

Multi-Party Dialogues – Durham Nuclear Health Committee Session Report

NWMO SR-2009-12

July 2009

Stratos Inc.

nwmo

NUCLEAR WASTE
MANAGEMENT
ORGANIZATION

SOCIÉTÉ DE GESTION
DES DÉCHETS
NUCLÉAIRES



Nuclear Waste Management Organization

22 St. Clair Avenue East, 6th Floor

Toronto, Ontario

M4T 2S3

Canada

Tel: 416-934-9814

Web: www.nwmo.ca

Nuclear Waste Management Organization

The Nuclear Waste Management Organization (NWMO) was established in 2002 by Ontario Power Generation Inc., Hydro-Québec and New Brunswick Power Corporation in accordance with the *Nuclear Fuel Waste Act (NFWA)* to assume responsibility for the long-term management of Canada's used nuclear fuel.

NWMO's first mandate was to study options for the long-term management of used nuclear fuel. On June 14, 2007, the Government of Canada selected the NWMO's recommendation for Adaptive Phased Management (APM). The NWMO now has the mandate to implement the Government's decision.

Technically, Adaptive Phased Management (APM) has as its end-point the isolation and containment of used nuclear fuel in a deep repository constructed in a suitable rock formation. Collaboration, continuous learning and adaptability will underpin our implementation of the plan which will unfold over many decades, subject to extensive oversight and regulatory approvals.

NWMO Dialogue Reports

The work of the NWMO is premised on the understanding that citizens have the right to know about and participate in discussions and decisions that affect their quality of life, including the long-term management of used nuclear fuel. Citizens bring special insight and expertise which result in better decisions. Decisions about safety and risk are properly societal decisions and for this reason the priorities and concerns of a broad diversity of citizens, particularly those most affected, need to be taken into account throughout the process. A critical component of APM is the inclusive and collaborative process of dialogue and decision-making through the phases of implementation.

In order to ensure that the implementation of APM reflects the values, concerns and expectations of citizens at each step along the way, the NWMO plans to initiate a broad range of activities. For each of these activities, reports are prepared by those who designed and conducted the work. This document is one such report. The nature and conduct of our activities is expected to change over time, as best practices evolve and the needs and preferences of citizens with respect to dialogue on nuclear waste management questions is better understood.

Disclaimer:

This report does not necessarily reflect the views or position of the Nuclear Waste Management Organization, its directors, officers, employees and agents (the "NWMO") and unless otherwise specifically stated, is made available to the public by the NWMO for information only. The contents of this report reflect the views of the author(s) who are solely responsible for the text and its conclusions as well as the accuracy of any data used in its creation. The NWMO does not make any warranty, express or implied, or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information disclosed, or represent that the use of any information would not infringe privately owned rights. Any reference to a specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or preference by NWMO.

**NWMO Dialogue with the Durham Nuclear Health Committee (DNHC)
on the Proposed Process to Select the Site for Managing Canada's
Used Nuclear Fuel for the Long Term**

- Whitby, Ontario, May 28, 2009 -

Summary Report

Submitted to:

**Nuclear Waste Management Organization
22 St Clair Ave. E.
Toronto, Ont.
M4T 2S3**

Attention: Jo-Ann Facella

July 3, 2009

Prepared by:



Stratos Inc.
1404-1 Nicholas Street
Ottawa, Ontario
K1N 7B7
tel: 613 241 1001
fax: 613 241 4758
www.stratos-sts.com

Introduction

Purpose & Context

The Nuclear Waste Management Organization (NWMO) met with the Durham Nuclear Health Committee (DNHC), at their request, on May 28th, 2009 to have a dialogue on the NWMO's proposed site selection process, as described in its discussion document *Proposed Process for Selecting a Site*. NWMO has invited Canadians to review its document, which outlines a proposed process for discussion. The dialogue with DNHC is one of many engagement activities being conducted by NWMO in 2009 to receive input on the proposed process for selecting a site.

The DNHC was created in 1995 to act as a forum for discussing and addressing the potential environmental human health impacts of nuclear facilities in the Durham Region. The nuclear facilities in the region include the Darlington and Pickering nuclear generating stations. DNHC is chaired by the Region's Commissioner & Medical Officer of Health. Membership of the DNHC consists of nine public members from Ajax, Clarington and Pickering who are appointed by Council; two representatives of Ontario Power Generation (OPG); and four Provincial/Regional government representatives.

NWMO retained Stratos Inc. to design, organise, facilitate and report on this dialogue. A total of 13 DNHC members, as well as staff from NWMO and Stratos, attended the session held at the Durham Regional Headquarters in Whitby, Ontario. The list of participants is provided in Appendix A of this report.

The agenda for the dialogue, provided in Appendix B, consisted of four main topics, aligned with chapters 3, 4, 5, and 6 of the discussion document. DNHC members focused their comments primarily on the project description, overall approach including proposed siting principles, steps and criteria, and community support. Given time constraints, lesser focus was given to discussion on third party review.

This report provides a summary of perspectives and ideas expressed and exchanged during the dialogue. Questions and suggested enhancements to the discussion document are highlighted in the report. The dialogue session was not intended to reach consensus among participants, though the report notes areas of general agreement.

Dialogue Opening

Kathryn Shaver, Vice President APM Engagement and Site Selection of the NWMO, thanked DNHC for inviting the NWMO and for offering to provide their input. Ms. Shaver provided a brief overview of the NWMO, its mandate, and the Adaptive Phased Management (APM) approach recommended by the NWMO and selected by the Government of Canada on June 14, 2007. She explained that last year the NWMO engaged Canadians on what is important in a site selection process, and that this year NWMO is inviting Canadians to review its discussion document on a proposed process for selecting a site in order to refine and enhance the document.

1 Results of the Dialogue

To frame the discussion, Jo-Ann Facella, NWMO's Director of Social Research and Dialogue, provided an overview of the discussion document, including a detailed review of selected chapters.

DNHC members posed a range of questions and offered comments and suggestions regarding specific sections of the discussion document. Key themes that emerged from the dialogue included the following:

- **Project Description:** Improvements to the project description to convey specific and tangible benefits for the community beyond the spending levels of the NWMO at each step
- **Incentives:** The need for a strong incentive, such as monetary benefit, to entice communities to come forward at the very beginning of the process
- **Timelines:** Communicating timelines and the basis for these timelines in the presentation of steps of the proposed process, and emphasizing the importance of commitment to these timelines, especially by major decision-makers
- **Pre-Screening:** Finding efficiencies in the process by screening out clearly unsuitable areas and/or communities at an early stages of the process, or by providing clarity and assistance to communities on the self-application of initial screening criteria

Detailed input on these issues and others are provided in the sections below.

1.1 Guiding Principles

Participants identified two elements to be added to the guiding principles listed on pages 15 to 18 of the discussion document:

- Recognition that communities that step forward are offering to “bear a burden” for the greater society and are contributing to the national good
- Implementing the site selection process with a sense of urgency and expeditiousness and obtaining a commitment to timelines by all parties, especially major decision-makers, involved in the process

1.2 Pre-screening and the Definition of Exclusion Zones

A few members suggested that an initial pre-screening step be conducted by NWMO to exclude communities with unsuitable characteristics or those located in unsuitable areas. The rationale for this suggestion was that such a step would make the selection process more efficient and avoid wasting the time of communities located in unsuitable areas. Various exclusion areas were suggested including urban areas, natural areas of significance, and communities outside of the four provinces involved in the nuclear fuel cycle - Saskatchewan, Ontario, Quebec, and New Brunswick. One participant suggested

that there be greater focus on finding a site in Ontario because 90% of the waste resides in this province. This participant also suggested that NWMO engage the province of Ontario more proactively given the province's capacity to host a site because of its jurisdiction over large areas of crown land and access to resources such as a geological survey.

The suggestion of pre-screening led to a discussion of the proposed initial screening criteria described on page 25 of the discussion document, which are part of Step 2 of the proposed process. One participant asked whether a potentially interested community would be expected to apply the screening criteria to itself. If so, this participant noted that a community may require assistance on the application of the initial screening criteria as some of these, such as defining 'economically exploitable natural resources', may be complex or subject to interpretation.

Some members stated that defining protected areas could also be challenging in that some areas of local value may be not adequately covered by federal or provincial legislation. It was also noted that certain areas may be highly valued and viewed as shared assets by people outside of the boundaries of the interested community. Members asked for clarification on how these situations would be addressed.

1.3 Definition of Community

A significant theme of discussion was the definition of community. On this issue, members offered the following comments and questions:

- The discussion document needs to be clear and consistent about referring to community either as a geographical area, a political jurisdiction or an area with like interests. Similarly, clarity and consistency of the term "region" is also required.
- Clarity is required concerning how the process accommodates the full range municipal jurisdictions, including districts, counties, and regions. These different types of communities, in all four provinces involved in the nuclear fuel cycle (Saskatchewan, Ontario, Quebec, and New Brunswick), need to be able to see themselves in the definition of community presented in the document.
- A clear definition of who is the 'community' for crown land is required.
- More information is required concerning the challenges posed by private land ownership within an otherwise interested community.
- Transient residents, such as cottage owners, may present a special challenge for certain communities as these constituencies often have different interests from permanent residents.
- One participant also raised the question about whether the proposed process could consider the possibility of a new community being built around a facility.

Overall, members suggested that the proposed site selection process document provide a stronger definition of community by considering the factors and nuances described above.

1.4 Enticing Communities to Express Interest and Maintaining a Community's Interest in the Process

Several members stated that despite the many positive aspects of the proposed process, communities would still need a tangible economic benefit, preferably a monetary incentive, to entice them to come forward at the very beginning of the process. Furthermore, there must be a benefit to keep residents and successive councils interested and motivated throughout the subsequent steps in the process.

Members offered the following comments and suggestions regarding the description of project benefits provided on page 14 of the discussion document:

- The description does not adequately capture the value of the project (both short-term and long-term) for the community. Members provided examples of the features that could be enticing to communities such as jobs, economic spin-offs, contributing to the national good, and support for community planning.
- More detail on the types of economic benefits during each stage, including short and long-term employment estimates, tax revenues, and permit revenues is required.
- Clarity on whether the centre of expertise is a necessary aspect of the project or if it is a perk to help entice communities would be helpful. It was suggested that NWMO may want to be more explicit about the role of the centre of expertise by, for example, highlighting NWMO's ongoing relationship with similar centres of expertise in other countries and by describing the scope of what a centre of expertise might study.

1.5 Clarity Concerning Local and Federal Processes

Members asked the following questions and raised the following comments concerning community and federal processes for site selection.

- One member asked about planning approval processes related to a community's expression of interest. In response, NWMO stated that the document speaks to the federal processes, and has opted to not be prescriptive about local processes in the discussion document but to raise the question. The member then emphasized that the step at which local planning processes need to be defined and started should be clear in the document.
- A member asked about the appeal process that would be required to address those situations where a community is not cohesive in demonstrating its willingness to host the facility. It was suggested that the willing host needs to understand what process would be in place for appeals and litigation.

- One participant asked about aspects of the American and Scandinavian political and planning structures factored into the capability of these countries reaching or not reaching a final siting decision.
- Some participants suggested that NWMO should provide more information or set basic minimum requirements for expressing willingness (e.g. a requirement for a referendum) but still give the community the responsibility to establish the final thresholds (e.g. 70%).

Members asked a range of questions about how environmental assessment (EA) fits into the proposed site selection process:

- Is there a separate EA process for the transportation aspect of the project?
- Is there a risk that the EA repeats parts of the site selection process in terms of evaluating the suitability of the site and the community?
- Was this type of project envisioned when the applicable regulations were developed?
- Will there be a permanent onsite regulatory presence for the project, as there is for nuclear power facilities? It was suggested that this would provide an additional level of comfort for communities.

1.6 Commitment to Timelines

Several members emphasized the risks of the site selection process slowing due to the challenges of maintaining commitment across electoral cycles and interest among residents, and due to delays at a political level resulting in delayed decision making by key federal regulators. One member stated that the process needs to convey a greater sense of urgency.

Specific comments and suggestions included the following:

- Interested communities risk being “left hanging in political limbo” if all levels of government are not similarly committed to the process and moving it forward.
- The project requires a multigenerational commitment.
- The process needs to clarify what factors are driving timelines - technical requirements, regulatory approval processes, or community decision-making. One member suggested indicating time requirements and drivers for these requirements next to each of the steps described on pages 19 to 24 of the discussion document. Another member suggested including a statement about commitment to timelines in the guiding principles.

One member suggested that the diagram on page 19 of the discussion document could also present a progression in the level of engagement and commitment to the steps in the process by communities, from awareness, to being informed, interested, committed, and selected. It was also suggested that the inclusion of decision tree aligned with these

steps would help to communicate a community's right to withdraw at each step of the process.

1.7 Partnership and Community Support

Members expressed support for elements of partnership and community support described on page 33 of the discussion document, including support for a community visioning exercise and establishment of a community office for the project. However, one member also cautioned that decisions on who to fund when working with a large diversity of communities could create divisions between communities and within communities. One member suggested that such communities would require support to address such tensions.

1.8 Quantity of Used Fuel

Members posed the following questions regarding the quantity of fuel for the repository:

- Is the NWMO addressing the possibility of a larger quantity of used fuel, given the possibility of new reactors being built in Canada, and could this result in the need for more than one host community?
- Could an interested community put a cap on how much used fuel it is willing to accept?
- Is there a minimum quantity of used fuel that the interested community would have to be prepared to accept to be part of the site selection process? Has the NWMO established the minimum size of a facility (i.e. the minimum number of bundles that must be accepted for storage) to make the undertaking viable?

1.9 Technical Questions on the Construction of the Repository

One member asked how the NWMO would handle waste rock or other geologic materials excavated during the construction of the repository. This member also asked whether the storage galleries would be filled as they are constructed or whether the entire facility would be completed before emplacing the used fuel. The member also suggested that the approach to constructing and filling the galleries should take labour force stability into consideration and that this would factor into the economic benefits of the project to a community. Related to this issue, NWMO was asked about radiological safety for workers entering a partially filled repository.

Appendix A – List of Participants

| Name | Organization |
|---------------------|--|
| Brian Devitt | Secretary of the DNHC |
| Brian Ikeda | University of Ontario Institute of Technology / FESNS |
| Janice Szwarc | Municipality of Clarington |
| Hardev Bains | Public Member of the DNHC |
| Dr. Barry Neil | Public Member of the DNHC |
| Dr. Dave Whillans | DNHC Member and Senior Scientist with Ontario Power Generation |
| Christine Drimmie | Durham Region Chief Administrator Officer's Office |
| Dorothy Skinner | Durham Region Planning Department |
| Andrew Keppen | Durham Region Finance Department |
| Greg Lymer | Durham Region Works Department |
| Kevin Heritage | Town of Ajax Planning Department |
| Ken Gorman | DNHC Member and Director, Environmental Health for the Health Department |
| Alex Heydon | Public Member of the DNHC |
| Jo-Ann Facella | NWMO |
| Mahrz Ben Belfadhel | NWMO |
| Kathryn Shaver | NWMO |
| Peter Simmons | NWMO |
| Stefan Reinecke | Stratos Inc. |
| Barb Sweazey | Stratos Inc. |

Appendix B – Agenda

NWMO Dialogue with the Durham Nuclear Health Committee (DNHC) on the Proposed Process to Select the Site for Managing Canada's Used Nuclear Fuel for the Long Term

Date: May 28, 2009

Time: 9:00 a.m. – 12:30 p.m.

Location: DNHC Headquarters, 605 Rossland Rd E, Whitby, ON L1N 0B2

Objective

- To engage members of the Durham Nuclear Health Committee in a dialogue to test and refine the proposed site selection process for a nuclear waste repository

| AGENDA (9:00 a.m. – 12:30 p.m.) | |
|--|--|
| 9:00 – 9:10 | INTRODUCTION & WELCOME |
| 9:10 – 9:30 | NWMO PRESENTATION – PROJECT DESIGN AND PROPOSED SITE SELECTION PROCESS |
| 9:30 – 10:00 | Proposed Siting Principles, Steps and Overall Approach (Chapter 3) |
| | <ol style="list-style-type: none"> 1. What are your initial thoughts on the proposed site selection process, siting principles and steps, as described by NWMO in today's presentation and in the document? 2. Should the proposed siting principles and/or steps be characterized differently? If so, how? 3. Are there any siting principles and/or steps missing? If so, what should be added? |
| 10:00 – 10:45 | Proposed Criteria – Safety & Community Well-Being (Chapter 4) |
| | <ol style="list-style-type: none"> 1. What elements in these proposed criteria work for you? 2. Are there criteria that raise concern for you? If so, how might you address these concerns? |
| 10:45 – 11:30 | Partnership and Community Support (Chapter 5) |
| | <ol style="list-style-type: none"> 1. What elements in the proposed approach to partnership and community support will make it work for communities? 2. Are there elements that raise concern for you? If so, how might you address these concerns? |
| 11:30 – 12:15 | Third-Party Review (Chapter 6) |
| | <ol style="list-style-type: none"> 1. What elements in the proposed approach to third-party review lend confidence to the process? 2. Are there elements that raise concern for you? If so, how might you address these concerns? |
| 12:15 – 12:30 | NWMO CLOSING REMARKS |