Dialogue with the Durham Nuclear Health Committee on *Choosing a Way Forward*

The NWMO Draft Study Report

June 10, 2005
Draft Study Report: Choosing a Way Forward

The NWMO has committed to using a variety of methods to dialogue with Canadians in order to ensure that the study of nuclear waste management approaches reflects the values, concerns and expectations of Canadians at each step along the way.

A number of dialogue activities have been planned to learn from Canadians whether the elements they expect to be addressed in the study have been appropriately reflected and considered in the Draft Study Report. Reports on these activities will be posted on the NWMO website. Your comment is invited and appreciated.

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*Choosing A Way Forward*

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DIALOGUE REPORT

June 27, 2005
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DIALOGUE WITH THE DURHAM NUCLEAR HEALTH COMMITTEE ON

CHOOSING A WAY FORWARD
THE NWMO DRAFT STUDY REPORT

–DIALOGUE REPORT –

June 10, 2005

Submitted to:

Nuclear Waste Management Organization

June 27, 2005

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OUR VISION

A world where decision makers at all levels integrate sustainability into their actions to improve ecological and human well-being.

OUR MISSION

To provide business, governments and organizations with expert advice, information, and tools that will assist the development and implementation of more sustainable policies and practices.
1 Introduction

1.1 Session Objectives

The Nuclear Waste Management Organization hosted a dialogue session with the Durham Nuclear Health Committee on June 10, 2005. The dialogue session was held at the Pickering Nuclear Information Station and was attended by the 12 participants listed in Appendix I. Sean Russell and Pat Patton represented the Nuclear Waste Management Organization. Mr. Brian Devitt, Secretary to the Durham Nuclear Health Committee, chaired the meeting. George Greene, Stratos Inc. facilitated the meeting.

The purpose of the dialogue session was to:
• Provide an opportunity for the Durham Nuclear Health Committee to comment on the draft NWMO recommendation and Draft Study Report;
• Provide a forum for an exchange of views; and
• Provide the NWMO with the opportunity to improve the recommendation before it is finalized.

This report is a summary of views expressed at the dialogue session. The meeting was not intended to reach consensus among participants, though the report notes areas of general agreement.

1.2 Session Opening

In his opening comments, the meeting Chair noted that he was very pleased with the way the Draft Study Report was written. He found the report easy to read and understand, but also appreciated the spirit in which the report was written.

Pat Patton provided an overview of the engagement and dialogue activities that the Nuclear Waste Management Organization will be undertaking in support of the release of the Draft Study Report and in finalizing the recommendation to the Minister of Natural Resources Canada prior to November 15, 2005.

Sean Russell provided the participants with an overview presentation of the Draft Study Report.
2 Participant Views on the Recommendation and Draft Study Report

Durham Nuclear Health Committee participants expressed support for the NWMO draft recommendation and the Draft Study Report, noting in particular:

- **Strong support for the NWMO’s emphasis on transparency and engagement**, and an expectation that this will continue throughout the implementation phase of the recommendation;

- **Agreement with the recommendation for a centralised containment and isolation facility**;

- **Agreement with the timeframes proposed for Phase I and Phase II of the recommendation**, with the proviso that implementation get underway as soon possible. Given the Durham region’s experiences in the siting processes for nuclear facilities, participants felt that the 30 year time line for Phase 1 was a reasonable estimate of the time that will be required to identify a suitable site and complete the initial design and assessment processes. Participants stressed the importance of timely decision-making by governments in response to the submission of the final recommendation;

- **Agreement with the recommendation’s proposal for major capital costs to be incurred early in the spent fuel management lifecycle.** This is seen to reflect society’s preference for the current spent fuel producers and present beneficiaries of nuclear power to take responsibility for the management of the waste, and also addresses concerns with respect to uncertainty around the availability of adequate expertise and financial resources over the medium to long term; and

- **Agreement with the recommendation’s approach of siting the centralized storage facility in a willing host community.** Participants did caution, however, that it might prove difficult to identify a willing host community.¹

Participants also offered general agreement with the proposal for an **interim shallow-depth storage facility** as a precursor to the deep geological repository. One participant did, however, raise questions with the proposed interim shallow-depth storage, suggesting that it was a relatively new idea, which would require further study and analysis.

¹ NWMO responded that it considers the voluntary approach to be appropriate since it has been proven successful in Canada with respect to hazardous waste facility siting, and as it has proven successful internationally, in countries such as Sweden and Finland. Moreover, NWMO believes an approach of deciding unilaterally and then defending the decision is not consistent with Canadian values and is less likely to be successful.
A number of the participants raised concerns with the signal that they felt was communicated by the **adaptive nature of the draft recommendation**. Participants worried that “flexible implementation” could be equated with procrastination and that while the use of terms such as “flexibility in the pace and manner of decision making,” “phased decision making,” and “provision of an interim step” might be comforting to decision makers, they could convey to the public, and politicians, an unintended sense of uncertainty. Participants thought this might ultimately be a hindrance to implementation and could work against the objective of identifying a willing host community. It was further suggested that the language used to describe the phased approach might lead the public to think that the waste issues will not be addressed by the present generation, which was one of their main points of understanding in the earlier dialogues.

### 3 REQUESTS FOR CLARIFICATION

While expressing support for the *Draft Study Report*, the Durham Nuclear Health Committee member did raise a number of questions, to which the NWMO provided responses, including:

- Clarification on the number of Canadians that had been engaged, to date, in the development of the *Draft Study report*.
- Clarification on the present level of understanding of the quantity of heat that might be generated in any future, fully-stocked deep geological isolation and containment facility, and the degree to which facility designs will be capable of managing these heat quantities.
- Confirmation that the any interim, shallow storage site would be located at the same site as the deep geological isolation and containment facility.
- Clarification on the use of the terms “Canadian Shield”, and “Ordovician sedimentary rock, and the nature of any technical studies and analysis relating to southern Ontario, in particular*2.
- A query on the number of shipments per day/month/year that would be required to transport the projected quantities of used fuel via different transportation modes (ship, road, rail, etc) over the illustrative 30-year Phase II timeline; and a question on whether transportation is expected to take place within existing storage containers.
- Confirmation that the cost estimates and financial surety mechanisms can adequately account for the range of flexibility required by the recommendation.
- A query on the costs of storage per fuel element and how this compares to the costs of electricity production.
- Clarification on why the NWMO has identified four provinces as the focus for the site of the future deep geological repository.

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*2 Participants were directed to page 252 of the Draft Study Report, and Background Paper 6-12 were these terms are discussed and defined with respect to their suitability for deep geological storage.*
• A query on the extent that Natural Resources Canada, and the Province of Ontario has been engaged in the process to date in light of this province’s current review of its energy policy.

• Confirmation that the November 15, 2005 deadline for submission of the NWMO recommendation is “real” and “feasible”.

• Clarification on the relationship between the Draft Study Report and any future requirement to examine alternatives as required by the Canadian Environmental Assessment Act.

• Clarification on the costs / benefits of interim sub-surface rather than at surface storage.

• Clarification as to NWMO’s definition of a “host community” and how this would be applied to any area of low population density and an abundance of Crown Land.3

• A query on which communities, if any, had expressed an interest in acting as a host community.

4 Requirements for Successful Implementation

Participants identified a number of factors that must be addressed to ensure successful implementation of the NWMO recommendation. These include:

• A timely decision by the Government of Canada. Participants expressed strong concerns that the Province of Ontario’s decision-making with respect to the future of nuclear power could be impacted should there be any significant delays in the Government of Canada’s decision making with respect to nuclear waste.

• An effective NWMO citizen engagement process. Participants expressed concern that in the absence of ongoing engagement by NWMO while a government decision is pending, and afterwards, momentum will be lost and there may be a need to repeat the entire engagement process. Participants suggested that continuous engagement is necessary as 30 years is not a long time in terms of influencing positive cultural and social change. While agreeing in principle, another participant cautioned that NWMO shouldn’t focus strictly on engagement and outreach, but should also be the focal point for scientific and technical information regarding management of used nuclear fuel. This participant argued for NWMO to take complete ownership of the recommendation and be prepared to provide an appropriate scientific defence of the recommendation and its implementation.

• Sufficient funding for the NWMO – both to cover engineering, transportation and construction costs, but also to adequately cover NWMO costs for citizen

3 Participants were directed to page 213 of the Draft Study Report.
engagement and the effective interventions by citizen groups. Participants raised the concern that beyond the need for financial support, there are a limited number of qualified consultants to support independent technical work for stakeholders and other communities to participate in ongoing NWMO study and research.

- The ability to plan for uncertainties, with clearly identified default decisions to be taken at specific milestones. Participants suggested that the uncertainty inherent in the adaptive, phased approach could be addressed, in part, by identifying the specific milestones that will require decision-making. Participants also suggested that the NWMO recommendation should include default decisions to avoid such processes from becoming protracted.

- More transparent and clear discussion of transportation-related aspects of the recommendation. Participants generally agreed that transportation-related aspects of the proposed approach might be the most difficult to overcome. Some participants thought that transportation aspects needed to be adequately addressed within the Draft Study Report.

A few participants also noted the need also to resolve energy policy issues and clarify the future of nuclear power in Ontario. Other participants, however, noted that there is a need to manage existing waste regardless of the future of nuclear operations.4

5 Suggestions for Strengthening the Recommendation and the Draft Study Report

The participants made a number of suggestions for strengthening the recommendation and Draft Study Report, including:

1. Participants suggested that the NWMO recommendation include a recommended timeline for government decision making, and that the Final Study Report provide a clear discussion of the implications associated with any delay in government decision making.

2. As a corollary, NWMO was strongly advised to plan and carry out an extensive and ongoing engagement process upon submission of its recommendation in November 2005.

3. It was suggested that NWMO address concerns with respect to the uncertainty that might be implied by the language used to describe the adaptive, phased recommendation.

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4 The NWMO noted that the draft recommendation included in the Draft Study Report is capable of supporting either potential outcome of continued nuclear development or phase out, or anything in between.
4. **It was suggested that the Final Study Report better integrate the supporting technical and scientific material with that derived from citizen engagement.** Participants were concerned that the *Draft Study Report* treats these materials separately, giving the reader the impression that the recommendation may be overly reliant on stakeholders’ opinions rather than clearly underpinned by sound science. NWMO was encouraged to communicate clearly that the recommendation is underpinned by sound science and that any future decisions will ultimately be made only in instances where they are supported by science and compelling justification.

5. **Participants also stated that the *Draft Study Report* could be improved by making the issues discussed more tangible to the general public.** For instance, the NWMO was encouraged to discuss management costs in terms of the ratio of such costs to the value of electricity generated. Similarly, the NWMO was encouraged to discuss transportation aspects in terms of the frequency of transport activities over the 30 years of the illustrative Phase II described in the report.

7. **CONCLUSION AND NEXT STEPS**

Pat Patton thanked the participants for their time and interventions. Ms Patton then outlined the engagement process with respect to the Draft Study Report. The Durham Nuclear Health Committee was also encouraged to make joint and / or individual submissions to the NWMO via letter, or through the NWMO website at [www.nwmo.ca](http://www.nwmo.ca). More information on submitting written comments can be found there.
Appendix I: List of Participants

Durham Nuclear Health Committee

Public Members
Dr. Gerry Gold
Dr. Yousef Mroueh
Dr. Barry Neil
Mr. Ken Shrives
Mr. John Stevenson (past member)

Municipal Officials
Ms. Dorothy Skinner – Durham Region Planning Dept
Ms. Christine Drimmie – Durham Region Planning Dept
Mr. Gordon Reidt – Durham Region Emergency Measures Office
Mr. Lloyd Murray – Durham Region Works Dept.
Ms. Jancie Swarz – Municipality of Clarington
Ms. Linda Lum – Municipality of Ajax
Mr. Brian Devitt (Secretary)

Nuclear Waste Management Organization
Mr. Sean Russell
Ms. Pat Patton

Stratos Inc.
Mr. George Greene (facilitator)
Mr. Bob Masterson (rapporteur)