## NATIONAL COUNCIL OF WOMEN OF CANADA

Established in 1893

Ms. Elizabeth Dowdeswell Nuclear Waste Management Organization 49 Jackes Avenue, 1st Floor, Toronto, Ontario M4T 1E2

Re: The NWMO Draft Management Plan for Nuclear Wastes

Dear Ms. Dowdswell,

The National Council of Women of Canada appreciates this opportunity to comment on Choosing a Way Forward, The Future Management of Canada's Used Nuclear Fuel. Over the past three years our representatives, NCWC immediate past President, Catharine Laidlaw Sly, VP Environment, Gracia Janes, and Ottawa Council of Women member, Monica Cullum have attended various national NWMO meetings in Montreal, Toronto and North Bay, where their input has reflected our NCWC policies.

These policies, democratically developed over several years by our 49 diverse affiliated member groups, representing many thousands of Canadians, support:

- \* a broad-based public policy debate on the energy future of Canada, with specific focus on the nuclear issue
- \* a phase out of nuclear plants at the end of their life cycle, to be replaced by energy conservation, energy efficiencies and alternative forms of renewable energy
- \* the prevention of any expansion of the nuclear industry.

Based on these policies, NCWC intends to make a more thorough commentary to the government regarding the Nuclear Waste Management Organization's final recommendations for used nuclear fuel management.

We know that you are on record as holding out little hope for any substantive changes to NWMO's draft plan for used nuclear fuel management. Nevertheless, we offer these preliminary observations based on our involvement in your consultations to date and our review of the 'draft' plan..

In brief, these relate to the:

\* absence of broad- based public debate on the future of nuclear energy production and NWMO's choice of the "robust" framework scenario to encompass more nuclear use well into the future

# 1. Absence of a Broad-Based Public Debate on Canada's Energy Future - Yet NWMO Framework Sets Stage for Continued Nuclear Use.

National Council of Women remains most concerned that a wide-ranging public consultation on the future of nuclear power as part of Canada's long term energy has yet to be held . This was promised to the Seaborne Panel ( as noted several times by its chair Blair Seaborne) by the Government . In your foreword to the Draft Study Report, you acknowledge the guidance from the work of the Seaborn Panel, yet fail to pick up on this key point and press the Government for such a debate.

In its 'Building a Framework' section of its 2004 Annual Report, NWMO noted that, "many spoke about energy policy expressing a belief that source reduction and elimination should be the first step in any management program of used nuclear fuel."

Further, the report states that, "...the absence of a fully articulated plan on the future of energy is a fundamental limiting factor of the NWMO's study for those who would assess approaches differently, according to the planned future for nuclear energy. These citizens (or participants) view the absence of such a plan as a key failing."

We agree with these statements and question why, in the absence of a broad based public discussion on Canada's energy future, NWMO has built its case for continued nuclear waste production by recommending a "robust" framework to cover current, future or expanded industry needs? This is despite the fact that NWMO states that its study was not meant to promote or penalize Canada's decisions regarding nuclear power, and more importantly, the enabling NWMO Legislation refers only to an "approach for the long term management of nuclear waste".

NCWC believes that NWMO's use of a "robust" management approach in this draft plan, definitely tips the balance towards continued use by governments. This is not what "many" Canadians who were consulted wish to see, for instance the Pauktuutit Inuit Women's Association, other Aboriginal groups and the National Council of Women of Canada. It is however, what the nuclear industry and those many people related to the industry eg. retired AECL employees, would wish to see.

Again there is no direct link to the consultation discussions, and the conclusion likely to be made is that because NWMO is a creature of the nuclear-industry, a continued use of nuclear is a foregone conclusion. In its 2004 Annual Report NWMO acknowledges that this issue was raised, saying "Some question the ability of the NWMO to arrive at a recommendation that protects the public interest. We heard concerns that because the organization is fully funded and

<sup>\*</sup> inadequacies of the consultation process

<sup>\*</sup> use of poor science in such an important endeavor.

organized by producers of used nuclear fuel under the Nuclear Fuel Waste Act, it cannot be relied upon to be objective."

This acknowledgment of the potential for a perceived conflict of interest, underlines the wisdom of the Seaborne Panel's recommendation that the NWMO be constituted of an arms-length membership, **not** the nuclear industry..

#### 2. Inadequacies of the Consultation Process

NCWC representatives have been involved in many well managed productive public consultations. In contrast, we found NWMO's consultation process to be very broad and complex, yet **vague and unaccountable**, focusing on a heavy use of the internet, selected focus groups, surveys of the general public, and the use of consultants as both facilitators and, at times, interpreters of group dialogues. **It was a challenge to know**, **in the final analysis, who said what, and if there was really general agreement on issues from which NWMO could with confidence determine what advice to give the government.** 

For instance, in one summary statement at the July  $16^{th}$  meeting in Toronto, the consultant noted general group agreement on an issue, only to admit that there were so many questions and differences of opinion as to make this statement null and void. We wonder how many more issues were presumed to be in general agreement by facilitators. And, in the web site library, a Mr. Robertson sent in twenty two ( out of 180 as of August  $12^{th}$ ) e mail submissions, critiquing briefs from others e.g.. the United Church . There was nothing on record to indicate that he was a retired AECL employee, of which .there were many, along with those involved in the nuclear industry in other ways .

The NWMO process, while far- reaching, and generally involving a diversity of views, was in stark contrast to that of the Seabourne Panel, where open houses and meetings over several years were publically advertised well in advance; the panel heard an extremely diverse group of presenters, and also commissioned papers to be presented publically - all attributed and documented for the record; and, the panel, along with others present, took an active role throughout in questioning presenters.

Perhaps the most clear justification of our lack of confidence that the outcomes in the draft report reflect the incoming public views, is to be found in statements made by NWMO itself. After an initial 2002 survey of many Canadians, NWMO said that the public's knowledge about nuclear was limited and their attitudes came from watching Homer Simpson on TV. More recently in the document Asking the Right Questions: Document 2: Understanding the Choices, NWMO stated that, "Canadians reveal an immense respect for technological progress to date, coupled with a sense of optimism about what the future holds."

Since further public surveys have not been done on such a wide scale, the e mail submission

are mainly from those who have followed the issue; and the consultations, mainly by-invitation, did not involve large numbers of ordinary Canadians, **this presumed wide-spread confidence** in

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#### the nuclear technology cannot be verified.

In summary, we have yet to see a clear link between what NWMO was told throughout this dialogue with Canadians and what they are recommending as the solution to long term management of nuclear waste. Regardless that unattributed views were generally well stated, the NWMO leaves itself open to the criticism that it is unable to document that its Draft Study Report represents the required public "social acceptance", or its concerns and recommendations.

### 3. Poor Science Underlies Framework for Nuclear Waste Management

National Council of Women of Canada, considers the use of good science to be paramount in the protection of the environment and public health and safety. In its final report on AECL's Nuclear Waste Management and Disposal Concept, the Seaborne Panel recommended that - "governments should direct NFWMA, together with Natural Resources Canada and AECB, or its successor, to undertake the following: review all the social and technical shortcomings identified by the Scientific Review Group and other review participants: establish their priority: and generate a plan to address them." This has not been done.

In its presentation to the Seaborne Panel, National Council of Women of Canada drew attention to one of these critiques by the Canadian Geoscience Council, which noted, "the limited and ambiguous nature" of the analogs cited by AECL, as proof of extremely long lasting uranium deposits." And, that Cigar Lake analog study "contains almost no structural geology, is restricted to only one deposit, relies on geochemical data that has not been reviewed by the scientific community"...and further that-"the clay mineralogy appears to be basically from one PhD thesis." The need for open, peer reviewed, scientific papers, to ground decisions on was backed by the Seaborne Panel's Scientific Review Group.

We draw this to your attention, as the above mentioned analog is to be found once again on page 258 of the NWMO Draft Study Report, with a statement that- "There is geo-technical evidence that suitable host rock formations are stable over hundreds of millions of years. In many respects a deep geologic repository would mimic conditions found in ore bodies such as Cigar Lake in northern Saskatchewan."

Further to this, in a June 11/03 news article you were quoted as having a confidence in this kind of research science, done at Whiteshell i.e. "I went up to Pinawa to see what kind of research they are doing and asked them very directly what further research do you think I need before I can make a recommendation to the government and they (the scientists) said 'none'. They themselves said that in their minds the research to make the management approach in favor of geological disposal was already there".

To add to our discomfort with this level of science, we note that the NWMO has expanded the potential geologically suitable areas for the final repository to include the Ordovician sedimentary

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formations. This is not backed up by any scientific proof as to the suitability of these formations for containment over the long term envisioned. Contrary geologic views are that Ordovician sedimentary rocks are jointed, broken by fractures, and in the shales there is plastic flow (creep),

making these formations quite unsuitable.. As well, areas such as Niagara, have experienced earthquakes- twelve in the last eight years, in one cluster or area at magnitudes of 2.5 to 3.5 at least. The area is off- shore in Lake Ontario. The Findlay-Algonquin Arch runs through the Niagara area and links up with the Ottawa -Bonnechere Graben, and the arch is far from inactive.

It seems clear that the above referenced science is quite inadequate, and NWMO's inclusion of the Ordovician sedimentary formations as suitable for nuclear waste burial over the very long raises questions as to the whole framework for the long term management of nuclear waste.

#### **Conclusion**

In summary, NCWC reiterates our concerns regarding the consultations, particularly that a public nuclear energy policy debate has not been held, but a plan, based on the "robust" scenario that favours its continued use is going forward to the government; that the views and concerns expressed throughout, particularly by non-partisan groups and the public may not be reflected in the draft recommendations to government; and, that the recommendations in the Draft Plan are based on poor science.

Therefore, NCWC would respectfully request that the NWMO consider the following:

- 1) Insert a time frame for a Government public consultation on the future of energy use in Canada- as it relates to nuclear, and request <u>most specifically</u> that this be a priority for the Government <u>before</u> it decides either for or against this plan for used nuclear fuel management.
- 2) Remove the rationale in Appendix 12 for the "robust" scenario, so as to conform to NWMO's enabling legislation as noted in <u>Asking the Right Questions</u> -The Future <u>Management of Canada's Used Fuel</u>, where it states "NWMO has not been asked to take a position on the broader policy issue of the future role of nuclear energy in Canada."
- 3) Identify the background for those sending in submissions and clearly attribute whose point of view in forums and discussions NWMO is following when making its recommendations, and why.

4) Remove references to the Ordovician sedimentary formations as potential safe repositories for used nuclear fuel waste.

Prepared for NCWC by Gracia Janes, Vice President NCWC, with responsibility for Environment - August 17<sup>th</sup>, 2005