# NWMO Citizen Panels Report, Phase III: Panel One

NWMO SR-2008-11

July 2008

Navigator Ltd.



NUCLEAR WASTE SOCIÉTÉ DE GESTION MANAGEMENT DES DÉCHETS ORGANIZATION NUCLÉAIRES

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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.

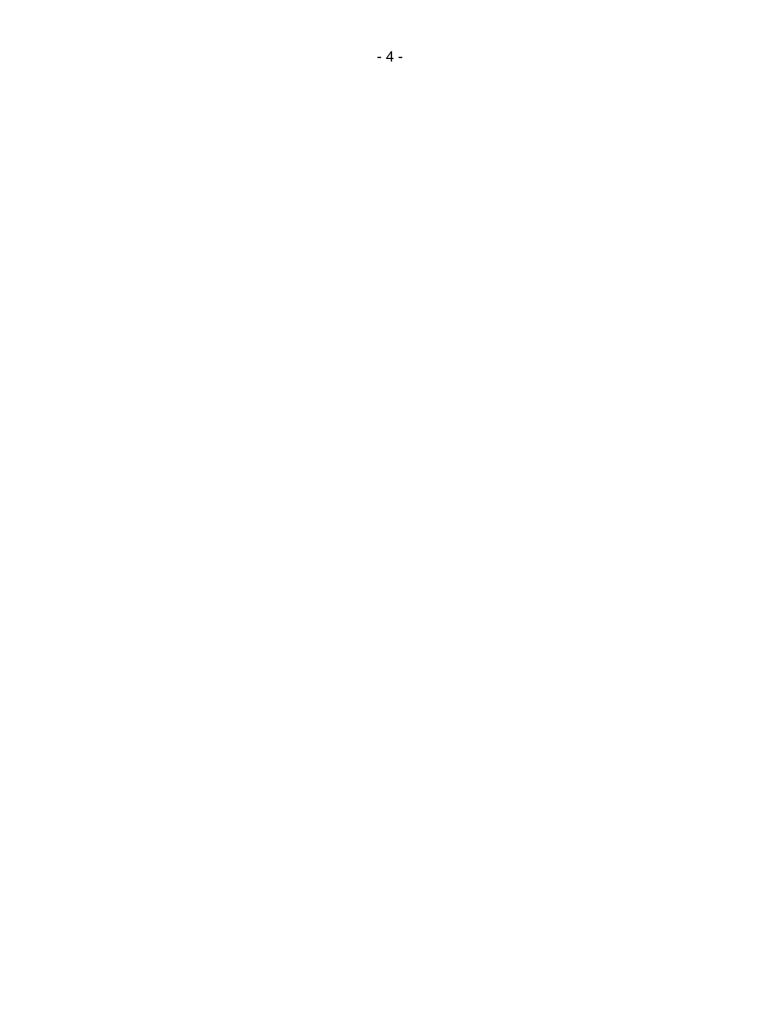
#### **NWMO Social Research**

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 Citizen Panel Report Kingston, Ontario

NUCLEAR WASTE MANAGEMENT ORGANIZATION KINGSTON, ONTARIO CITIZEN PANEL REPORT JULY 2008

## WHAT ARE CITIZEN PANELS?

Building on previous qualitative research studies, the NWMO contracted Navigator to initiate Citizen Panels in 8 cities across Canada. The goal of the Citizen Panel project was to further explore the feelings, attitudes and perceptions of Canadians toward the long-term storage of Canada's used nuclear fuel.

The Citizen Panel project is markedly different from the qualitative research projects that have preceded it. The intent of the Citizen Panel format used in this project is to allow for the discussion to be formed and driven by the views of the individual Panelists. These Panelists have had a brief introduction to the NWMO and are aware of rudimentary facts surrounding Canada's used nuclear fuel such that an informed discussion can occur.

Phase Three of the Citizen Panel project occurred in Kingston, Ontario in May 3, 2008.

#### WHAT IS NAVIGATOR?

Navigator is a research-based public affairs firm that works with companies, organizations and governments involved in the public policy field.

Navigator has grown to become a diverse firm with consultants from a variety of backgrounds who have excelled in the fields of journalism, public opinion research, politics, marketing and law.

Our strategic approach can be summed up as: "Research. Strategy. Results."



# PANEL REPORT OUTLINE

#### 1. NWMO Citizen Panel Background

- a. Citizen Panel
- b. Panelist profiles
- c. Panel methodology

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- b. Strategic Objectives
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    - II. Governance Structure
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#### 3. Questions & Discussion, Technical Representative

- a. Explanation
- b. Questions & Discussion

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- i. Navigator Personnel
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# 1. NWMO CITIZEN PANEL BACKGROUND

#### a. Citizen Panel

The Kingston, Ontario Phase Three Citizen Panel was held on May 3, 2008 at a neutral third party facility in Kingston.

The Panel was held over three hours from 12PM – 3PM with 12 Panelists in attendance. Jaime Watt, a Navigator research professional, acted as Discussion Leader.

A general outline of discussion objectives, as well as a discussion document intended to guide the work of the Panel were prepared in advance of the Citizen Panel. Reproductions of the document shown to the Panel can be found at the end of this report as appendices.

#### b. Panelist Profile

In order to ensure that Panelists speak openly and freely over the course of this research, the individual identities of Panelists will remain protected and not revealed to the NWMO at any point of the project. Contact with Panelists is managed exclusively by a dedicated Panel Manager and each Panelist has been given an identifier code to ensure anonymity in all accessible Panel documents. All personal information and contact reports are stored separately and controlled by the Panel Manager.

While verbatim comments are used through this report, the identification will be only by Panel or by unique Panelist identifier code, but never by name.

Panelists have agreed to offer additional information, including their gender and one additional fact about their lives to make the Panel reporting richer for the reader.



Below are the profiles of the Kingston Panelists by Panelist identifier code:

Panelist: K-2A	City: Kingston Age: 55-65 Gender: Male Occupation: Employed, Conference Board of Canada and law professor	Panelist: K-4A	City: Kingston Age: 65+ Gender: Female Occupation: Retired
Panelist: K-5A	City: Kingston Age: 25-34 Gender: Female Occupation: Employed, kindergarten teacher	Panelist: K-6A	City: Kingston Age: 55-64 Gender: Male Occupation: Self-employed, financial planner
Panelist: K-7A	City: Kingston Age: 55-65 Gender: Male Occupation: Retired	Panelist: K-11A	City: Kingston Age: 35-44 Gender: Male Occupation: Employed, Development and recruitment officer
Panelist: K-12A	City: Kingston Age: 45-54 Gender: Male Occupation: Unemployed	Panelist: K-13A	City: Kingston Age: 18-24 Gender: Female Occupation: Employed, cell centre representative
Panelist: K-14A	City: Kingston Age: N/A Gender: Male Occupation: N/A	Panelist: K-15A	City: Kingston Age: 35-44 Gender: Female Occupation: Self-employed
Panelist: K-16A	City: Kingston Age: 25-34 Gender: Female Occupation: Student	Panelist: K-17A	City: Kingston Age: 35-44 Gender: Male Occupation: Employed, stationary engineer

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#### c. Panel Methodology

These Citizen Panels have been designed, as much as possible, as collaborative discussions facilitated by a Discussion Leader. They are separate and apart from focus groups in that they empower individual Panelists to raise questions and introduce new topics. The role of the Discussion Leader, in this format, is merely to introduce new topics of discussion and lead the Panel through a number of discussion exercises.

As well, additional measures were incorporated into this Citizen Panel format to empower individual Panelists. Each Panelist was made aware of their independence and responsibilities to both contribute to, and lead, the Panel discussion. A transcriber, traditionally taking contemporaneous notes behind one-way glass or in another room, was, in this case, placed inside the discussion room. Panelists were empowered to direct him or her to take special note of elements of the Panel discussion they felt were important, or ask him or her to recap any part of the discussion upon request. A commitment was made by the Discussion Leader that the notes taken would be sent to Panelists for review, possible revision and approval, to give Panelists faith that they are in control of the proceedings and ensure their contribution is reflected accurately.

Potential Panelists were originally selected through random digit dialling among a general population sample in the wide area in which each Panel was held. Individuals called underwent a standard research screening survey in which they indicated that they were interested and able to participate in a discussion about a general public policy issue with no advance notice of the specific topic. Individuals were screened to include community-engaged opinion leaders in at least one of these topics: community, environment, and/or public/social issues. Those that passed the screening process were asked to participate in a traditional focus group on the perceived trust and credibility of the NWMO, which allowed an introduction to the topic of used nuclear fuel and topics such as Adaptive Phased Management. The discussions were neutral in tone and did not presuppose any outcome on issues such as nuclear power generation and siting for used nuclear fuel.

At the end of this research study, participants were asked if they would be willing to continue in discussions on the topic of used nuclear fuel. Those that expressed interest were placed on a "short list" of potential Panelists for the four-phased Citizen Panel project. Research professionals at Navigator subsequently used this pool to select Panelists that would ensure a diversity of age, gender and experience in the Panels. Only participants who demonstrated both a willingness and ability to contribute to group discussion and complete exercises were included in the pool. The content of each participant's contribution in the focus groups was not reviewed by Navigator professionals. Rather, the only qualifiers were that individuals could speak clearly and were able to grasp concepts introduced to them at a basic level.

A target Panel population of 18 was determined for each location in the interest of ensuring the long-term viability of each Panel over the course of four discussions.

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Phase One Citizen Panels occurred in late Fall 2007. Panel discussions began with an indepth review of the NWMO's Moving Forward Together brochure. Individually, Panelists were asked to mark the document with red and green pens, green indicating they felt positively about a certain point and red indicating that they felt negatively. Furthermore, Panelists were asked to circle the items they felt the most strongly about, both positively and negatively, with the "Sharpie" marker. Panelists were then asked to write down what they thought about the brochure, what they would say about the brochure and how the brochure made them feel. This metaphorical or projective exercise was an attempt to get a more nuanced view of the brochure and to have Panelists share some of their internal reservations they may have been holding back from the Panel. Following the "Think, feel, say" exercise, Panelists reviewed the NWMO's strategic objectives and were asked to rate how important each strategic objective was to them, as well as how appropriate the particular objective was to them. Lastly, Panelists were provided with an excerpt of the draft NWMO's draft approach to transparency. The exercise was introduced with a reminder to Panelists about the frequency with which they raised the issue of transparency as an important pursuit and focus for the NWMO in the previous research phase of the study. Panelists were asked to discuss whether or not the NWMO's proposed approach to transparency met with their general expectations. At the conclusion of the Panels, Panelists were provided with post-session work (homework) to complete following the Citizen Panel. The work consisted of a simple seven question survey to be completed after a brief review of the NWMO website. Those without any access or ability to use the internet were exempted from the exercise.

Although successful in terms of the richness of data collected in all 8 Panel locations, it was clear upon completion of the Panels that it would be necessary to hold Supplementary Citizen Panels in four locations (Toronto, Montreal, Regina and Sault Ste. Marie) due to smaller than expected Panel populations, as well as a difficulty experienced by some Panelists to honour their commitment to attend, as was confirmed on the day of the Panel.

Supplementary Citizen Panels occurred in early January 2008 and consisted of 6 new recruits, selected by random digit dialling, to replicate the experience by which all other Panelists had been selected. New recruits were sent a reading package in advance and then had a one hour "lobby" session immediately prior to the Supplementary Citizen Panel. This session replicated a condensed version of the Preparatory Phase research and allowed for any questions Panelists might have had about the NWMO. Following the "lobby" session, the Supplementary Citizen Panel continued, adding Panelists who had confirmed but, for a myriad of reasons, could not participate in the Phase One Citizen Panels.

Following the completion of the Supplementary Citizen Panels, those that demonstrated a willingness and ability to continue were added to the pool for Phase Two Citizen Panels.

Phase Two Panels occurred in mid-to-late January 2008. The Panel discussion began with the Discussion Leader asking Panelists if they had thought any more about the NWMO since the last Panel, or if they had just gone back to their daily routines and not given the organization much additional thought. The Discussion Leader then distributed a

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document for discussion, the Executive Summary of the NWMO's study *Choosing a Way Forward: The Future Management of Canada's Used Nuclear Fuel.* The document was given both individual consideration, as well as collective consideration. Individually, Panelists were asked to mark the documents with red and green pens, green indicating they felt a certain point was helpful to their understanding and red indicating that they did not find the point helpful. The intent of the individual document review was to serve as a launching point for further collective consideration and discussion of the more complex strategic objectives of the NWMO. The Panel discussion concluded with Panelists reviewing the answers provided by the NWMO to the questions Panelists had posted in the Parking Lot in Phase One.

Again, Panels were successful in the richness of the data gathered. Furthermore, Panelists have begun to demonstrate a higher degree of ownership in the process with impressive attendance, commitment to the discussion and, in come cases, engaging in extra work, such as assembling their thoughts on paper and seeking out additional information.

Phase Three Panels occurred in late April and early May 2008. Unlike previous Panels, Phase Three Panels were divided into two parts: a discussion portion and a question and answer portion with a technical representative from the NWMO.

The discussion portion of the Panel began with a general discussion on Panelists' thoughts, if any, on the NWMO since the last Panel session and then turned to the Draft Implementation Plan that had been distributed to Panelists upon their arrival. Similar to Phase Two, the document was not reviewed by Panelists but, rather, used to inform Panel discussion on the NWMO's strategic objectives. Although Panelists were given an opportunity to comment on all objectives, as well as the document as a whole, they were asked to concentrate specifically on four of the seven NWMO strategic objectives: Building Relationships; Building Knowledge: Technical and Social Research; Review, Adjust and Validate Plans; and Collaborative Design and Initiation of a Siting Process. These objectives were rated by Panelists in Phase One as highly appropriate and important for the NWMO. For each strategic objective, Panelists were given a summary that outlined items the NWMO plans to implement over the next five years (2008-2012) and asked for their feedback; specifically whether they felt the NWMO was moving in the right direction with these plans and whether they felt that anything important had been overlooked.

Due to a timing issue in Montreal, Montreal Panelists were only able to concentrate on three of the seven strategic objectives during the Panel discussion: Building Relationships; Building Knowledge: Technical and Social Research; and Review, Adjust and Validate Plans. As a result, all Montreal Panelists present for the Phase Three Panel discussion were contacted by the Francophone Panel Manager to schedule an in depth interview to discuss the remaining objectives not covered in the Panel: Collaborative Design and Initiation of a Siting Process; as well as Financial Surety, Governance Structure and Building an Implementing Organization. Panelists scheduled for the individual in-depth interviews were provided with a copy of the Implementation Plan in advance of the discussion and, as was the case in the Panel discussion, were given a chance to provide their feedback on the objectives outlined above.

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Once the discussion on the Draft Implementation Plan was complete, in seven of the eight Panel discussions, a technical representative from the NWMO was invited into the Panel discussion for a question and answer session. This was not the case in Saint John, New Brunswick, where the technical representative from the NWMO was brought into the Panel prior to the discussion of the Draft Implementation Plan. All eight Panel discussions concluded with a wrap-up discussion, including feedback on the question and answer portion of the discussion.

This Panel Report is, to the best of Navigator's abilities, a faithful rendering of the discussion held in Kingston and stands alone as a record of the Citizen Panel discussion on May 3, 2008. A larger Aggregate Report on this wave of Panel discussions, including the Panels in Montreal, Toronto, Sault Ste. Marie, Scarborough, Saint John, Saskatoon, and Regina has also been submitted to the NWMO.



## 2. DIALOGUE: DRAFT IMPLEMENTATION PLAN

#### a. Overview

During this Phase of Citizen Panels, the NWMO's Draft Implementation Plan was reviewed by Kingston Panelists in advance of a general discussion beginning. While a significant amount of Panel discussion was directly related to the four strategic objectives identified by Panelists in Phase One Panels as most important and appropriate for the NWMO, there was time dedicated for a more general discussion of the Draft Implementation Plan among Panelists.

The Draft Implementation Plan was well-received by Kingston Panelists, most of whom felt that the Plan and, by extension, the NWMO, was headed in the right direction. As was the case in other Panel discussions, few Kingston Panelists made occasional comments about the overall subject matter being complicated and, in some instances, felt the wording chosen was not as clear as possible. For example, a number of Kingston Panelists struggled with the terms "corporate citizenship program" and "hydride cracking." There were few instances throughout the Kingston Panel discussion where Panelists voiced a desire to see more simplified terms used and for the NWMO to be cognisant of bringing the language down to a level that those with no knowledge on the subject matter could understand. In the words of a Kingston Panelist,

I think one of the key things with communications is that they have science communications [and communicators] that aren't necessarily scientists. If they have that, their communications strategy should fall into place really well.

A number of Kingston Panelists reacted positively to what they perceived as far more definitive language used by the NWMO in the Draft Implementation Plan. As was illustrated in other Panel discussions as well, the use of this language left many Panelists with the impression that the NWMO is now moving forward in its mandate with confidence, which a number of Panelists in Kingston reacted to positively. In the words of one Kingston Panelist,

This document sounds very confident to me. They have this plan in place and they will achieve these points by the year 2012. It sounds like they're very confident that they're going in the right direction and know what they're going to do. It's going in the right direction. It looks pretty good to me.

A number of Kingston Panelists seemed sceptical of the NWMO's consistent need to differentiate between Canadians and Aboriginal Peoples. Some Panelists wondered if the NWMO's attempt to be sensitive to the aboriginal community by recognizing them as distinct was actually unnecessary "tokenism" and others wondered if it signalled the organization's intention to target aboriginal land for long-term storage.

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In the words of a Kingston Panelist,

By reading between the lines, I'm seeing that they're already thinking about where this is going to be because if they're consulting this much with Aboriginal Peoples, they're looking for a remote, Northern community...

Discussions on the timeline associated with APM demonstrated a noticeable divide among some Kingston Panelists. Some perceived the projected timeline to be excessively long and could not comprehend why the process could and would take the length of time outlined by the NWMO. Others, however, felt that the timeline was well thought out and necessary, given the complicated nature of the process. In the words of a Kingston Panelist,

> If you go forward 20 or 30 years and you start doing this and then something goes wrong, the first thing that will be asked is how did it go wrong and why did it go wrong. When people were starting this process, didn't they give consideration to a slow and methodical process making sure that things didn't go wrong? I think it would be negligent to not proceed at a snail's pace. Think of the consequences on the other end. They are enormous. Maybe a snail's pace is required to say that we did everything we possibly could.

Education and increasing awareness were, as well, prominent themes in the Kingston Panel's discussion. A number of Kingston Panelists called for increased education for both the general public as well as youth and, as a result, reacted positively to the NWMO's plan to develop an education and awareness program. In the words of a Kingston Panelist,

*I like the education and awareness program. I think that's very necessary. The more information the better.* 

Lastly, there was a noticeable change in the attitudes of some Kingston Panelists towards international collaboration. These Panelists demonstrated a much greater openness to referring and modeling the Canadian process after those in other countries that are further along in the storage process than in previous Panel discussions. For instance, in the words of one Kingston Panelist,

How about referring to the experience from Finland and Sweden? It seems to me [that consultation with Canadians on designing a siting process] is sort of reinventing the wheel.

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#### b. Strategic Objectives

In the Phase One Citizen Panels, seven strategic objectives were shared with Panelists. Panelists were asked to examine each objective and then give an indication of their relative importance and appropriateness. Although all strategic objectives seemed largely in line with the majority of Panelists' expectations, there were consistently stronger views on four of the seven strategic objectives: Building Relationships; Building Knowledge – Technical and Social Research; Review, Adjust and Validate Plans; and Collaborative Design and Initiation of a Siting Process. As such, these four objectives were selected as the primary objects of discussion in Phase Three for reasons of time availability.

For each strategic objective, Panelists were given a colour-coded worksheet outlining items the NWMO plans to implement over the next five years (2008-2012). A more comprehensive overview of each objective in the Draft Implementation Plan document was flagged with the same colour of the worksheet for quick reference should Panelists have wanted or required more information. After reviewing each of the four objectives, Panelists were asked for their feedback; specifically whether they felt the NWMO was moving in the right direction with these plans and whether they felt that anything important had been overlooked.

After reviewing and discussing the four objectives mentioned above, Panelists were provided with an opportunity to provide feedback on the remaining three objectives: Financial Surety, Governance Structure and Building an Implementing Organization. Panelists were asked by the Discussion Leader if any of the remaining objectives now struck them as more important, given the increase in their knowledge on the subject matter since Phase One.

Below, please find contemporaneous notes of the Panel discussion on the Strategic Objectives.



#### c. Panel Notes

i. Disclaimer

The attached are contemporaneous notes of the Panel discussion on the Draft Implementation Plan and Strategic Objectives. The notes were taken by a transcriber positioned in the room with the Panelists. The transcriber was taking direction from the Citizen Panel on specific points of interest. The following is not an official transcript, but a best effort to capture the sense of discussion with some granularity.

The transcriber for this Panel was Courtney Glen, a Navigator research professional.

#### **Draft Implementation Plan Discussion**

Discussion Leader:	When you got here today, we passed out a Draft Implementation Plan. Another name for this would be a business plan, work plan, activity plan. What it lays out is the NWMO's thinking about how it can move ahead with its work. The NWMO is transforming itself from being a study organization to an implementing organization. To plan their work over the next couple of years, they put together this plan. In it, they have 7 strategic objectives. Tonight I'd like to focus on 4 of those 7. We're going to
	Tonight I'd like to focus on 4 of those 7. We're going to look at them one at a time.

#### **Building Relationships**

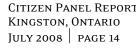
<b>Discussion Leader:</b>	Now that you see what they're planning to do, does it make
	sense to you? Are they on the right track? Heading in the
	wrong direction?

- K-5A: I'm happy to see they have the concept of developing and implementing a way to engage youth, but I wanted to understand what that meant. Also, the corporate citizenship program is going in the right direction.
- K-11A: I couldn't understand what that meant.
- K-6A: Me neither.
- K-12A: I was wondering if it was just the industry players or if it was going to be people who were not directly involved.

K-2A: I think it's probably the right way to go. I thought that seeking meetings with editorial boards and other media is the right way to go. I like that they'll be engaging the



	press. I don't know about the speaking engagements. I don't know where they will speak. I gather they are trying to educate the public as a whole. You had asked an interesting question as to whether we had seen any publicity and no one has seen anything. I haven't seen a single thing in the press and I read 4 papers a day! I haven't seen a single word of discussion.
K-6A:	I love groups that plan and organize, strategize and plan their objectives. That's key to the success of any organization. They have very specific goals and things that they want to do. Some aren't very clear but they are still good. Is it overkill? Maybe, but it's the Canadian way to talk something to death.
K-14A:	Several references to consulting with Aboriginal Peoples jumped out at me. Also, the very first sentence about relationships with interested Canadians and Aboriginal peoples. I would suggest changing that since Aboriginal people are Canadians.
K-11A:	I would suggest that too. It's a sensitive thing.
Discussion Leader:	Yes, but there are many Aboriginal people who feel they are distinct from Canadians.
K-14A:	But by saying that, you're putting yourself on one side of the fence when you could make it more neutral. By reading between the lines, I'm seeing that they're already thinking about where this is going to be because if they're consulting this much with Aboriginal Peoples, they're looking for a remote, Northern community that's not necessarily on the reserve, but maybe on land that is used by Aboriginal Peoples.
Discussion Leader:	Do you think there is a reason why the organization would consult with Aboriginal Peoples, even if the eventual site was not on aboriginal land? For instance, they have traditional knowledge that we could learn from regardless of where the site was located?
K-14A:	I would see value in it but it isn't typically what I've seen. Usually, consulting Aboriginal Peoples is pre-emptive, anticipating resistance.
K-11A:	It looks like a lot of work, which is a good thing.
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K-12A:	My question about the editorial boards and media is will it only be national or will it include both provincial and local?
K-5A:	It's lovely to see that they have a focus on improving their website. It needs looking at. It's very busy, not extremely user friendly. It lacks a functioning search and it would be nice to have RSS feeds so you got updated information. Any organization's website should be a living and breathing thing and continue to evolve as the organization does.
K-4A:	I agree. That's what I was going to talk about. I think we're on the right track, I'm quite impressed with this.
K-13A:	I think we're on the right track for now. I'm very worried because it seems to be very focused on the here and now. I wonder what's going to happen 30 years in the future. I'm wondering what's going to happen, it doesn't seem to be focused on that.
Discussion Leader:	The point of this document is to plan what they're going to do in the next four years. Knowing that that is what this is for, how does that fit in with your concern?
K-13A:	It looks like they're heading in the right direction more or less, but my concern is that they're primarily worrying about this so I hope they're thinking of the future. A lot could happen in years to come.
K-4A:	They're responsible people. Everyone is involved here, even us. Everyone is involved so they're going to make sure that things are going to go right for themselves as well as the rest of us.
K-15A:	It seems like they've covered a lot of areas which is a good thing. The website should be clear and precise.
K-11A:	I think one of the key things with communications is that they have science communications that aren't necessarily scientists. If they have that, they're communications strategy should fall into place really well.

### **Building Knowledge – Technical and Social Research**

**Discussion Leader:** Now that the NWMO has shown you what they propose to undertake, do you feel they have a good handle on it? Heading in the right direction? Missing the mark?

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K-12A:	I appreciate the annual reports. However, the cooperation agreements, it's specifically Western. It doesn't mention Russia, China or India who I know have nuclear.
Discussion Leader:	Our technical representative will be in soon and will be able to answer that question for you.
K-12A:	Will they consider growth in the industry? Eventually, if things go the way they're trying to push it, away from oil based generation, that when they make the repositories, they make room.
Discussion Leader:	That might be something we look at in the adaptive strategic objective.
K-12A:	And the last point, to whom will the report end up, in the hands of local people too because they really need to know?
K-15A:	In a broad way, I thought it was addressing a lot of important things but I was confused about why only by 2011 will they find a safety and assessment license and completing two safety cases? Why would they wait so long? Wouldn't they want to do that first?
Discussion Leader	Why don't we defer that question to the technical representative.
K-2A:	I take it that no sites will be selected in this time period, but just the tools being put together and the sites being done after 2012. That's good, tools are fine.
K-11A:	Why wouldn't they hold citizen panels across the country? It's a Canadian issue. It would make more sense to me to convene citizen panels across the country. Eventually, down the road, they will likely be more than 4 nuclear provinces.
K-15A:	Especially when you want to do surveys. You can't just call people out of the blue. They should know what's going on.
Discussion Leader	People know why the NWMO is focusing on the 4 nuclear provinces. The way the legislation is set up is that it will be those 4 provinces that will have the responsibility of paying and caring for the waste, in terms of the life cycle

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	approach. Of course, the organization has said they would consider other provinces.
K-5A:	I think they're heading in the right direction, they have lots of tools to be effective. I like the fact that they are developing capabilities to review transportation options. I think that is very important. I am interested in the idea of uranium dioxide dissolution rates.
K-17A:	This document sounds very confident to me, they have this plan in place and they will achieve these points by the year 2012. It sounds like they're very confident that they're going in the right direction and know what they're going to do. It's going in the right direction. It looks pretty good to me.
K-6A:	I like that it's very specific, with timelines, there's dates by, etc. From what I recall, it's going to take over a hundred years to do this yet they are already talking about a complete evaluation of container placement methods. Won't technology change quite a bit over 120 years?
K-17A:	I know the wheels of progress are really slow so I'm wondering how many studies are going to be done in order to move this process forward? I like the confidence.
Review, Adjust and Valid	ate Plans
Discussion Leader:	How do you as an organization move forward and get things done but at the same time, keep yourself open to changes that might have taken place? This is what the NWMO has undertaken to do in order to remain open to change. What are your thoughts on what they are proposing?
K-13A:	This is more or less what I was talking about with looking into the future and still keeping an open mind and willing to change and grow. I like this.
K-15A:	They're not saying it will take 120 years, but they recognize that this will change.
K-7A:	It's okay, very well planned. The research part is strong.
K-13A:	I like that they're mentioning the growth of the amount of fuel bundles they're going to have to store, they're more or less suggesting that we're going to move to nuclear fuel



	and the site will have to be larger and they're making plans for that. Thirty years from now, it's going to be a lot larger. They're planning on that.
K-12A:	I'm hoping in 30 years time they'll find a way to start reducing the amounts too. It scares me to think that there is thirty years of stuff anywhere, especially in such a small space. I like how they will report 3 times a year. That's a good thing.
K-14A:	It's not what's here, but maybe what's not here. When it references used fuel from nuclear new build. I'm personally a little wary about storing other country's used fuel. We do have agreements with other countries already and it seems we're focusing on this international collaborative approach so I'd feel much more comfortable to see they are addressing it.
K-4A:	I don't agree with this publishing the research papers and the results of the research on the website. The average person would not understand. It doesn't hurt but it doesn't help.
Discussion Leader:	Anyone see anything they think is a complete waste of
	time?
K-11A:	In terms of transparency, something like that is a must. Whether people want to read it or not, it's a must to put that on the website.
K-11A: Discussion Leader:	In terms of transparency, something like that is a must. Whether people want to read it or not, it's a must to put that
	In terms of transparency, something like that is a must. Whether people want to read it or not, it's a must to put that on the website. A lot of people tell me that it is the standard, best practices
Discussion Leader:	In terms of transparency, something like that is a must. Whether people want to read it or not, it's a must to put that on the website. A lot of people tell me that it is the standard, best practices for 2008.
<b>Discussion Leader:</b> K-11A:	<ul><li>In terms of transparency, something like that is a must. Whether people want to read it or not, it's a must to put that on the website.</li><li>A lot of people tell me that it is the standard, best practices for 2008.</li><li>It's a given.</li><li>It's like a library. You have to have everything there, but whether you chose to read it or not is another thing.</li></ul>



K-6A: I still think they need to do a lot more public relations. As soon as you get the environmentalists out there working against you, you're cooked. But if there is a base of understanding among the public...

#### **Collaborative Design and Initiation of a Siting Process**

**Discussion Leader:** Again, we've talked a lot about how this is where the rubber hits the road when it comes to siting. This is what the NWMO is proposing to do to get a siting process. I'm wondering if these make sense to you? Are they on the right track? Are they off base? K-11A: In 2008, they talk about conversations with Canadians on the design of the process. I think it's a necessary step, but I'm not sure how useful it is. I understand why they're doing that but I think it's something more up to the experts. How about referring to the experience from Finland and Sweden? It seems to me it's sort of reinventing the wheel. But I do understand from a public perspective why they need to do it. I just wonder what it yields. K-4A: I like the education and awareness program. I think that's very necessary. The more information the better. K-12A: I was wondering if the awareness program was going to include the possibility of public tours? What about high school tours? **Discussion Leader:** This is speaking more about designing the process to identify a site. They're a long way from building the thing. This is how the NWMO is proposing to design a process that will be appropriate. Are they good points? K-14A. The reference to Aboriginal Peoples is noticeably absent here. If it's possible an aboriginal community could be chosen, it should be mirrored here if it's included in Building Relationships. I like the last statement, it implies action. We're going beyond design and establishing a plan to actually implement it. K-17A. Drafting a siting process. It doesn't sound like it would be that difficult. It would be something where geologists would have a firm understanding of what the earth would have to be like. It seems like there might be a little too much to it. I'm all about keeping it simple and it seems that there might be a bit much to it. I remember you talking

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	about a place up north where the geology hasn't shifted in billions of years. That's more than likely not going to shift in the next few years. Why are they taking so many steps? It seems a bit overkill.
K-6A:	France has huge nuclear power, 50% or 75% of their generation, and they've already decided that deep rock is the way to go.
K-2A:	If you go forward 20 or 30 years and you start doing this and then something goes wrong, the first thing that will be asked is how did it go wrong and why did it go wrong. When people were starting this process, didn't they give consideration to a slow and methodical process making sure that things didn't go wrong? I think it would be negligent to not proceed at a snail's pace. Think of the consequences on the other end. They are enormous. Maybe a snail's pace is required to say that we did everything we possibly could.
Discussion Leader:	That is an interesting balance that the organization has to strike, between taking too long and being careful enough.
K-12A:	Four years isn't that much, it goes by very fast. Have they considered having a second smaller site in case there is a problem?
K-16A:	I don't think it is overkill because we want it to be transparent and have everyone involved.
K-17A:	In the interim, where are these five hockey rinks of waste being stored? They are stored in the open. Say a plane crashes into that, you've got a mess. You're going with the snail's pace, but you know what to do, why don't you get started?



# 3. QUESTIONS & DISCUSSION, TECHNICAL REPRESENTATIVE

#### a. Explanation

Technical representatives from the NWMO were present for a question and answer session at the request of the Panelists themselves. Panelists were twice given the option to have a technical representative present at the Panel discussion but preferred to wait until Phase Three as, until this point, felt that they still had more they needed to learn and discuss so that they were able to ask informed and insightful questions.

The technical representatives had approximately 90 minutes with the Panel to offer technical insight, institutional knowledge and a corporate perspective that, to date, only been present in written materials. Panelists were able to present their questions on a "first come first serve" basis with the Discussion Leader keeping a speaker's list to ensure all were able to address the technical representative.

Technical representatives were not permitted to view the Panel before, nor after, the question and answer session. The Panel was informed of this so that they felt comfortable being frank before and after the appearance of the technical representative and did not feel required to censor themselves fearing observations.

As was the case in all Panel discussions with the NWMO technical representative, the majority of questions posted by Kingston Panelists fit clearly into five themes: safety, site selection, timeline, international comparison and transportation. For a full analysis of each theme, please refer to the Aggregate Report.

Below, please find questions posed by Kingston Panelists to the technical representative from the NWMO.



## b. Questions & Discussions

K-2A	I'm trying to understand your educational background. In what field is your specialty?
K-2A	We were talking about collaborative design and initiation of a siting process. There were a lot of questions about why it would take 4 years to set up the siting process. Is that really necessary time?
K-2A	Why so long? What's needed that will make it so long? Some think it is too long, I thought it might not be in order to ensure safety. Why does it take so long when all you're looking at is a collaborative design, when you're not even doing it?
K-2A	What is it that takes so many years? In France, they developed their system to store much quicker. I heard that, but I have no knowledge.
K-17A	So this is the norm?
K-12A	Will it take us 15 to 20 years to site the facility? I expect that Canada will have to do the same thing as France and Sweden and go for nuclear if they want to get past fuel.
K-12A	What makes that process of selecting a site so complicated, besides the geological survey? It sounds like that part of it will be done by a select bunch of people. Why does it take them so long if they have already decided there are 5 spots that are possible? Why will it take 10-15 to decide which one?
K-12A	Will the environmental assessment process be by application? An official pick? Or sort of like a lottery?
K-12A	With Building Knowledge, you're looking very closely at Western countries. There's no mention of Russia, China, India or Pakistan. I know that Russia has nuclear plants. Will they be included at any point in the studies? Or at least told about what's going on? Why was the NWMO not focusing on cooperation agreements with those countries?

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K-13A	Of those 4 research facilities that have already been built, have members of the NWMO gone over to take a look at them? How similar in design are they?
K-13A	How far along is each of them?
K-13A	I'm also curious if any of these 4 have run into problems or setbacks that have delayed the time they have set out?
K-13A	You also say it took about 15 years for them to arrive at a site?
K-13A	You say a draft siting will be issued in 2012?
K-7A	Have there been any potential problems or defects anywhere in the world with respect to storage? If we are aware of those problems, we can avoid them in Canada. There were problems and a leakage in Russia. We must take care of all the sites and management systems here, otherwise the same thing might happen at those sites here in Canada. If we know potential threats with respect to management, then we can avoid them.
K-15A	In respect to your technical research, I just noticed it says you have 2 cases, 2 safety cases. One for crystalline rock and one for sedimentary rock. Is it safe to say, I'm not sure if it seems too late in the process to be giving safety cases. You think you would have already done something to that effect.
K-14A	What is the NWMO's stance on the storage of spent fuel for other countries? For example, if the US determines that it's less expensive to ship it across the border? This makes me nervous and concerned.
K-14A	What is hydride cracking of used CANDU fuel bundles?
K-5A	I'm beginning my journey on understanding nuclear energy. Could you explain a little bit about the model for uranium dioxide dissolution rates in deep geological repositories?
K-2A	How susceptible are the interim storage sites to possible terrorist attacks? When you hear of sites in the modern age when you're talking about trying to attack another country, how susceptible are sites to bombings or any other attack

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	before these repositories are developed? Once this is developed, how secure is it then?
K-2A	What if an organization said they want to disrupt a country. A nice one would be these facilities. If they dropped a bomb on one of these interim storage facilities, a small nuclear bombI mean, how safe is this? That would cause significant disruption?
K-2A	Isn't that the kind of information that a community would want to know in the long run? If you are becoming more of a target than we would be otherwise?
K-2A	When you're doing these research cooperation agreements, these are relatively small players in the world. Progressive, but small. Why are the big players not at the table? India has roughly 1/6 <sup>th</sup> of the world's population, the Americans have the biggest economy, the Chinese are 1.5 billion of the world's population. Are they backwards? Why are we not watching? When I'm thinking of global climate change, the Kyoto Accord, all those players here have adopted Kyoto, but the big players haven't. I'm wondering if that's the same? Are they just backward?
K-16A	Establishing a corporate citizenship program, some of us didn't know what that meant.
K-17A	A high pressure welder told me that a nuclear reactor is here in Kingston at RMC. Is that true? What do they use it for?
K-6A	Do you have an opinion of the probability in the next 40 or 50 years that a use for spent nuclear fuel will be found?
K-17A	What about transmutation?
K-4A	The breaking down of the fuel has to happen before it's transported, I presume. Is there a breakdown of it, or what?
K-13A	How large will the facility actually be? How far down will it actually go? How much will actually be on the surface?
K-17A	Is there any chance of enlarging it once you've built this? You're not going to start a new one down the road?
K-12A	The process of choosing one site will take a minimum of 15 years and probably almost 30 years to pick one. Would you
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	have a second site, just in case there is a problem with a first one? I wasn't so much thinking as a need as much as a precaution.
K-6A	You mentioned earlier in your original study, citizens didn't want to have other country's waste. I am all in favour of importing. If we develop the expertise, have the technology, if we have the space, why not make some money off it?
K-6A	In terms of positive outlook towards nuclear energy, I was speaking with someone who said they would take a masters in nuclear energy because that's the future of electricity. Maybe the message is getting out there. We can't rely on fossil fuels, we don't have enough hydro, this is going to be it.
K-17A	What about northern income fund? They produce power and sell it back to the grid. They're going into renewable energy sources like sun and water. They're using gas fired turbines to produce electricity and supply heat and cooling from the energy that they're burning and producing. Why do we have to go all the way nuclear? It's nice short term but why not go renewable?
K-2A	There doesn't seem to have been much if any discussion of this process in the press. How come? Is it just too boring a topic to the average person at this point?
K-2A	When people hear it they think "here comes the nuclear man and what are the implications." But what is the organization doing?
K-13A	Would you ever consider putting a pamphlet in with your hydro bills? That way everyone would find out about it.
K-5A	In regards to the capability to review transportation options used to fuel long-term management facilities, can you just explain a little bit about that?
K-16A	I remember how we were talking about 2-3 shipments per month for 30 years, I found that very shocking. Will the transportation be on regular roadways? Trains?
K-17A	When you say reprocessing, what do you mean?
K-7A	Same as co-processing?
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K-12A You say that you're going to include reprocessing in the studies. Will that include new studies?

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# **APPENDICES**

- i. Navigator Personnel
- ii. Discussion Leader's Guide
- iii. Excerpts from Draft Implementation Plan

#### I. NAVIGATOR PERSONNEL

#### JAMES STEWART WATT, SENIOR DISCUSSION LEADER

Jaime Watt is Chair of Navigator, a Toronto-based research consulting firm that specializes in public opinion research, strategy and public policy development.

Prior to relocating to Toronto, he was, for ten years, Chair of Thomas Watt Advertising, a leading regional advertising agency and communications consulting firm based in London, Ontario.

A specialist in complex communications issues, Jaime has served clients in the corporate, professional services, not-for-profit and government sectors and has worked in every province in Canada, the United States, the United Kingdom, France, Central America, Korea and Kosovo.

He currently serves as Chair of Casey House, Canada's pioneer AIDS hospice, as well as Casey House Foundation and is a Vice President of the Albany Club. He is a director of the Dominion Institute, Woodrow Wilson Center's Canada Institute, TD Canada Trust's Private Giving Foundation, The Canadian Club of Toronto and The Clean Water Foundation. As well, he is a member of the President's Advisory Council for the Canadian Red Cross and is a member of the Executive Committee of Canadians for Equal Marriage. He was a founding Trustee and Co-chair of the Canadian Human Rights Trust and the Canadian Human Rights Campaign.

#### CHAD A. ROGERS, SUPPORTING DISCUSSION LEADER

Chad Rogers is a Consultant at Navigator providing strategic planning and public opinion research advice to government, corporate and not-for-profit clients.

He has recently returned to Canada after working abroad with the Washington, DC based National Democratic Institute as director of their programs in Kosovo and Armenia respectively. Chad oversaw multi-million dollar democracy and governance assistance programs directed at political parties, parliaments and civil society organizations in newly democratic nations. He conducted high-level training with the political leadership of Armenia, Bosnia Herzegovina, Iraq, Kyrgyzstan, Macedonia, Moldova and Serbia.

Having previously worked on Parliament Hill as both a legislative and communications

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assistant to Members of Parliament and Senators, he has an in-depth knowledge of Canada's Parliament and its committees, caucuses and procedures.

He is a board member of the Kosova Democratic Institute and is a member in good standing of the Public Affairs Association of Canada (PAAC) and the Market Research & Intelligence Association (MRIA). Chad has trained at the RIVA Qualitative Research Training Institute.

## **COURTNEY GLEN, PROJECT MANAGER**

Courtney Glen is a Consultant at Navigator assisting in public opinion research, strategic planning and public policy advice for government, corporate and not-for-profit clients.

Courtney most recently worked at the Fraser Institute as a junior policy analyst in health and pharmaceutical policy. In her time at the Institute, Courtney co-authored a major pharmaceutical policy paper and contributed to their monthly policy journal, *The Fraser Forum*.

Prior to that, Courtney worked as a researcher for the Scottish Labour Party in Edinburgh, Scotland, conducting an audit of the Parliament's Cross Party Group on International Development.

Courtney has a Masters in International and European Politics from the University of Edinburgh in Scotland and a Bachelor of Arts Honours degree in Political Science from the University of Guelph.

# JOSEPH LAVOIE, PANEL MANAGER (FRANCOPHONE)

Prior to joining Navigator, Joseph Lavoie worked at Citigroup Global Transaction Services where he improved communications within the Transfer Agency Systems department. Joseph achieved this objective via Web 2.0 technologies, which he previously leveraged in developing Santa's Journal, a successful viral marketing campaign that introduced Santa Claus to the world of blogging and podcasting.

Joseph has been active in numerous provincial and federal election campaigns; has provided political commentary for various websites and television/radio programs; and has served as the recruitment director for the Ontario Progressive Conservative Youth Association. In March 2007, Joseph was selected *Canada's Next Great Prime Minister* by Canadians as part of a scholarship program sponsored by Magna International, the Dominion Institute, and the Canada-US Fulbright Program. He currently serves on the Public Affairs/Marketing Team for the Toronto Symphony Volunteer Committee.

# STEPHEN LEONARD, PANEL MANAGER (ANGLOPHONE)

Prior to joining Navigator, Stephen attended the University of Guelph where he graduated with a Bachelor of Arts Honours degree in History. Throughout his

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undergraduate career, Stephen was an active member of the Canadian Forces Army Reserve in Toronto, which he left in June due to medical reasons as a Corporal.

Stephen is head Panel Manager and plays a vital role in the management and organization of the Citizen Panel project.

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## II. DISCUSSION LEADERS GUIDE

# PHASE THREE CITIZEN PANELS

# **DISCUSSION LEADER'S GUIDE**

### ADVANCE OF DISCUSSION

## **1. LOBBY EXERCISE**

- Review of Draft Implementation Plan
  - Panelists are provided with the NWMO's Draft Implementation Plan to review in advance of the Panel discussion.
  - Panelists will be asked to "scan" or read the document quickly, indicating they are not expected to have digested it in detail for the discussion

# PANEL DISCUSSION

## 1. OPENING OF PANEL SESSION (0:00 – 0:05)

- Welcome back
- Reminder: Confidentiality of session
- Explanation of NWMO disclosure of proceedings
- Re-introduction of Transcriber
- Re-introduction of Parking lot
- Re-introduction of Panel Managers

#### 2. OVERVIEW OF AGENDA FOR SESSION (0:05 – 0:10)

- Document Review
  - o Tonight we will review the Draft Implementation Plan
- Representative from NWMO
  - Guidance for questions

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- Speakers list, allowed a limited number of questions, time permitting.
- Briefing details
  - Has read your Parking Lot questions and a summary of your discussions to date
  - Has not viewed a complete session

3. RE-INTRODUCTIONS (0:10 – 0:15)

## 4. GENERAL DISCUSSION (0:15 – 0:20)

- I am wondering if you thought more about the NWMO after our last session
- Has anyone read, seen or heard anything about NWMO in the media since our last discussion?

## 5. DRAFT IMPLEMENTATION PLAN (0:20 – 1:35)

- When you arrived, you were given a copy of the NWMO's Draft Implementation Plan to review.
- This Implementation Plan lays out NWMO's thinking about how it will move ahead with its work. In your opinion, overall, do you think NWMO is moving in the right direction?
- In the Draft Implementation Plan, the NWMO provides a detailed overview of all 7 of their strategic objectives. I would like to concentrate on 4 objectives that Panels have previous rated as important and appropriate for the NWMO:
  - Building Relationships
  - Building Knowledge
  - Review, Adjust and Validate Plans
  - Collaborative Design and Initiation of a Siting Process

#### [For each of the above 4 Strategic Objectives]

#### [Give Panelists a few minutes to review each objective]

- Discuss the objective after review.
  - Do you think that plans are moving in the right direction?

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- When you reviewed the Draft Implementation Plan earlier, you will have seen that there were 7 strategic objectives in total. I'd like you to refer to the remaining 3 objectives in the Draft Implementation Plan:
  - Financial Surety
  - Governance Structure
  - Building an Implementing Organization

# [Give Panelists a few minutes to review the remaining 3 objectives in the Plan – all marked with same pink colour tags]

- Do any of the other strategic objectives now strike you as more important?
- Do you have any other comments about the Draft Implementation Plan?
- You are free to take the Draft Implementation Plan with you after this evening's session.

#### 6. NWMO REPRESENTATIVE Q & A (1:35 – 2:50)

• We have a lot of work to do here this evening, and have allocated just over an hour for these questions. If we do not finish in that time we will defer to our parking lot or we will look at bringing the NWMO representative back either in person or by teleconference.

#### [SHORT BIO INTRODUCTION OF PERSONNEL]

- The individual will not be watching you before or after this session, and they will not see a tape.
- Do you have any questions?
- Guidelines for questions

#### 7. WRAP-UP (2:55 – 3:00)



# III. EXCERPTS FROM THE DRAFT IMPLEMENTATION PLAN USED AS INDIVIDUAL WORK SHEETS

# **BUILDING RELATIONSHIPS**

# The NWMO will continue to build long-term relationships with interested Canadians and Aboriginal people and involve them in setting future direction.

In 2008 we will:

- Undertake a communication audit to support the design of our communication strategy;
- Rebuild the NWMO web site to enhance accessibility;
- Develop and implement a strategy to more effectively engage youth in the implementation of APM;
- Work with national, provincial and regional Aboriginal organizations to establish protocols to support Aboriginal involvement in engagement; and
- Establish a corporate citizenship program.

In the period 2008-2012 we will:

- Continue to identify speaking engagements, community-based presentations and media opportunities to develop awareness about NWMO activities;
- Develop communications materials about NWMO, APM, the project and other issues as required;
- Use many tools, including multi-party dialogues, citizen panels, topical workshops and web-based surveys, to invite input from Canadians and Aboriginal people in regional and community-based associations, interest groups, researchers, industry, governments and the general public;
- Broaden NWMO's relationships in the four nuclear provinces to include municipal, regional and provincial associations; Seek advice on engagement of Aboriginal people from the Elders' Forum and Niigani, the working group established by the NWMO Elders' Forum;
- Seek meetings with editorial boards and other media;
- Continue to provide regular updates to provincial and federal government ministers, departments and agencies;
- Maintain protocols with interested organizations, including Aboriginal Peoples; and
- Develop strategies to address knowledge-building as the needs are identified.



# **Building Knowledge - Technical and Social Research**

The NWMO will advance research to broaden its foundation of technical and social knowledge, bringing to bear the most advanced Canadian and international expertise to support implementation of Adaptive Phased Management.

#### **Technical Research**

During 2008-2012 we will:

- For the purpose of assessing potential candidate sites, develop the capability to conduct geoscientific aspects of site feasibility assessments, including sub-surface investigations and evaluations, in both crystalline and sedimentary settings;
- Maintain safety assessment system models and data suitable for supporting site feasibility studies;
- Continue to monitor developments in Canada and internationally related to regulatory aspects of used fuel management facilities;
- Prepare an annual report documenting alternative technologies for long-term management of used fuel including reprocessing, partitioning and transmutation; and
- Continue to participate in cooperation agreements with national radioactive waste management organizations around the world, specifically, SKB (Sweden), Posiva (Finland), Nagra (Switzerland) and ANDRA (France). These agreements provide the framework for sharing research information and participating in joint research and development programs in underground facilities such as the Äspö Hard Rock Laboratory in Sweden.

By the end of 2008 we will:

- In the area of geosciences, develop generic geo-scientific siting criteria; and
- In engineering, complete evaluation of container placement methods for the conceptual design of a deep geological repository in crystalline or sedimentary rock; and
- Appoint members to an Independent Technical Review Group and convene the inaugural meeting.
- By June 2009 we will develop the capability to review transportation options to a used fuel long-term management facility for various locations in the four nuclear provinces.

By the end of 2010 we will:

- Develop an improved model for uranium dioxide (UO2) dissolution rates under deep geological repository conditions;
- Evaluate conceptual designs for optional centralized underground storage of used fuel; and

By 2011 we will support safety assessment and licensing, through completion of two illustrative safety cases, one for a deep geological repository in crystalline rock and one in sedimentary rock.



By December 2011 we will maintain a program to provide assurance of integrity of used fuel while in storage, including completing evaluation of delayed hydride cracking of used CANDU fuel bundles under dry storage conditions.

#### **Social Research**

In the period 2008-2012 we will:

- Commission background papers to support the collaborative design of the siting process, drawing on experiences in Canada and abroad;
- Convene capacity-building workshops on selected implementation issues;
- Convene Citizen Panels in each of the four nuclear provinces;
- Convene workshops on Aboriginal Traditional Knowledge;
- Complete telephone surveys for input on siting design and other implementation issues;
- Conduct deliberative surveys on the web site;
- Collaborate with interested academics in Canada and internationally to bring the best knowledge and practices of social and community-based process to NWMO's work; and
- Apply the ethical and social framework developed for the study phase to guide Implementation and report regularly on activities against this framework.



# **Review, Adjust and Validate Plans**

The NWMO will continually review, adjust and validate plans against factors such as advances in technical learning, evolving societal expectations and values, and changes in energy and environmental policies.

In order to facilitate the process of dialogue and adaptation in response to the changes in projected fuel quantities and types, we will:

- Publish on an annual basis information on current and future potential inventories of used fuel volumes and types;
- Seek input from Canadians on how NWMO's plans should be amended to accommodate current and projected inventories; and
- Adapt and develop plans on how to go forward against the framework of the Strategic Objectives and with the guidance of our many advisors including ethicists. Specifically, we will consider the implications of used fuel from nuclear new build in our engagement program, in our technical and social research programs, in our financing formula, on the size and structure of the organization and governance, and on the design of a process for site selection.

We are committed to reporting on developments in technology, societal expectations and energy and environmental policy on an ongoing basis through many communication routes, including:

- Posting research papers and the results of engagement activities on the NWMO web site;
- NWMO Triennial Report to Minister of Natural Resources and public;
- NWMO Annual Report to Minister of Natural Resources and the public; and
- Annual update to the NWMO five-year implementation plan.



# **Collaborative Design and Initiation of a Siting Process**

The NWMO will proceed with the collaborative design of a siting process, supported by a public engagement program, and subsequent initiation of a siting process.

In 2008 we will:

- Prepare a discussion document to initiate and facilitate conversations with Canadians on the design of the process for selecting a site. The document will, among other things, present an initial framework of objectives and principles and key issues that people will likely wish to consider; and
- Prepare information materials, such as fact sheets, to support a public dialogue on the design of a process for site selection.

In 2008-2012, subject to confirmation of readiness to proceed with each step, we will:

- Engage interested individuals and organizations in a dialogue on the design of a process for selecting a site to invite diverse perspectives;
- Draft a siting process proposal, including preliminary criteria, based on input from the previous round of dialogue;
- Test and validate the draft siting process proposal using a public engagement process;
- Develop supporting information and an education and awareness program; and
- Initiate the process for selecting a site subject to validation of the siting process proposal and readiness of the supporting engagement and information program.



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