



### CANADAS INTERNATIONAL OBLIGATIONS WHEN THERE ARE POSSIBLE TRANSBOUNDARY ENVIRONMENTAL EFFECTS: OPG, THE JRP AND ITS CREATORS (ENVIRONMENT CANADA AND CNSC) FAILED ON EVERY COUNT

#### Overview

The location of OPG's proposed deep geologic repository on the shores of a trans-boundary watershed requires specific attention to environmental effects.

Canada is obliged by its own law, the Canadian Environmental Assessment Act 2012 (CEAA 2012), as well as numerous binational legal obligations and customary international practice, to adhere to these principles.

# CANADIAN LAW, TREATIES, AGREEMENTS, AND OTHER LEGAL OBLIGATIONS

#### **CEAA 2012**

According to the Government of Canada's website, CEAA 2012[1] is "An Act respecting the environmental assessment of certain activities and the prevention of significant adverse environmental effects."[2]

Section 5(1) b) (iii)[3] requires consideration of environmental effects in relation to a project that could cause a change to the environment outside of Canada. Additionally, Section 18[4] of this document imposes a duty on the Minister of the Environment to offer to consult and cooperate with certain jurisdictions with respect to the environmental assessment of a project.

In the case of OPG's deep geologic repository project the jurisdictions outside of Canada include the United States, the States bordering on the Great Lakes (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin,) and the 34 US Federally Recognized Tribal Governments in the Great Lakes Basin. Arrangements with the jurisdictions must be formalized and posted publically prior to the start of the joint review panel hearing for the project.

#### Boundary Water Treaty of 1909 [5] and the International Joint Commission [6]

The Boundary Water Treaty (BWT) provides general principles for the United States and Canada to follow in using the waters they share. The International Joint Commission (IJC), established by the BWT, is guided by the articles of the Treaty. The IJC has two main responsibilities: regulating shared water uses and investigating transboundary issues and recommending solutions.[7]

According to the Treaty "The United States of America and His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, being equally desirous to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise, have resolved to conclude a treaty in furtherance of these ends …" [8]

"For the purpose of this treaty boundary waters are defined as the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary."[9]

Article IV of the Treaty states: "It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other."[10]

Article IX of the Treaty states: "The High Contracting Parties further agree that any other questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between the United States and the Dominion of Canada, shall be referred from time to time to the International Joint Commission for examination and report, whenever either the Government of the United States or the Government of the Dominion of Canada shall request that such questions or matters of difference be so referred.[11]

There is no evidence in the public record that the Canadian Minister of the Environment requested the assistance of the IJC on questions involving the rights, obligations or interests of the United States relating to this project.

#### Great Lakes Water Quality Agreement[12]

The Environmental Protection Agency states: "The Great Lakes Water Quality Agreement is a commitment between the United States and Canada to restore and protect the waters of the Great Lakes. .... The 2012 agreement will facilitate United States and Canadian action on threats to Great Lakes water quality and includes strengthened measures to anticipate and prevent ecological harm." [13]

Article 6(c) of the GLWQA required Canada to notify the U.S. through the Great Lakes Executive Committee of OPG's plan for its deep geologic repository given that it was a project involving the

storage and transfer of nuclear waste or radioactive materials that could lead to a pollution incident or that could have a significant cumulative impact on the waters of the Great Lakes.

The publicly available record indicates that Canadian Co-chair of the Great Lakes Executive Committee provided verbal notice to the U.S. Co-chair about the project on June 21, 2013, just three days after the full committee had met for its biannual meeting. The deadline to apply to participate in the JRP hearing was July 5, 2013. This notification did not meet the standards of timely notification (6 months) as customarily required through international agreements. The "behind the scenes" notification also prevented the committee as a whole from discussing the project while in full session, which violates the spirt of cooperation among the parties.

## The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)[14]

The Espoo (EIA) Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning and "to enhance international cooperation in assessing environmental impact in particular in a transboundary context," [15]. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. [16] Examples of potentially significant projects identified by other nations include: nuclear power plants in Finland , pipelines ,hydropower stations and expansion of spent nuclear fuel repository in Finland[17]

Article 3 of the Convention states that notification "For a proposed activity listed in Appendix I that is likely to cause a significant adverse transboundary impact, the Party of origin shall, for the purposes of ensuring adequate and effective consultations under Article 5, notify any Party which it considers may be an affected Party as early as possible and no later than when informing its own public about that proposed activity."[18]

Activities listed in Appendix I include: "Installations solely designed for the production or enrichment of nuclear fuels, for the reprocessing of irradiated nuclear fuels or for the storage, disposal and processing of radioactive waste."[19]

Article V of the Convention outlines requirements for consultation: "The Party of origin shall, after completion of the environmental impact assessment documentation, without undue delay enter into consultations with the affected Party concerning, inter alia, the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact. Consultations may relate to:

(a) Possible alternatives to the proposed activity, including the no-action alternative and possible measures to mitigate significant adverse transboundary impact and to monitor the effects of such measures at the expense of the Party of origin»

(b) Other forms of possible mutual assistance in reducing any significant adverse transboundary impact of the proposed activity; and

(c) Any other appropriate matters relating to the proposed activity.

The Parties shall agree, at the commencement of such consultations, on a reasonable time-frame for the duration of the consultation period. Any such consultations may be conducted through an appropriate joint body, where one exists."[20]

As early as 2005, OPG was aware of the requirements of the Espoo Convention as found in a report from OPG to the Canadian Nuclear Safety Commission. This report noted:[21]

1.) OPG recognizes the requirements of the International Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, Finland, 25 February 1991) to: take all appropriate and effective measures to prevent. reduce, and control significant adverse transboundary environmental impacts of proposed activities; and

2.)Based on the information presented in the project description OPG does not believe that environmental effects of the DGR will be experienced outside of the primary focus area. OPG is therefore not planning to actively inform or seek to engage stakeholders in the United States in consultation on the proposed DGR.

In December 2006, Linda J. Keen, President of the CNSC, submitted a report to the Minister of the Environment with the Commission's recommendation that the environmental assessment for this project be referred to a review panel. This was in part based on the following concerns: [22]

- the proximity of the facility to Lake Huron;
- this type of project has never been done before;
- the long-lived radioisotopes pose a risk for many generations;
- the suitability of sedimentary rock for the DGR;
- the unpredictability of subsurface water movement;
- the possibility of a leak; and
- the added stress on the Great Lakes.

According to Ms. Keen, "The Commission is of the view that a recommendation to the Minister of the Environment for a referral to a review panel appears to be appropriate under the circumstances, given the wastes to be managed and the uniqueness, first of kind nature and importance of the project.

Based on information presented, the Commission is of the opinion that the issues surrounding the uncertainties associated with the project and the concerns identified to date would be better addressed in a review panel. The Commission concludes that a review panel EA of the project is warranted."[23]

On June 29, 2007 the Honourable John Baird, Minister of the Environment announced that the environmental assessment for OPG's DGR was referred to a review panel.

Given the concerns identified in the CNSC report and the referral to a review panel, the Espoo Convention requirements apply.

### Other International and Binational Agreements Relevant to this Project that were ignored by OPG.

• Agreement Between the Government of Canada and the Government of the United States of America on Air Quality [24]

Convention on the Law of the Non-navigational Uses of International Watercourses
1997 [25]

- The Convention on Long-range Transboundary Air Pollution [26]
- · Canada-United States Joint Inland Pollution Contingency Plan [27]
- · Canada –U.S Joint Marine Pollution Contingency Plan[28]
- Montreal Protocol on Substances that Deplete the Ozone Layer [29]
- North American Agreement on Environmental Cooperation (NAAEC) [30]
- Migratory Bird Treaty Act [31]
- Vienna Convention for the Protection of the Ozone Layer [32]

• Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal [33]

· Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Wastes, 1986 [34]

• Stockholm Convention on Persistent Organic Pollutants [35]

· Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management [36]

- Rio Declaration on Environment and Development[37]
- · Stockholm Declaration
- Ramsar Convention [38]
- · North American Waterfowl Management Plan

#### SUMMARY

By missing or bypassing virtually every requirement relating to possible transboundary environmental effects, OPG, the JRP, including its creators (ENVIRONMENT CANADA AND CNSC), who wrote its Terms of Reference (TOR), showed a troubling ignorance of and/or disregard of CANADA's International Obligations particularly to the US and the US Border States.

- [1] http://laws-lois.justice.gc.ca/eng/acts/c-15.21/index.html
- [2] http://laws-lois.justice.gc.ca/eng/acts/C-15.21/page-1.html#h-1
- [3] http://laws-lois.justice.gc.ca/PDF/C-15.21.pdf
- [4] http://laws-lois.justice.gc.ca/eng/acts/c-15.21/FullText.html
- [5] http://www.ijc.org/en\_/BWT
- [6] http://www.ijc.org/en\_/Role\_of\_the\_Commission
- [7] http://www.ijc.org/en\_/Role\_of\_the\_Commission
- [8] http://www.ijc.org/en\_/BWT
- [9] http://www.ijc.org/en\_/BWT
- [10] http://www.ijc.org/en\_/BWT
- [11] http://www.ijc.org/en\_/BWT
- [12] https://binational.net//wp-content/uploads/2014/05/1094\_Canada-USA-GLWQA-\_e.pdf
- [13] https://www.epa.gov/glwqa/what-glwqa

[14]http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo\_Convention\_authentic\_ ENG.pdf

 $\cite{15} http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo_Convention_authentic_ENG.pdf$ 

[16]http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo\_Convention\_authentic\_ ENG.pdf [17] http://www.unece.org/env/eia/pubs/factsheets.html

[18]http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo\_Convention\_authentic\_ENG.pdf

[19] http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo\_Convention\_authentic\_ENG.pdf

[20]http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo\_Convention\_authentic\_ENG.pdf

[21] Appendix F EIS, pg. 153

[22] http://www.ceaa-acee.gc.ca/050/documents/40439/40439E.pdf

[23] http://www.ceaa-acee.gc.ca/050/documents/40439/40439E.pdf

[24]http://www.ijc.org/files/tinymce/uploaded/documents/Agreement%20Between%20the%20Governm ent%20of%20Canada%20and%20the%20Government%20of%20the%20United%20States%20of%20A merica%20on%20Air%20Quality.pdf

- [25] http://legal.un.org/avl/pdf/ha/clnuiw/clnuiw\_e.pdf
- [26] http://www.unece.org/fileadmin/DAM/env/lrtap/full%20text/1979.CLRTAP.e.pdf
- [27] https://www.epa.gov/sites/production/files/2014-08/documents/us\_can\_jcp\_eng.pdf

[28] http://www.ccg-gcc.gc.ca/folios/00025/docs/canadaus\_pub-eng.pdf

- [29] http://ozone.unep.org/en/handbook-montreal-protocol-substances-deplete-ozone-layer/5
- [30] http://www.cec.org/sites/default/files/naaec.pdf
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- [37] http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm
- [38] http://www.ramsar.org