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Review Panel c/o Canadian
Environmental Assessment Agency
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Comments on the CEA 2016 Review of Environmental Assessment Processes

Introduction

The National Council of Women of Canada (NCWC) welcomes the opportunity to comment to this Expert Panel as it reviews the environmental assessment processes associated with the Canadian Environmental Assessment Act, 2012 (CEAA 2012). NCWC has a long history of advocating for federal legislation, policies, actions and processes to protect the environment in a sustainable manner for the benefit of present and future Canadians **1**, and therefore, we strongly support the Panel's mandate to introduce new and fair processes, particularly those that will:

- restore robust oversight and thorough environmental assessments of areas under federal jurisdiction, while working with provinces and territories to avoid duplication;
- ensure decisions are based on science, facts and evidence and serve the public's interest;
- provide ways for Canadians to express their views and opportunities for experts to meaningfully participate;

Most specifically, NCWC feels these guiding principles should apply to the environmental assessments of nuclear projects, since over the last several years, to the detriment of the public and the environment, an increasingly nuclear-biased Canadian Nuclear Safety Commission (CNSC), has failed to adhere to them, while approving, advising and evaluating nuclear proposals, and more recently, taking on complete responsibility for nuclear Environmental Assessment hearings under CEAA 2012 .

Contrasting EA Methodologies: the Positive and Negative

In advocating for environmental protection, NCWC has presented its opinions to a variety of government Standing Committees, Boards, Commissions, Agencies and Panels. For the purpose of this Expert Panel Review, and relying on NCWC and Provincial Council of Women of Ontario (PCWO) experiences in three nuclear-related processes, we will contrast the excellent 1988-1997 Seaborn Commission hearings on the Management of High-Level Nuclear Fuel Waste in the Precambrian shield, with two recent hearings, i.e., the 2013-2014 EA hearing for OPG's deep geological repository for low and intermediate non-fuel nuclear waste at the Bruce site near Kincardine, ON and OPG's 2013 CNSC hearing on its application to extend the operational life of the aging Pickering Nuclear Station.

Positive Aspects of the Seaborne Commission Process re Nuclear Fuel Waste Management and Disposal Concept February 1998

The positive aspects of the 1985-89 Seaborne Commission process were the provision of :

- a broad diversity of independent panelists with various areas of expertise such as scientists and social advocates, e.g., a religious leader (the former Moderator of the United Church of Canada) and a Quebec social policy analyst.

- an independent Scientific Review advisory panel (composed of distinguished scientists from academia and the Royal Geographical Society, etc.).

- two equally important mandated panel requirements – one, that the decision be ethical and "*societally acceptable*" and the other, that it be "*scientifically sound*".

- substantive time taken to explore both requirements, with all public and expert participants allowed to question each presenter.

- panel questions directed at Intervenors, not Panel staff .

- specific panel-invited participants and advisory groups to deal with all aspects, e.g., science of proposal and societal obligations to future generations.

- a final report, which reflected both the scientific results and the public interest, e.g., in it the Seaborne Panel noted that, although the AECL concept was safe and should be doable, there were many (over 100) flaws to address; the proponents AECL and Ontario Hydro had failed to properly consult the public, particularly First Nations; and the proponents had also failed to find a way to safely dispose of nuclear waste that the public could trust. **2**

Negative Aspects of OPG's 2013-2014 CEA Hearing re Geological Repository for Nuclear Waste at the Bruce Site

Examples of negative aspects of the Bruce Environmental Assessment hearing were:

- the appointment of panel members, including the Chair, with-nuclear ties.**3**

- the lack of an alternative repository option, due to a pre-hearing arrangement between CNSC and the Mayor that Kincardine was a *"willing host*" community.**4**

- an over-arching use of the non-scientific *"observational*" method of determining environmental risk, which in essence is getting a licence/permission to find any problems as you dig bore-holes down to your estimated burial location . This is used in the mining industry, but is not suitable for such an important and potentially dangerous project.

- failure to listen to the Panel's own scientific advisory expert's warnings that only one of six bore-holes was close to the planned project site, and there was evidence that prior "*seal-rock facies*" had been breached. **5**

These and many other examples of the Bruce EA hearing's biases are before you in submissions from participants such as the SOS Great Lakes Organization. As well, the recent intervention of the Federal Minister of Environment appears to challenge the Bruce EA Panel's favourable ruling, as the Minister is now requiring Ontario Power Generation to provide extensive further information on such important issues as potential alternative sites and long term cumulative impacts. The Government in Council also announced on December 12th that it would be an additional 243 days before a Ministerial decision is made. These actions clearly underscore the failure of this pro-nuclear CNSC-dominated Environmental Assessment process, and Panel EA decision, to protect the environment over the near and very long term future.

Negative Aspects of CNSC Hearing re OPG's Pickering Nuclear Station Life Extension

Some serious examples of CNSC bias at the OPG Pickering nuclear station life-extension hearing, which were also observed at hearings regarding the Bruce and Darlington applications, were the:

- CNSC Commission Chair's bias toward nuclear projects, both in hearing web casts and on CNSC's Web site, where CNSC posted his and others' aggressive letters attempting to discredit excellent counter-briefs by scientists such as Dr. Gordon Edwards and Frank Greening.

- lack of respect for presenters who were rarely asked questions, with 99% of these directed towards CNSC and OPG staff, who invariably supported OPG's position.

- CNSC staff (and Commission) acceptance and support of poor science presented by proponents. For example, OPG used a very old 1947 Latvian study and a 1980s day and a half observational survey by Natural Resources Canada , to confirm seismic stability in area surrounding Pickering. This was in direct contradiction to intervenor evidence of a lengthy study by a University of Toronto professor, as well as that of the author of the text book Geology and the New Global Tectonics, that Pickering lies on a geological fault and its earthquakes are becoming more frequent and intense. **6**

Conclusion

To conclude, NCWC has no confidence that CNSC provides robust oversight of the Environmental Assessment of nuclear projects. This agency is far too close to the nuclear industry, and its bias to date, as shown in its misuse and disregard for excellent independent science and lack of respect for the views of intervenors, has worked directly against the protection of public safety and health and an environmentally sustainable future for Canadians. Therefore, we would strongly recommend that CNSC should not be mandated to conduct Environmental Assessments under the Canadian Environmental Assessment Act.

[Text prepared by Gracia Janes, NCWC Environment Convenor]

Sincerely,

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Attachment: Background pp.5,6

BACKGROUND

1. **NCWC Policies**
   Since the early 1900s, NCWC has developed policy and advocated on a broad diversity of environmental issues such as the need for:
   - the creation of National Parks and their protection from commercial development
   - comprehensive national, or joint national/provincial, environmental assessments of potentially damaging projects
   - a National Water Policy
   - a National Energy Policy to enable Canada's transition, from nuclear power with all its inherent dangers throughout its life cycle to alternative forms of energy, energy conservation and efficiencies.

2. **ISBN 0-662-26470-3 Seaborn Commission Panel report on its review of Nuclear Fuel Waste Management and Disposal Concept by Atomic energy of Canada.** ***"****From a technical perspective, safety of the AECL concept has been on balance adequately demonstrated for a conceptual stage of development, but from a social perspective, it has not."*

3/4. Presentation to the Expert Advisory Panel by Mr. Rod McRae, November 9, 2016, Slides 4 and 5.

5. **G.Janes PCWO VP Environment. Final Comments to Bruce EA panel, October 9, 2014**. "The Panel request for information EIS-08-315, page 1074 Context information, states that '*Faults are known throughout the RSA at the level of the proposed DGR excavation. The pervasive dolomitization of Cambrian and Silurian rocks throughout the RSA implies that Upper Ordovician seal-rock facies have been breached in the past and that hot fluids have moved through parts of the stratigraphic section within the RSA in the past, possibly along as yet unmapped deep-rooted faults and fractures which cut across the Ordovician section*.'"

6. **G.Janes PCWO VP Environment. Presentation at CNSC Pickering Nuclear reactors life-extension hearing April 26th 2013**.
   *"*We also noted '*a 1993 article by Dr. Arsalan Mohajer, of the University of Toronto, (who did early seismic work for OPG) which was written as a result his study of the Rouge Valley and Lake Ontario over several years, and showed that the faults near Pickering, including under Lake Ontario, were active.' (Neotectonic faulting in metropolitan Toronto: Implications for earthquake hazard assessment in Lake Ontario region. GEOLOGY. The Geological Society of America. 1993.) One further 2003 article by Dr. Mohajer and N. Eyles clearly shows the lack of depth of the studies relied on by CNSC staff and the*

nuclear community. In an article 'Analysis and reinterpretation of deformation features in the Rouge River Valley, Scarborough,Ontario' {which critiqued work recommended by the 1997 Andognini NPAG, Nuclear Advisory Group, and done for OPG by Godin et al}, Dr. Mohajer and N. Eyles note that 'PNGS (Pickering Nuclear Generating Site) was constructed adjacent to a major population centre (now more than 5 million people) in the late 1960s, largely in ignorance of local and regional geological conditions and well before the plate tectonic paradigm provided a model for basement evolution. The presence and significance of major bedrock linaments such as the Central Metasedimentary Belt Boundary Zone (CMBBZ) that passes ***directly under PNGS****, together with several other structures that intersect below Pickering, was not then known.' "*