

*Your file* *Votre référence*

*Our file* *Notre référence*  
10-HCAA-CA4-05739

Canadian Environmental Assessment Agency  
Deep Geologic Repository Project  
Attn. Panel Manager  
160 Elgin Street, 22<sup>nd</sup> Floor  
Place Bell Canada  
Ottawa, ON K1A 0H3

Dear Ms. Virtue,

**Subject: Technical Review of Ontario Power Generation's Response to the Request for Additional Information for the Deep Geologic Repository (DGR) for Low and Intermediate-Level Radioactive Waste Project.**

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received the above-noted request from the Canadian Environmental Assessment Agency on January 18, 2017. As per the letter received, the Program has reviewed the documents submitted by Ontario Power Generation under our mandate in order to provide specialist advice to enable the technical review of the documents. The Program's comments and analysis of the information provided is attached in Annex 1.

If you have any questions related to the information contained in this letter, please contact Sara Eddy at our Burlington office at <sup><contact information removed></sup> or by email at [Sara.Eddy@dfo-mpo.gc.ca](mailto:Sara.Eddy@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

<Original signed by>

Jennifer Thomas  
A/Regional Manager, Regulatory Review

## Annex 1: Information requests for the Agency's consideration

Dept #	Project Effects Link to CEAA 2012	Request Element	Reference to OPG's Response	Context and Rationale	Specific Question/ Request for Information
DFO-01	5(1)(a)(i) Fish and Fish Habitat	Alternate Locations	Environmental Effects of Alternate Locations - Section 4.2.1	It is noted that the sedimentary site would likely not be located on a floodplain.	Siting of infrastructure may impact floodplains of small watercourses and should be considered.
DFO-02	5(1)(a)(i) Fish and Fish Habitat	Alternate Locations	Study of Alternate Locations Main Submission - Section 4.2.1  Environmental Effects of Alternative Locations - Section 4.3	The report states that in the sedimentary ecozone, most watercourses are cool to cold water.	Note that many of the watercourses in this area are warm water, but may have sensitive species present, including species at risk. The potential for sensitive species should be considered at the alternate locations.
DFO-03	5(1)(a)(i) Fish and Fish Habitat  5(1)(a)(ii) Aquatic Species  5(2) Linked to Regulatory Permits/Authorizations	Alternate Locations	Study of Alternate Locations Main Submission - Section 4.3  Environmental Effects of Alternative Locations - Section 4.3	The potential for species at risk to be present at both the sedimentary and crystalline locations is noted in the Main Submission and in Sections 4.3 and 5.3 of the Environmental Effects document. The report states non-critical supporting habitat will be removed for aquatic species.	It is recommended that the proponent consider the potential for aquatic species at risk and critical habitat, as per section 58 of the Species at Risk Act, at the alternate locations.  Aquatic species at risk, as per the federal <i>Species at Risk Act</i> , are found throughout the sedimentary alternative location in southern Ontario, as illustrated in Figure 4-2 of the <u>Study of Alternate Locations Main Submission</u> . Aquatic species at risk are found within rivers, streams, creeks and agricultural municipal drains in this area. Aquatic species at risk may also be found in areas of the crystalline alternative location. For further information, please refer to the aquatic species at risk maps on Fisheries and Oceans Canada's website at: <a href="http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html">http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html</a> .

	(Fisheries Act, Species at Risk Act)		- Section 4.3.1 - Section 5.3 - Section 5.3.1		
DFO-04	5(1)(a)(i) Fish and Fish Habitat  5(1)(a)(ii) Aquatic Species	Alternate Locations	Environmental Effects of Alternate Locations Section - Section 4.3.1 - Section 5.3.1	Installation of infrastructure, such as culverts, may have direct impacts on aquatic habitat and aquatic biota, depending on the habitat and species present and design and mitigation measures. Changes to water quantity and flow, including groundwater, may impact fish and fish habitat, beyond the aquatic invertebrates identified in the report.	DFO advises the proponent that changes to water quantity and flow may result in impacts to fish and fish habitat, including aquatic species at risk, and should be considered prior to siting.
DFO-05	5(1)(a)(i) Fish and Fish Habitat  5(1)(a)(ii) Aquatic Species	Alternate Locations	Environmental Effects of Alternate Locations Section - Section 4.3	The report states that decommissioning the DGR has the potential to have a beneficial effect on aquatic habitat.	The benefits to aquatic habitat of decommissioning are not expanded on in the report. DFO recommends that the proponent provide more information on the potential benefits.
DFO-06	5(1)(a)(i) Fish and Fish Habitat  5(1)(a)(ii) Aquatic Species  5(2) Linked to Regulatory Permits/Authorizations (Fisheries Act, Species at Risk Act)	Alternate Locations	Environmental Effects of Alternate Locations Section - Section 4.3.2	The proponent identifies that depending on the sensitivity and size of nearby aquatic habitat, additional mitigation may be required.	Note that it is the impact on fish and fish habitat and aquatic species at risk that is considered, not the size of the habitat. Should a <i>Fisheries Act</i> authorization be required, offsetting measures will also be needed. A <i>Species at Risk Act</i> permit may also be required.
DFO-	5(1)(a)(i) Fish	Alternate	Environmental	The conclusions are that effects on aquatic habitat and aquatic	The alternate locations may impact aquatic species at risk, critical habitat or sensitive

07	<p>and Fish Habitat</p> <p>5(1)(a)(ii) Aquatic Species</p> <p>5(2) Linked to Regulatory Permits/Authorizations (Fisheries Act; Species at Risk Act)</p>	Locations	<p>Effects of Alternate Locations</p> <p>- Section 5.4.5</p>	<p>biota are likely to be similar at all three locations.</p>	<p>species and their habitat, depending on specifics of siting.</p> <p>The proponent is advised that aquatic species at risk, as per the federal <i>Species at Risk Act</i>, are found throughout the sedimentary alternative location in southern Ontario, as illustrated in Figure 4-2 of the <u>Study of Alternate Locations Main Submission</u>. Aquatic species at risk are found within rivers, streams, creeks and agricultural municipal drains in this area. Aquatic species at risk may also be found in areas of the crystalline alternative location. For further information, please refer to the aquatic species at risk maps on Fisheries and Oceans Canada's website at: <a href="http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html">http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html</a>.</p> <p>Species at Risk may be added to Schedule 1 of the <i>Species at Risk Act</i>, prior to the construction and operation of either alternative site for the DGR, which may necessitate additional mitigation measures and design considerations.</p> <p>Critical habitat for species at risk is established in Recovery strategies and legally protected through Governor-in-Council. Works that may impact critical habitat may not be permitted.</p> <p>Note that a <i>Species at Risk Act</i> Section 73 Permit may be required for the project to proceed in an alternate location.</p> <p>A <i>Fisheries Act</i> Paragraph 35(2)(b) Authorization may also be required for the project to proceed in an alternate location, which would include monitoring, contingency and offsetting measures.</p>
----	---	-----------	--	---	---