Multi-party dialogues Fall 2008 -Toronto session 2 report

NWMO SR-2008-33b

January 2009

Stratos Inc.



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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 Social Research

The objective of the social research program is to assist the NWMO, and interested citizens and organizations, in exploring and understanding the social issues and concerns associated with the implementation of Adaptive Phased Management. The program is also intended to support the adoption of appropriate processes and techniques to engage potentially affected citizens in decision-making.

The social research program is intended to be a support to NWMO's ongoing dialogue and collaboration activities, including work to engage potentially affected citizens in near term visioning of the implementation process going forward, long term visioning and the development of decision-making processes to be used into the future. The program includes work to learn from the experience of others through examination of case studies and conversation with those involved in similar processes both in Canada and abroad. NWMO's social research is expected to engage a wide variety of specialists and explore a variety of perspectives on key issues of concern. The nature and conduct of this work is expected to change over time, as best practices evolve and as interested citizens and organizations identify the issues of most interest and concern throughout the implementation of Adaptive Phased Management.

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-Stratos Multi-Party Dialogues - Toronto, October 3, 2008 -Session 2: Alsace Room, Novotel Hotel

Summary Report

Submitted to:

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January 21, 2009

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1 Introduction

Purpose & Context

A series of dialogues on the design of the process to select a site for the long-term management of Canada's used nuclear fuel was held across the four nuclear fuel cycle provinces in September – October 2008.

The purpose of the dialogue sessions was to seek input, among a diverse cross-section of Canadians in each nuclear cycle province, on the critical elements of a fair, ethical, and effective siting process. The dialogue sessions are an important input, among several inputs, to the development of NWMO's draft proposal for the siting process, to be released in 2009.

The Nuclear Waste Management Organization (NWMO) retained Stratos Inc. to design, organise, facilitate and report on these dialogues.

Individuals with a wide range of perspectives were invited, including those from Aboriginal organizations, business associations, municipal groups, non-governmental organizations (NGOs), academia, nuclear industry, and professional associations. While many of the participants were affiliated with organizations, they were asked to participate as individuals. A total of 14 participants, as well as staff from NWMO and Stratos, attended the session held in Toronto, Ontario on October 3, 2008 (see Appendix A for a list of the participants). A parallel session was held in the *Provence* room of the same venue and is summarized in a separate report.

To facilitate conversations on the design of the process to select a site, NWMO has published a document entitled Moving Forward Together: *Designing the Process for Selecting a Site*. The document draws on the past study process in which many Canadians were involved, proposes objectives to guide the future work, and identifies a number of considerations, challenges and opportunities for discussion. The document also presents six discussion questions, which formed the basis for the agenda used in the dialogue session (see Appendix B).

Organized according to the agenda, this report provides a summary of perspectives and ideas expressed and exchanged during the dialogue. 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, Corporate Affairs of the NWMO, welcomed participants to the dialogue session and provided an overview of the history 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 the NWMO's next step is the development of a draft site selection process in 2009, and that ideas exchanged during the dialogue sessions will serve as input to this process. Finally, Ms. Shaver indicated that a report capturing the views heard in the dialogues would be shared with participants following the sessions.



2 What is Important in a Siting Process

To initiate the dialogue, all participants shared with the plenary group their thoughts on what is important in a siting process. Participants offered some perspectives on technical considerations, but the discussion focused on non-technical issues such as social acceptability, transparency, approaches to engagement, and capacity building.

An overarching issue raised at the beginning of the discussion was that the site selection process should be placed within the broader context of the discussion about the expansion of nuclear power and Canada's overall policy on sustainable energy.

Technical Considerations

There was agreement that safety is one of the most important issues in the site selection process. The process should result in identifying a site that is safe over the long-term, including the minimization of hazards associated with the geology of the site.

Some participants spoke to the need for a clear understanding of technical requirements, transparency concerning the technical aspects of the process, and the ability to demonstrate that technical criteria have been satisfied. Credible and independent technical experts should be part of the process. One participant stated that the siting process must also allow for local social and environmental knowledge to take precedence over expert scientific and technical knowledge.

Defining the Process

Several participants stated that the site selection process needs to be well-defined in terms of criteria, timelines, and who makes the final decision on the selection of a site.

Transparency

Transparency was identified as a key characteristic of the site selection process. According to participants, a transparent process would be one that is clearly defined and that ensures access to information, knowledge, and decision-makers.

Decision-making and Social Acceptability

While participants recognized the need to define criteria for social acceptability, some participants also saw the need for trade-offs and flexibility to avoid having the process be paralyzed by attempting to achieve "total social acceptance".

Some participants suggested that the siting process must be based on community acceptance and on a system of voluntarism (communities stepping forward of their own accord) that incorporates flexibility and minimum technical constraints. One participant noted that the project will affect many generations in the future, and that the siting process must address multi-generational consensus.



Participants also noted that the decision-making process should be democratic, and one where public interests are balanced with smaller vested interests.

Engagement

Early engagement was identified as an important component of the site selection process. Some participants held the view that a willing host community would likely be in a rural and northern community, and stressed the need to engage the organizations, economic sectors, and other stakeholders that serve these regions.

Some participants stated that protest has an important role in social dialogue by helping to ensure that all environmental and social concerns are raised. They added that the role of protest should be recognized in the site selection process. Other participants observed that people with neutral views, and those not affiliated with organized groups, get drowned out by opposition and proponent groups in decision-making processes. Therefore, the siting process should include engagement at the grassroots level and consider innovative engagement approaches. One participant pointed to recent democratic reform initiatives in British Columbia and Ontario as possible sources of information on different approaches.

With regards to engaging Aboriginal peoples, the NWMO was advised to integrate into the siting process the requirements related to consultation and accommodation as set out in recent Supreme Court of Canada decisions.

Capacity Building

Participants recommended that the siting process include capacity building by funding groups that are less established, providing tours of other facilities, and supporting education through local institutions. Site tours were seen as especially effective for conveying technical concepts and building confidence among diverse groups in the community. It was proposed that site tours of international facilities may be appropriate at some stage of the siting process.

Defining Community

There were divergent views on the definition of community. Several participants supported definitions that extend beyond the immediate site of the repository to include other nearby communities in the "zone of influence" (potentially affected zone) as well as communities along the transportation route. Given the large time scale of the project, it was suggested that the site selection process also recognize that the zone of influence will vary in time. Some participants also asked whether the process would consider multiple host communities.



Economic Considerations

There was some concern that communities, especially poor communities, may express willingness based mainly on economic incentives and not fully consider the risks of the project. Some participants warned that a perception that the nuclear industry is offering communities large sums of money to host a waste facility could negatively affect the credibility of the NWMO.

While a few participants saw the potential for several communities competing to become the host community and to receive the associated benefits, others suggested that a contingency plan should be in place should the siting process not identify a willing host community.



3 Testing the Set of Objectives, Ethical Principles and Characteristics

In plenary, participants reviewed the framework of objectives, ethical principles and characteristics presented in the NWMO document *Moving Forward Together: Designing the Process for Selecting a Site.* This framework was developed based what NWMO heard in conversations with Canadians during the study phase of its work.

Objectives

Generally, participants felt that the list of objectives appropriately embodies a series of key values or principles, rather than objectives.

Participants suggested adding "Long-term safety of human beings" as another objective or principle. There were also requests to clarify or strengthen the wording of the following terms: *community well-being*, *economic viability*, and *environmental integrity*.

Characteristics

Participants suggested adding the concepts of "respecting geographic scope" and "respect for intergenerational scope" to the *Characteristics* section of the framework.

Other Related Messages

Participants offered the following range of suggestions for providing more clarity on the context for the site selection process:

- Recognize that only one site is to be selected.
- Acknowledge the uncertainty in the process, and the need for flexibility and adaptability.
- Acknowledge that this is a new experience, with long-term considerations that require a new way of thinking, and that the document represents the best knowledge currently held.
- Consider modifying the framework of this document according to the following elements: Goal, Principles, Measures.

Some participants indicated the need to make a distinction in the framework between the desirable objectives of a site selection (the end point) and the desirable objectives for the process for selecting a site (the means).

Participants also spoke about the need for the framework of objectives and characteristics to take into consideration full-cost accounting that incorporates externalities into the financial analysis of siting and maintaining a repository for used nuclear fuel. Participants indicated that having this perspective could make a difference in terms of the how the management plan looks. These participants reiterated that it is not sufficient to only have financial commitments to fund the project as it is currently conceived; rather there needs to be certainty that a trust will exist in perpetuity.



Another theme that emerged during the discussion was the Aboriginal concept of planning for seven generations. Although this project will be in existence for thousands of generations, some participants suggested that a "seven generation" planning concept may be a practical way to approach this challenge, as it recognizes the need for adaptability and allows for some uncertainty.



4 Major Activities in a Siting Process

Some participants stated that the major activities of the siting process need to address, and integrate a discussion on, the future of nuclear energy generation, including new facilities and the refurbishment of existing facilities. They felt strongly that this issue cannot be separated from discussions on nuclear waste management. Despite NWMO's narrower mandate, the public is engaging in a larger discussion and want to talk about whether nuclear is part of a broader sustainable energy and climate change strategy. NWMO was urged to articulate different nuclear futures and their impact on its project.

From a practical standpoint, potential host communities may need to consider a future involving more than just existing waste in stock if there is significant expansion in nuclear energy generation. This raises the question about whether the site will be expected to accommodate, and capable of handling, all of the additional waste.

Participants envisioned a siting process involving the identification of potentially suitable areas, followed by engagement and capacity building with communities in those areas. They also saw the need for a broader education and engagement process. Site selection criteria, decision-making processes, and the levels of involvement of various groups will need to be defined.

Ideas and perspectives on the major siting activities identified in the discussion are described below:

Identify the most suitable geological areas for repository – Several participants indicated that a preliminary feasibility assessment of sites should be conducted in order to identify the most suitable areas for siting the repository. While many participants indicated that suitable geology would be the basis for the assessment, others believed that exclusion criteria based on other technical, environmental, social and cultural factors may also be involved. Tools such as geographical information systems (GIS) could be used to analyze and map potentially suitable locations.

Undertake a broad education and consultation program with a wide range of communities – All participants agreed that information should be provided as part of an education campaign, particularly informing Canadians about the NWMO and the upcoming call for expressions of interest. Participants advised NWMO to start the education campaign early and broadly to ensure there are no surprises to Canadians. Some participants stated that awareness of nuclear issues is low for many Canadians. The education campaign should provide information on:

- the nuclear cycle to put nuclear waste management in context, especially for users of nuclear power
- the relative risks associated with nuclear and on the concept of risk management



Others spoke of more targeted awareness-raising to stimulate interest among communities within the suitable areas identified by the preliminary feasibility assessment.

Engage communities – Participants suggested that communities, local politicians and local councils be engaged in the site selection process. NWMO was also urged to consider a grassroots campaign to get information out to people early, often, and in a balanced way. Several participants recommended that information materials should include points both in support of, and points in opposition to, the management of used nuclear fuel.

One participant suggested that at least half of those involved in consultation should be women. This approach was tied to an Aboriginal tradition of having women select the warriors and hunters based on women being more attuned to what is best for the safety and survival of the community.

Provide resources to support community participation – There was agreement that it will be important to ensure that the process and the results of risk assessments are transparent, and that communities are assisted in understanding the complex and potential risks of the project. Several participants recommended that resources should be provided to communities to participate fully and effectively, support their own assessment of the information they receive, and ensure informed decision-making.

Others suggested that the services of experts should be made available to communities considering involvement in the site selection process. There were divergent views on whether experts or communities should decide how to use the funds available to support community participation. Some participants suggested that funding should be distributed through a third party, as is currently done in Sweden.

A few participants indicated the process needs to acknowledge the role of opponents and should provide some support to them, including legal support.

Seek volunteer communities – Most participants recommended that once the steps described above were underway, NWMO should initiate the process to seek volunteer communities. It was suggested that NWMO should aim to solicit interest from more than one community, as this will allow for a comparison and evaluation of various sites. Participants noted, however, that when receiving an expression of interest from a community, there must be a demonstration of the municipality's consent to pursue the discussion and the NWMO needs to confirm this willingness. Some participants viewed site selection as the matching of technical (geological) suitability with willingness.

Two issues related to the timing of the process were raised:

• Some participants urged the NWMO not to rush and to slow down the process. They stated that this process may take decades, but that this is a small amount



of time compared to the total timescale of the project. It was suggested that no timelines be set to acknowledge that obtaining social acceptance may be a long process.

• When willing host(s) are identified, a final "go / no go" decision must be made. Participants indicated that this is the point where environmental assessment enters into the process. The site selection process should define a point at which a host can pull out relative to the timing of the environmental assessment.



5 Who should be involved? What should their level of influence be in decision-making?

In discussing who should be involved and their level of influence in decision-making, participants identified various key players and characterized their involvement, as outlined in the following table:

Who should be involved?	Nature of role, and factors for defining involvement and level of influence
Potential Host Communities (Town / city / municipal councils)	 Host and ultimate decision maker Should have veto power and ability to opt out up to the point of environmental assessment (EA) and licensing Decision-making processes to be determined, but may involve Council approving expressions of interest and referendum for final expression of willingness
Other communities / zone of influence (communities around the selected community, communities)	 Influence on decision-making could be based on position in zone of influence (e.g. distance from host community) Do not have the same level of influence as host, but need to be informed and consulted May obtain a share of benefits from the project Will require support (funding and education)
Transportation Communities and Other Potentially Affected Communities	 Needs to be informed and consulted regarding transportation details, but should not have veto power May provide comments on proposal, and be involved in planning and implementation Consider establishment of committee to address planning of transportation corridors, safety issues, and risk mitigation, and emergency response
First Nations Communities	 Have their own consensus decision making processes Cooperation and agreement between First Nations and non-Aboriginal potential host communities is crucial
Other Communities of Interest (NGOs, and other local, regional and national interest groups)	 Need to be consulted and involved in the process Feedback on decisions related to their input should be reported back to demonstrate transparency
Provincial and Federal Governments	 Political consensus at provincial and federal levels is required to move forward Provincial support is crucial, due to jurisdiction over many aspects of the project, and must be obtained prior to seeking interest from communities Province should have a say on whether or not they want to have a host facility in their jurisdiction, but once they have agreed should not have veto power over the final decision Communication and knowledge transfer is required to keep new elected members informed of the process



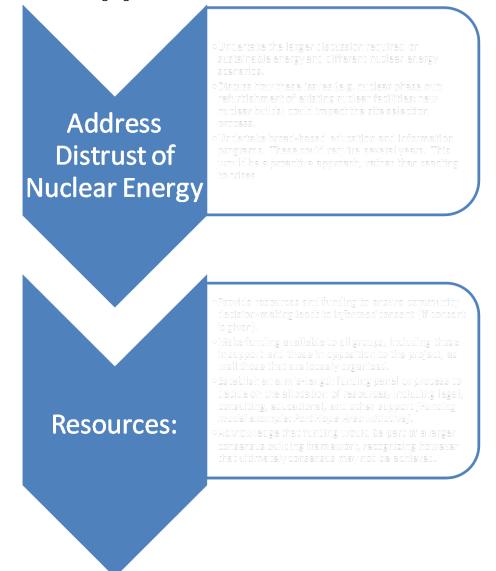
Who should be involved?	Nature of role, and factors for defining involvement and level of influence
Regulators (e.g. CNSC)	Decision making powers in accordance with regulatory mandate
Technical and Scientific Experts (e.g. local geological society)	Could have role in approving expressions of interest from communities

Some participants held the view that local municipalities and their residents and neighbouring First Nations should be the only parties that have veto ability. Neighbouring communities and transportation corridor communities should not have the power to prevent a community from self-identifying itself as a host community. However, in the final decision, preference should be given to those situations where both the host municipality and the neighbouring municipalities are in support of the project, even though the latter group may not have veto power.



6 Ensuring a fair site selection process

Participants discussed and identified elements of a fair site selection process, focusing on the themes of addressing distrust of nuclear energy and providing resources to ensure informed decision-making. A summary of the range discussion points on these themes is provided in the following figure:



Participants also offered the following suggestions and perspectives on gauging public understanding and support:

- Invite constituencies to participate and give them the support needed to be involved.
- Recognize that polling does not provide a good measure of public understanding.
- Ensure that different points of view are heard.
- Emphasize that building consensus is critical.



7 Considerations, Factors and/or Criteria Guiding Decision-making

Participants identified the following technical, social and exclusionary considerations and criteria for guiding decision-making:

Factors / Criteria	Factors / Criteria	
 Hydrogeology (groundwater) Ecosystem sensitivity Design of facility (integrity, safety) Transportation & accessibility Health and safety for workers, 	 Population density Community support Cultural and historical assets of significance Economic impacts (use of agricultural lands, impacts on tourism) Costs of construction and operations 	 A site can be eliminated if it is not technically sound Location with mineral deposits could be excluded. (Note that this would be included in long-term technical safety criteria).

Most participants agreed that safety is the paramount criteria. Safety needs to be addressed over the entire lifecycle of the site and its management (this is both a technical and social requirement).

Participants suggested that potentially interested communities must initially meet technical criteria (the technical criteria are the initial "go / no go" criteria), resulting in a short list of technically eligible communities. Ultimately, the differentiation between these communities will be based on social criteria. Participants also suggested that if one community has more support than another community, then the more supported community should be considered the better site.

Many participants felt that for social and environmental justice reasons, the process should not include very disadvantaged communities. One participant suggested looking at the approaches to environmental justice used in the USA as a model.

The following additional perspectives were offered by a few participants:

- There should be no importation of waste from other countries.
- Provinces may have the authority to exclude a site within its jurisdiction.
- Both First Nations and municipal/town councils could also make the decision to exclude a site.
- The technical and social considerations are being framed primarily in the context of the current generation. The relevance of certain considerations will change as the risks and benefits are realized within different generations.



8 Information & Tools to Facilitate Stakeholder Participation

Participants discussed the information and tools that would be required to facilitate the participation of potential host communities and other interested parties.

A range of specific suggestions on the type of information required and tools for potential host communities including:

- a clear definition of "community";
- clarity on decision-making powers, including who among the potentially affected communities (host community, surrounding communities, and transportation communities) has veto power;
- credible information on social and technical considerations, addressing both the pros and cons of hosting the repository; and
- tools and programs for protecting private property, such as property value protection programs and willing seller/willing buyer programs.

Some participants stressed the importance of giving communities the means to engage their own experts and to conduct their own assessment of risk, so as to take ownership of these assessments and the results.

The NWMO was encouraged to develop a wide range of compensation and benefits options and provide information on these to potential host communities. The following options and characteristics of such benefits were presented:

- Instead of monetary compensation, identify benefits the community desires and that contribute to its sustainability.
- Benefits could include enhanced health care, community economic opportunities (including in sectors not affiliated with the repository), and programs aimed at training and retaining youth in the community.
- This information needs to be provided sufficiently early for communities to use it in their decision-making processes.

To address potential issues of trust, namely a lack of trust in the nuclear industry or government, it was recommended that communities and stakeholders be offered choices in their sources of information. The process should also welcome opposing views and offer opponents meaningful opportunities for participation.



9 NWMO's Future Challenges & Opportunities – Best Advice

In the closing plenary discussion, participants were invited to share their perspectives on the opportunities and challenges facing the NWMO, drawing on what they heard and learned from the dialogue. The following range of suggestions and comments were made:

- Energy policy issues, including the future of nuclear energy, need to be addressed in the siting process.
- There may be significant competition between interested communities and NWMO will have to manage the effects of this competition on the integrity of the process.
- NWMO will never have a second chance to make its first impression. Therefore, the NWMO should take a slow and measured approach, ensuring that the entire process is well defined and supported (materials, information, decision-making mechanisms) before initiating it.
- The challenges are great, but the NWMO should have courage. In some cases, issues will need to be addressed at Cabinet level. However, people are willing to talk and work together. NWMO should draw on the collaboration demonstrated in this dialogue in going forward.



Appendix A – List of Participants

Name	Organization
Ms. Caryl Arundel	Canadian Urban Institute
Ms. Janice Auger Szwarz	Canadian Association of Nuclear Host Communities
Mr. Mac Bain	Federation of Northern Municipalities
Chief John Beaucage	Union of Ontario Indians
Mr. Ken Dormuth	
Ms. Shirley Farlinger	International Institute of Concern for Public Health
Mr. Harold Flaming	The Ontario Rural Council
Ms. Joy Kennedy	United Church of Canada
Dr. K.Y. Lo	Geotechnical Research Centre, University of Western Ontario
Mr. Dave Martin	Greenpeace
Dr. Jatin Nathwani	University of Waterloo
Dr. Grant Sheng	York University
Mr. Mark Stevenson	
Dr. Murray Stewart	Stewart Advantage Consultants Inc.



Appendix B – Agenda

NWMO Dialogues on Designing the Process to Select the Site for Managing Canada's Used Nuclear Fuel for the Long-Term

Objectives

- To seek input from individuals and organizations, which reflect a diverse set of perspectives, on the design of a siting process
- To invite/generate ideas about critical elements and issues in the design of a siting process

Time	Subject
8:00-8:30	Greeting & Registration
8:30-8:40	NWMO Welcome
8:40-9:00	Stratos Opening Remarks & Roundtable Introductions
9:00-10:30	<u>Plenary</u> : What matters in a siting process?
	What is important in a siting process?
	Testing the set of Objectives, Ethical Principles & Characteristics (Q1)
10:30-	Refreshment Break
10:45	
10:45-	Breakout Groups: Design Elements for NWMO Siting Process - Methods
12:30	Major activities in a siting process
	 Who should be involved? What should their level of influence be in decision- making? (Q4)
	Ensuring a fair site selection process (Q2)
12:30-	Lunch (provided)
13:00	
13:00-	Reporting Back in Plenary: Design Elements for NWMO Siting Process -
13:45	Methods
13:45-	Breakout Groups: Design Elements for NWMO Siting Process - Content
14:45	Considerations / Factors / Criteria guiding decision-making
	 Information and tools to facilitate stakeholder participation (Q5)
14:45-	Reporting Back in Plenary: Design Elements for NWMO Siting Process -
15:15	Content
15:15-	Refreshment Break
15:30	
15:30-	<u>Plenary</u> : What are the NWMO's future challenges & opportunities? What are
16:25	the key considerations?
	Key challenges & opportunities in the design and implementation of a siting
	process (Q6)
	 Best advice to NWMO on design of a siting process (Q6)
16:25-	<u>Plenary</u> : Wrap-up
16:30	

