NWMO Citizen Panels Report, Phase IV: Panel Eight

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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 Toronto, Ontario

NUCLEAR WASTE MANAGEMENT ORGANIZATION TORONTO PHASE FOUR CITIZEN PANEL SEPTEMBER 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 Four of the Citizen Panel project occurred in June 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

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I. NWMO CITIZEN PANEL BACKGROUND

a. Citizen Panel

The Toronto, Ontario Phase Four Citizen Panel was held on June 17, 2008 at a neutral third party facility in Toronto.

The Panel was held over three hours from 6PM – 9PM with 15 Toronto Panelists in attendance and 1 Kingston Panelist, who was unable to make the Phase Four Kingston Citizen Panel but wished to remain involved. 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 documents 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 Toronto Panelists by Panelist identifier code, as well as the Kingston Panelist present at the Toronto Panel discussion:

Panelist: T-1A	City: Toronto Age: 25-34 Gender: Male Occupation: Student	Panelist: T-3A	City: Toronto Age: 55-64 Gender: Male Occupation: Self-employed, semi-retired
Panelist: T-6A	City: Toronto Age: 25-34 Gender: Female Occupation: Employed, accountant	Panelist: T-7A	City: Toronto Age: 65+ Gender: Male Occupation: Employed, watch maker
Panelist: T-8A	City: Toronto Age: 45-54 Gender: Male Occupation: Employed, translator	Panelist: T-9A	City: Toronto Age: 55-64 Gender: Female Occupation: Retired
Panelist: T-10A	City: Toronto Age: 45-54 Gender: Female Occupation: Employed, business analyst	Panelist: T-11A	City: Toronto Age: 55-64 Gender: Female Occupation: Employed, project manager
Panelist: T-13A	City: Toronto Age: 35-44 Gender: Male Occupation: Unemployed	Panelist: T-14A	City: Toronto Age: 25-34 Gender: Female Occupation: Employed part- time, admin assistant
Panelist: T-15A	City: Toronto Age: 25-34 Gender: Female Occupation: Unemployed	Panelist: T-16A	City: Toronto Age: 45-54 Gender: Female Occupation: Employed, financial consultant
Panelist: T-18A	City: Toronto Age: 45-54 Gender: Female Occupation: Self- employed, psychotherapist	Panelist: T-19A	City: Toronto Age: 35-44 Gender: Male Occupation: Employed, engineer
Panelist: K-5A	City: Kingston Age: 25-34 Gender: Female Occupation: Employed, kindergarten teacher		

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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 discussions 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 those individuals who 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. 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 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

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PHASE IV CITIZEN PANEL REPORT TORONTO, ONTARIO SEPTEMBER 2008 PAGE 7 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.

Phase Four of the NWMO Citizen Panels took place in June 2008. The Panel discussions primarily gathered input and explored Panelist reaction to the design of a process for selecting a site, and used five questions as a foundation for research:

- 1. Does the framework of objectives, ethical principles and requirements provide a sound foundation for designing the process for selecting a site?
- 2. How can we ensure that the process for selecting a site is fair?
- 3. From what models and experience should we draw in designing the process?
- 4. Who should be involved in the process for selecting a site, and what should be their role?
- 5. What information and tools do you think would facilitate your participation?

These five questions also served as the organizing principle for the discussion leader's guide. A general outline of discussion objectives, as well as materials intended to guide the work of the Panel, were prepared in advance of the Citizen Panel. Reproductions of discussion materials shown to the Panel can be found at the end of this report in Appendices iii, iv, and v.

This Panel Report is, to the best of Navigator's abilities, a faithful rendering of the discussion held in Toronto and stands alone as a record of the Citizen Panel discussion on June 17, 2008. A larger Aggregate Report on this phase of Panel discussions, including the Panels in Kingston, Scarborough, Sault Ste. Marie, Saskatoon, Regina, Saint John, and Montreal has also been submitted to the NWMO.



II. PANELIST DIALOGUE

a. Overview

The Phase Four Citizen Panel discussion of June 17, 2008 took place in Toronto, Ontario. Unlike Phase Three of this project, Panelists were not given any material to review in advance. Instead, they were asked a series of five discussion questions throughout their three-hour discussion using three "backgrounder" sheets for reference. The five questions were listed in section I of this document.

During discussion of the first question, a Toronto Panelist asked how they could know for sure that the NWMO's list of siting considerations was complete and actionable:

How do we guarantee that they covered everything they say they do? They can claim that they've done all this, but how can we be sure?

The Panelist went on to state that they were not yet comfortable that this was the case. The Discussion Leader attempted to determine what would make the Panelist feel more confident. They replied that, in their view, a [presumably neutral] third party would lend authority to the list:

> Another organization, maybe, someone to make sure they really work in the way that they say they will.

Another Panelist used this portion of the conversation to raise an entirely different point, dealing with the potential utility of used nuclear fuel for reprocessing:

...Let's not forget about the fact that there have been discussions about what we bury today is spent fuel, quite possibly in the very near future it could be a resource.

The idea of reprocessing as an avenue to explore was mentioned by Panelists in other locations and in previous phases of this project. Many expected the technology to improve in the near future.

Toronto Panelists, as in all other Phase Four locations, were quick to raise transportation as a key consideration for siting:

More, also, about transportation to and from the site, I think that might need to be in there...

This Toronto Panelist's comments differed from many of their fellow Panelists because they proceeded to remind the NWMO that transportation ought not to be forgotten for a second reason: as a citizen, they should be able to find out how this dangerous material is handled. The Panelist explained:

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... It's important to hear that groups get to voice their opinion on transport, but I want to know who does the transport and how it's done to ensure safety.

Another Panelist weighed the benefits that could come to a potential host community in the form of jobs and infrastructure versus the benefits that transport route communities might see:

You know in a way, the final destination community does stand to benefit a great deal, I think they will volunteer for this, but I predict the sticking point will be the communities through which the rods are transported. They don't stand to benefit from this they will only see the risk.

Discussing the second question led to a conversation about the ability for communities in economic need to objectively judge their own financial best interest. This Panelist expressed their worry:

I guess a lot of the concern I have is putting the focus on ethics into action, it's not easy, the reality is we need a solution and a site and I don't think communities are the best judges of where it should go. When you think about it contributing to an economy... people will often welcome things that aren't really in the best interest of their community because they just see the jobs. Is this really informed consent?

When the Panelist was asked how they could know if the NWMO was being genuine, they expressed their personal scepticism based on the impact of resource projects in other communities:

> I don't think we can. I hope they also take a historical approach and look at the long term effect on communities, look at the tar sands for example. These developments are not always good for communities.

Moving toward a similar point was this Toronto Panelist, who expressed the need for community consent to be informed. While the particular example may be slightly optimistic, this Panelist suggested that European society is generally more well-informed about the topics of nuclear power and waste:

In Europe they've created a culture of understanding. The population is educated; they believe that this is the thing to do. Ask anyone; ask a teenager - they're informed and comfortable with what's happening.

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PHASE IV CITIZEN PANEL Report Toronto, Ontario September 2008 | page 10 When discussing the third question about external input and expertise, Toronto Panelists raised a number of excellent points. This Panelist named two powerful interest groups in Canada that have "moved the goalposts" of debate around impaired driving and smoking:

If you think about the NWMO needing to change the culture around nuclear, look to the example set by the Lung Association or M.A.D.D. They changed the culture around drinking and driving and smoking completely in a relatively short period of time. Maybe you can get examples from there.

Another Panelist stressed that invaluable input can be gleaned from establishing working groups that utilize citizen input:

I've been a part of a number of working groups, they give you a real sense of everyone's opinions, the community and everyone who is involved. It's a consensus building process not a voting process, very much like our panel except the goal is to have something in place at the end. We raise the issues and work through them until everyone is satisfied.

When it came to engaging citizens, a Toronto Panelist thought that information should be presented in a neutral, scholarly fashion. The Panelist figured that if anyone from the NWMO were to take that role, it could be perceived as inviting bias:

There are two ways to get them the information... one is to get someone from the company then we'll be sceptical because they're on the payroll, if it's someone from the government it would be the same thing. But if you get a professor who is unbiased and can present both sides, then that might work.

Another Panelist added on to the previous comment with a more novel suggestion of their own – that the NWMO could learn from the creators of a clever television show that manages to engage children in learning about science:

When it comes to education, what about a show like Bill Nye, a show like that?

Overall, Toronto Panelists had a well-informed conversation driven by their aboveaverage social awareness and knowledge of citizen processes.



Panel Notes

i. Disclaimer

The attached are contemporaneous notes of the general Panel discussion, as well as the discussion on the three backgrounder documents provided by the NWMO. 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 Amy Loney, a Navigator research professional.

General Discussion

Discussion Leader:	I'm wondering if anyone has spoken to people since our last meeting.
T-14A:	I think people are more and more resigned to the fact that nuclear is the way to go and there's no turning back from it. There are no more protests anymore, it seems.
Discussion Leader:	So what is the impact of that in terms of what we've been talking about?
T-14A:	I think that means that nuclear is seen in a more positive light. People are more receptive to the idea and, if nuclear energy is more popular, then nuclear waste will be more of an issue and matter more to people than it did before. People will be thinking about it more.
T-3A:	I tend to agree, but there's always a certain faction of people who want to know why we have it at all. They want to more about the actual dialogue on why we have it at all, not just how we dispose of it. I think, in general, society is starting to think more about it.
Discussion Leader:	So has anyone talked specifically about what we've been doing here?
T-7A:	Some of those nuclear engineers are taking a second look at breeder reactors and that would revolutionize both the price of the fuel and the

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	method of disposal. It would be a lot easier to dispose of. They mentioned that they're starting to take a second look at it, in terms of disposal.
T-1A:	People were talking about various alternatives given the recent fuel crisis. People had different ideas about what ways were safer, about the various alternatives. Then we were talking about nuclear versus other alternatives and people had different ideas about what would be safer.
Discussion Leader:	One conversation that we've had involves the process of finding a site. The NWMO will embark on a process to find a site but, tonight, we're not going to talk about where that site will be, but rather the process by which they will go about finding the site. We're going to talk about what a fair and ethical process would include. We have 2 handouts to look through and the type of input we want from these is not like in the past where we've asked how it comes across as a communications piece. These won't be for outside communications. They have been made specifically for us.
Discussion Leader:	So the NWMO is keen to make sure the process that's designed to find a site meets the highest professional and ethical standards for Canadians. Willing, informed, responsible for the waste in the first place. I'm just wondering when you read that does it sound like these are the kind of things that are pointing them in the right direct or are these things going kind of wrong?
T-18A:	I like the clarity and the directness. But I'm also concerned about how the information will be communicated and shared and how to work collaboratively throughout the process. One of the things that comes to mind is the notion that we don't all have equal education and speak the same language. I think that's something that really has to be considered for communication and education.
T-3A:	How information will be communicated and shared. If there's going to be political masters, whatever stripe, how do we keep them from propagandizing this? If there's going to be fair information, then

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	there needs to be some type of civilian oversight board.
Discussion Leader:	What about the process of selecting the site itself?
T-11A:	I think it's very simple; it's laid out very clearly. We have even more information than before in terms of how they actually layout the depth of the site and what have you. I think it's very clear.
T-8A:	They don't say anything about the process of selecting the site.
Discussion Leader:	That's why we're here to give them help with designing the site selection process, what to consider when they design the process.
T-10A:	How do we guarantee that they covered everything they say they do? They can claim that they've done all this, but how can we be sure?
Discussion Leader:	What would make you feel sure they had done it?
T-10A:	I'm not very comfortable.
Discussion Leader:	What would make you comfortable?
T-10A:	Another organization, maybe, someone to make sure they really work in the way that they say they will.
T-7A:	I think these two papers reflect what we've done here. We did discuss the various modes of communication between NWMO and the public. It is covering all the important features. There's one thing I want mentioned and that is that there's a big focus on being politically correct. Also there's just one location for the whole country? Will it be a central point for the whole country?
Discussion Leader:	Yes, one location.
T-7A:	I noticed that there is a strange focus on having contact with Aboriginal Peoples. Is it going to be located on their land?
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Discussion Leader:	I usually don't do this but I really want people on the right track, so let me just say that there is no hint or indication that this is going to go on Native land.
T-18A:	They don't necessarily consider themselves to be Canadians; they are the original people of the land. It's like a different nation. There's a respect for that, given that it's going to be outside of urban areas, there needs to be a discussion there.
Discussion Leader:	They also have some additional rights, treaty and otherwise, that need to be taken into consideration and that's why they are involved in the way that they are. It's about being respectful of rights.
T-8A:	Does that mean that their rights are more important than other people?
Discussion Leader:	That's not what we're here to discuss.
T-14A:	The best hint is that it's in "stable rock" so that means it's in the Canadian Shield.
Discussion Leader:	As our technical representative stated there's more than just the Canadian Shield.
T-14A:	That's what I want to know, what parts of Canada would be eligible if there's more stable rock than what's there? I want to know where it could go.
T-15A:	He also said that it's not just in certain spots
	because we talked a lot about the Bruce Peninsula. That type of rock is in a wide variety of Canada. It's everywhere. He said they also need to look at climate and depth.
T-14A:	because we talked a lot about the Bruce Peninsula. That type of rock is in a wide variety of Canada. It's everywhere. He said they also need to look at

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T-14A:	Okay, that's true; we don't know the ultimate destiny of spent fuel.
T-7A:	It might be a financial resource for Canada to take others' waste.
T-14A:	Let's take care of our own before we take anyone else's. I don't want anyone else's.
Discussion Leader:	That is already in the Canadian policy. We won't take any other country's waste. So what I really want to know is if these are the kinds of things the organization needs to look at? Is the emphasis in the right places?
K-5A:	I like the openness and the objectives. It mentions benefits and for me, if this was coming to my community, I would want to know more about the benefits. If I lived in an impoverished community, I would want to know about that. More also about transportation to and from the site, I think that might need to be in there. When they talk about site selection, is there any emphasis on educating the future generations at this point to be involved in the site selection?
Discussion Leader:	So under characteristics when it talks about involving all communities affected by it, even through transport, is that enough?
T-9A:	Would people be allowed to vote about this issue?
K-5A:	I'd like to see the safety plan in place, some type of scientific information in there. People get all worked up about their concerns but I want to see the science.
Discussion Leader:	Does this approach take that into account or no?
K-5A:	No, I feel that it's missing. It's important for groups to be heard, but what I'm looking for is information about who is going to do the transport, for example will the trucking be contracted out? It's important to hear that groups get to voice their opinion on transport, but I want to know who does the transport and how it's done to ensure safety.
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T-16A:	You know, in a way, the final destination community does stand to benefit a great deal. I think they will volunteer for this, but I predict the sticking point will be the communities through which the rods are transported. They don't stand to benefit from this they will only see the risk.
Discussion Leader:	So those in the transportation corridors?
T-16A:	Yep.
Discussion Leader:	What does taking that into consideration look like?
T-16A:	I think there has to be some sort of financial bonus for people on the transport route, like a fee for the material passing through that community.
T-9A:	And you think people would take the risk for a few bucks even though the town would get it all?
T-15A:	Well the Aboriginal Peoples do in Alberta. They get oil money.
T-16A:	The community would have to evaluate whether it would compensate for the risk.
T-16A:	Yes, maybe they would build an arena with the money, I don't know. I'm just saying the sticking point will be the transit communities.
Discussion Leader:	Do people imagine different communities would make quite different decisions?
T-16A:	Sure, but as I said, I predict there would be volunteers.
T-14A:	I agree.
T-1A:	When you vote, people have different votes. You have to make sure everything is safe, that people are not trying to cause problems or stage protests, especially through the transportation corridors. One major thing they should emphasize on here is that the planned storage is a big improvement over the



current situation.

T-9A:	Would the community be allowed to vote? If it's a small community then it's much more likely that you can educate them and get them to agree.
Discussion Leader:	A lot of people bring up the idea of a referendum on the issue. Some people say those elected to decide should do so while other people say that it is important enough that people should get to vote. So how should communities decide? What if 40 locations agreed to host this place? Then how do we decide where it goes?
T-9A:	Well then you go by cost.
Discussion Leader:	Is that how the decision should be made?
T-9A:	Yes, you go by cost, or maybe by location. For example, do you have to drill down less than in another location? Then the most cost effective location should be chosen.
T-19A:	There are a couple things in here that tweaked my interest. One bullet said that everyone is given the opportunity to have their views heard. So it's not just racial minorities or ethnic minorities, but it should be financial minorities as well. So people from the wrong side of the tracks should have a mechanism in place to have a voice. You should protect financial minorities from having the site dumped on their land.
T-18A:	Who is going to provide them with the ability to present their case effectively?
Group agrees that it would be by pr	roviding lawyers as spokespeople.
T-18A:	Right, but who is giving them the means to make their case known?
Discussion Leader:	The NWMO would provide funding. There's an obligation to make sure the other side is heard.
T-18A:	I guess a lot of the concern I have is putting the focus on ethics into action. It's not easy. The reality is we need a solution and a site and I don't think
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	communities are the best judges of where it should go. When you think about it contributing to an economy, people will often welcome things that aren't really in the best interest of their community because they just see the jobs. Is this really informed consent?
Discussion Leader:	How would you know they were behaving in a way that honoured the kinds of things they were talking about here?
T-18A:	I don't think we can. I hope they also take a historical approach and look at the long term effect on communities, look at the tar sands for example. These developments are not always good for communities.
Discussion Leader:	We just had an example of two communities vying to be the site of Ontario's next nuclear reactor. Now many communities would have objected to this. So we can't tell communities what to want, but we need to know what the organization has to do for us so we know they have their act together.
T-16A:	I would imagine they could convene a town hall for information and opinions, a panel of scientific people that you could fire questions at.
T-15A:	But how long have we been here for and we still have questions, you'd have to do that for quite sometime.
T-16A:	They should set it up so they have the other side voiced, too.
T-15A:	I think it would take a year.
T-9A:	Not a year.
T-15A:	How long have we been doing this?
T-16A:	To be fair they should grant intervener status to people on the other side, so people can hear the other side, too.



T-15A:	You need to make the information into a movie, so people know exactly what NWMO is about. Make it interesting and make it idiot proof, especially for teens and young adults.
T-6A:	What about now? Who are they answering to now? I mean its sitting somewhere unsafe now.
T-11A:	It's licensed.
T-3A:	There has to be some sort of security guards keeping this stuff safe already, keeping an eye on this stuff now.
T-9A:	Communities who already have nuclear power stations are more receptive to this because they've been living with it and nothing has happened to them.
T-6A:	No, I think they're just uninformed.
Loud agreement.	
T-16A:	There are people in Pickering I know that don't know that the rods are being stored there and that wasn't the plan. The building was never supposed to be a storage site. No one agreed to that.
Discussion Leader:	That's one of the reasons in the study that they decided to take these steps.
T-10A:	How do they measure or define a vote?
Discussion Leader:	How should they?
T-10A:	I think it should be by majority rules.
Agreement.	
T-14A:	Majority rules, definitely.
T-3A:	But it can't be 50% plus 1.
Discussion Leader:	Well, we were prepared to break up our country with that.

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T-3A:	You may have been but I wasn't!
T-3A:	It should be 75%.
T-9A:	Yes, it has to be more than half because then half of the people are dissatisfied.
T-3A:	75% of the town. So if you get 7,500 of 10,000 people in a small northern town, if that many people agree, then it's a go.
T-10A:	Some people don't express themselves.
T-9A:	You won't get that.
T-16A:	It's tricky to transport it through these other communities. It's a hell of a problem.
T-11A:	Look at Sweden, they transport it by ship. I would think you'd have to ask everyone if they agree to have it transported by ship. I wouldn't want it transported like that if I lived anywhere in Sweden. I'd want to have a say if they were going to pollute the waters.
T-9A:	It's bombproof.
K-5A:	In Europe they've created a culture of
	understanding. The population is educated; they believe that this is the thing to do. Ask anyone; ask a teenager. They're informed and comfortable with what's happening.
Discussion Leader:	understanding. The population is educated; they believe that this is the thing to do. Ask anyone; ask a teenager. They're informed and comfortable with
	understanding. The population is educated; they believe that this is the thing to do. Ask anyone; ask a teenager. They're informed and comfortable with what's happening.So, I don't want to put words into your mouth here but would you take that one step further and say that
Discussion Leader:	understanding. The population is educated; they believe that this is the thing to do. Ask anyone; ask a teenager. They're informed and comfortable with what's happening.So, I don't want to put words into your mouth here but would you take that one step further and say that they've accepted it?
Discussion Leader: K-5A:	understanding. The population is educated; they believe that this is the thing to do. Ask anyone; ask a teenager. They're informed and comfortable with what's happening.So, I don't want to put words into your mouth here but would you take that one step further and say that they've accepted it?They're informed.

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T-1A:	I think we need to make sure everyone is comfortable.
T-7A:	Never happens, you just need the majority to agree.
T-1A:	That should be part of the criteria for picking a site. Maybe you find a site where 90% of the people are educated and comfortable with it.
T-11A:	We should look at Sweden and see what they based theirs on. They had a number of places vying for it, so how did they decide?
T-18A:	I don't think we can compare ourselves to Europe. We have a very different history, a very different culture. Especially if it goes in the north, we also have aboriginal concerns to contend with. We have a much different history than European nations, we also have a history of creating a great deal more waste than them.
T-19A:	I think you have to start educating the next generation right now. There will initially be that taboo where people don't want it and then, after that first hurdle, people grow up with it and accept it.
Discussion Leader:	Sometimes one of the ways to look at something is from another place or time. I'm interested to know if there's anything the NWMO can learn from other organizations that have had to make similar decisions. One of the things I'd be interested to know is if you can think of a time when another organization faced similar challenges.
T-16A:	Dumps.
T-15A:	Group homes.
T-14A:	Safe site injections.
Discussion Leader:	What can they learn? What should they stay away from?
T-15A:	When I grew up in the 1980s, I lived in a rough neighbourhood and they put a halfway house in the backyard of an elementary school. My father asked
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	if they could ensure that there wouldn't be any pedophiles, they said no. Everyone in the community objected, but it got built anyways and it's still there. As a result, the safety of our kids is still in question.
Discussion Leader:	So the lesson to the NWMO would be what?
T-15A:	If people don't want it there then go someplace else.
Discussion Leader:	Right, well we've said they won't build it if it's not welcome.
T-15A:	It's weird because I was reading this and we were talking about more than one town wanting the site to be put in their community and I could see the Bruce Peninsula and Sudbury fighting over it. We've never talked about this before; we always assumed no one would take it. It never crossed my mind before, did anyone else think about this?
T-3A:	They said there would be a number of factors that would determine who gets it.
T-14A:	I've said this before I would take the word "fair" right out. The legal definition of fairness isn't what people think it represents in this context. They need to replace it with equitable or some other word.
T-9A:	Most of these jobs aren't going to be filled by local residents. They'll contract it out to someone with the highly skilled workers.
T-19A:	But that money will be spent in the community because they'll have to live and eat there.
T-9A:	True.
T-13A:	This is all good information but if it were going in my community, I would want more detail then we're given here. I mean, most people don't even know who you guys are.
K-5A: Nuclear Waste Management Organization	If you think about the NWMO needing to change the culture around nuclear, look to the example set by the Lung Association or M.A.D.D. They changed the culture around drinking and driving PHASE IV CITIZEN PANEL REPORT TORONTO, ONTARIO SEPTEMBER 2008 PAGE 23
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	and smoking completely in a relatively short period of time. Maybe you can get examples from there.
Discussion Leader:	So that's an example of how we changed the culture in a short period of time.
K-5A:	Yes.
T-18A:	I've been a part of a number of working groups, they give you a real sense of everyone's opinions, the community and everyone who is involved. It's a consensus-building process, not a voting process. It's very much like our Panel, except the goal is to have something in place at the end. We raise the issues and work through them until everyone is satisfied.
T-16A:	You have to really guard against corruption though. You can visualize a situation where a community is ambivalent about hosting the site but someone who stands to gain more.
T-19A:	That's what I like about the financial backing. No matter how disadvantaged people are, they will be somewhat protected from being taken advantage of. If we're talking about good and bad ways to go into a community, let's look at the power station at the waterfront. They didn't consult with the community and everyone went nuts thinking it was going to be running 24 hours a day. If anyone from the company had told them, or if they had gotten the literature on it themselves, they would have known that it was just a top-up station, which means that it only runs during peak times. On the other hand, there's another company who bought up property at the bottom of the street, Wal-Mart, and they went into the community to try to ease people's worries and they're still being beaten up. It's easier to take if there's a dialogue about things. It hasn't really worked for Wal-Mart but it makes it an easier pill to swallow.
Discussion Leader:	In Sault Ste Marie, someone mentioned that when the whole community benefits from something like this, it's called a benefit, but if just a few people

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benefit, it's called a bribe. They said that the real

	trick to guard against corruption is to make it a public benefit.
T-18A:	I've had experience in that as well. In the last building boom, there was a whole issue around a developer and a public school and turning the Sears building into public housing and turning the school into a private building to make money. It all ended up falling through, but as long as there's as much transparency as possible, then its okay, I think.
T-1A:	What if in the future we discover that our methods don't work? Is there a contingency plan if the host community gets sick from something we weren't aware of at this time? Is there a plan to upgrade the facility? Would we have to abandon the facility area? My guess would be that health needs would be taken in as part of it.
T-3A:	Its part of the managerial flexibility.
Discussion Leader:	You think that's how it would work?
T-13A:	There has to be a plan B or C. If something goes wrong, there has to be a backup. It's all about safety.
T-7A:	I think there is something missing here, a major means of communicating with the people. Not just a website. We need something where people can post questions because this is probably the limit of our involvement with this, unless something goes wrong, which is highly unlikely. Other people have had even less. This is the most important thing that's not mentioned here, how they will communicate with everyone else.
Discussion Leader:	Is this list right though?
T-7A:	Absolutely, it has all the necessary features.
Discussion Leader:	Any more thoughts?
T-10A:	Things get built places for political reasons. We need hard measurements to make the decision so we know where we should build.

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T-6A:	If they pick the potential sites, they really need to educate the people there. You need to educate people before they just react and pounce. We also need to educate the young.
T-15A:	The young will educate their parents and grandparents.
Discussion Leader:	Let's talk about that. What's the difference between educating youth and getting them involved and interested?
T-1A:	Most of the learning you can do with things that are "boring" is through games. Kids love games. Later they'll be repeating the information without even noticing.
T-6A:	Just bring it to the classroom. Just make it an auditorium presentation.
T-9A:	A respected member of the community might be accepted better.
T-11A:	Brainwashing!
T-15A:	I was one of the early years of people being educated about gay and lesbian issues in school. Adults didn't want it there. But I remember educating my aunts and grandparents about it. That was brought into the classroom. I think, as a result, my generation is more accepting. I think it starts in the classroom, that way it's there and they can't get away from it, you have their attention. In video games, you can ignore it.
Discussion Leader:	How do you guard against the worry that they would be "brainwashed"?
T-14A:	Facts!
T-11A:	You have to tell the parents make sure they're ok with it.
T-19A:	There are 2 ways to get them the information. One is to get someone from the company, but then we'll be sceptical because they're on the payroll. If it's someone from the government, it would be the
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	same thing. But if you get a professor who is unbiased and can present both sides, then that might work.
T-14A:	When it comes to education, what about a show like Bill Nye, a show like that?
T-3A:	Yes, like the nuts and bolts of it.
T-14A:	People in grade five and up kind of thing.
T-18A:	I agree with not wanting it to be brainwashing, people need to learn in a holistic way. If you can tie conservation in, a "what we do with what we have" plus the environmental part. Add it to the curriculum. It's not the job of us to come up with it, but to look at the whole picture.
K-5A:	It's complicated; I have to think on how I feel about that a little bit. In order to do it in a holistic way, I know they cover that a bit with energy in the older grades. They make solar panels as a part of their energy unit.
T-6A:	I don't mean that we should make a whole curriculum around it, but just a presentation and usually parents are invited. They're just informing the kids of this stuff and then pamphlets go home and parents also see what we need to be dealing with.
T-1A:	One way to avoid brainwashing is to cover both sides, rather than just giving one side.
T-7A:	What two sides?
T-1A:	The creation of it as well as the waste management.
Discussion Leader:	We're not talking about the creation.
T-1A:	Okay well the storage methods that weren't chosen.
T-19A:	You can't cover it just once with kids; you have to repeat it in each year.
T-15A:	Okay, then let's start them in kindergarten.

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Discussion Leader:	How do you balance the need to get moving with the longer-term strategies and tactics?
T-11A:	It's a luxury that it takes so long for the process; that's the perfect opportunity to work on the other areas, the information aspect.
T-9A:	Would this education be aimed at everyone? Would it be in urban areas or just those places likely to host the site? I think you want to get moving on the smaller communities.
Discussion Leader:	I think we've beaten the education horse to death
T-7A:	Maybe it's to our benefit if we visualize the process. Specialists, who will deal with all these problems, and then we're given a scheme, and then we get to voice our opinion. Majority must rule everything. I'll give you an example. Years ago there were a dozen meetings with the TTC about Spadina station. Everyone voted for it' democracy has a tendency towards chaos. Nothing will convince everyone to vote the same way. We need the system of organization. You have an organization like the NWMO with a whole bunch of experts and these people will decide what is the best thing, in what location.



APPENDICES

- i. Navigator Personnel
- ii. Discussion Leader's Guide
- iii. Backgrounder 1: Selecting a Site
- iv. Backgrounder 2: Framing the Discussion
- v. Backgrounder 3: Learning from Others

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.

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

LANNY A. CARDOW, PROJECT MANAGER

Lanny Cardow is a consultant performing research-based strategic communications work on projects for Navigator's corporate and not-for-profit clients.

Lanny most recently served in the Office of the Prime Minister as the Executive Assistant to the PM's Chief of Staff, having previously worked in the Office of the Leader of the Opposition in various capacities, including Manager of Outreach (Operations).

Lanny graduated with a master's degree from The George Washington University's Graduate School of Political Management in 2006, specializing in both Campaign Management and Polling course concentrations.

While completing his degree, Lanny performed research at GWU's Institute for Politics, Democracy and the Internet, contributing to numerous studies and events that explored the crossroads of online technology and advanced campaigning techniques.

Lanny earned his bachelor's degree in Political Studies at Queen's University in 2002.

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.

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AMY LONEY, PANEL MANAGER (ANGLOPHONE)

Prior to joining Navigator, Amy attended Queen's University where she graduated with a Bachelor of Arts Honours degree in Political Science. Amy has also completed intensive Explore French Language Bursary Programs at Université de Montréal and Université du Québec à Trois-Rivières respectively.

Amy 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 FOUR CITIZEN PANELS

DISCUSSION LEADER'S GUIDE

1. OPENING OF PANEL SESSION (0:00 - 0:03)

- Welcome back
- Explanation of NWMO disclosure of proceedings
- Re-introduction of Transcriber
- Re-introduction of Parking lot
- Re-introduction of Panel Managers

2. PRE-DISCUSSION EXERCISE (0:03-0:15)

'Creating an Information Package' Exercise

- Brainstorming about what an information package should look like.
- Will revisit suggestions later in the Panel discussion.

3. OVERVIEW OF AGENDA FOR SESSION (0:15 - 0:17)

- 4. **RE-INTRODUCTIONS** (0:17 0:21)
- 5. GENERAL DISCUSSION (0:21 0:25)
 - Read, seen or heard anything about NWMO in the media since our last discussion?
- 6. BROAD DISCUSSION OF SITING PROCESS (0:25 0:30)

7. DISCUSSION OF BACKGROUNDERS 1 AND 2: BACKGROUND – 'SELECTING A SITE' AND 'FRAMING THE DISCUSSION' (0:30 – 1:10)

- Q1: Does the framework of objectives, ethical principles and requirements provide a sound foundation for designing the process for selecting a site?
 - Do you think this ethical framework will be good for the siting process?
 - Do you feel this framework covers all of the important aspects?
 - Do you feel that anything is missing?

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- Q2: How can we ensure that the process for selecting a site is fair?
 - How, in your view, could fairness be best assured in and by the process for selecting a site?
 - How should the process for selecting a site take into account the needs of both this generation and future generations so that costs, benefits, risks and responsibilities are distributed fairly across generations?
 - Are there other geographical considerations which should be taken into account for the process to be fair?
 - The NWMO has committed to only choosing a site in a location that is informed and willing. How might the design of the process ensure that this happens?

8. DISCUSSION OF BACKGROUNDER 3: 'LEARNING FROM OTHERS' (1:10 – 1:40)

- Q3: From what models and experience should the NWMO draw in designing a siting process?
 - From your perspective, what experience and models do you think would be particularly relevant to consider and draw from in designing the process for selecting a site?
 - What other decisions/processes might we learn from or are comparable? Are there events which have happened in the past which you are aware of which we should look back on for lessons?

• Q4: Who should be involved in the process for selecting a site, and what should be their role?

- What are your views on who should be involved in selecting a site? What would you count on them to bring to the process?
- Would you expect each of these individuals and groups to play a different role in selecting a site, or have different responsibilities in the process? What role or responsibilities?

9. DISCUSSION OF 'COMMUNICATIONS' GROUP WORK (1:40 – 2:10)

- Q5: What information and tools do you think would facilitate your participation?
 - What information and tools do you think would help Canadians participate constructively in the siting process?
 - What about reporting: things like documents and publications?

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- Do any of the questions raised today strike you as more important than the others? Less important?
- Do you have any suggestions for what remains to be considered?

10. REVIEW "PROJECT DESCRIPTION" AND "WHO WE ARE" AND OTHER DOCUMENTS (2:10 – 2:50)

- Do you think something like this would help explain the project to larger audiences?
- If you didn't know what you now know about the NWMO's project, would a document like this answer your questions, or perhaps help you ask some better ones?
- What suggestions do you have to help NWMO improve this document?

[Distribute 'Who we are' document and give Panelists a few minutes to review]

- If you didn't know about the NWMO or the role it plays, would a document like this answer your questions, or perhaps help you ask some better ones?
- What suggestions do you have to help NWMO improve this document?

[Distribute 'Security and Safeguards', 'Transportation of Used Nuclear Fuel', and 'Monitoring and Retrievability' documents and give Panelists a few minutes to review]

- And what do you think about these ones?
- What suggestions do you have to help NWMO improve these documents?

11. WRAP-UP (2:50 - 3:00)

- As we end our session does anyone have any remaining issues to discuss or questions to raise about our discussions here?
- Panel Management issues
- Adjourn



III. BACKGROUNDER 1: SELECTING A SITE

Background - Selecting a site

Canadians have been using electricity generated by nuclear power reactors for about four decades. Canada currently has 20 operating commercial reactors at 5 nuclear generating stations located in New Brunswick, Québec and Ontario. These reactors are fueled by uranium formed into bundles. Once used, the bundles are hazardous to humans and the environment, essentially indefinitely. They must be managed properly.

Canada has about two million used fuel bundles and is generating about 85,000 more each year. We can expect to produce about 3.6 million used fuel bundles if each of the current electricity generating reactors operates for its anticipated average life-span of about 40 years.

Currently, the used fuel bundles are safely stored at licensed facilities located at the reactor sites in Canada. The communities hosting these facilities understand this to be temporary, and that the used fuel has always been destined for long-term management at a specially-designed facility.

Through Adaptive Phased Management, the used fuel bundles will ultimately be packaged into long-lived strongly built containers, transported to the selected site and placed in the deep geological repository.

While technical studies suggest that large geographic portions of Canada have rock formations potentially suitable for the deep geological repository, scientific, technical, social, ethical, economic, and environmental factors also have to be weighed in selecting a site.

That site will occupy a surface area of about 2 kilometres by 3 kilometres. Underground, the repository will be about 1.8 square kilometres in area. It will consist of a network of horizontal tunnels and rooms excavated in stable rock at a depth between 500 to 1,000 metres. Once there, the used fuel will be monitored to confirm the safety and performance of the repository until a decision is made to close the site. It will remain retrievable until such time as a future society decides on final closure and on the appropriate form and duration of post-closure monitoring.

People will be keenly interested in where the site is located, in how the used fuel will get there, and in how safety and security will be assured. Communities considering hosting the site will want to know how their well-being could be affected including what risks they might face, how they might benefit, and what commitments they will have to make.

Communities will also want to have updated information about the used fuel to be managed. We will regularly publish inventory information on the current and future potential used fuel inventories. Recognizing the potential for industry to make decisions that may affect the amount and characteristics of the used fuel to be managed in future, we will continually monitor, review and invite broad discussion about new developments so that our plans may be adjusted as required.

Selecting the site thus requires dialogue and careful thinking. We expect that the design of the selection process will need to have many features including:

- The objectives of the siting process and the principles that would apply.
- The major steps in the siting process.
- The factors and criteria that will be applied in making siting decisions.
- How Aboriginal insights and traditional knowledge will be respected.
- How information will be communicated and shared.
- The studies required at each step.
- How to work collaboratively throughout the process.

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IV. BACKGROUND 2: FRAMING THE DISCUSSION

Framing the discussion

In conversations with Canadians during the study phase of our work, we heard that the approach for managing Canada's used nuclear fuel must respond to a *framework* of objectives and characteristics. This framework will help shape the process for selecting a site and to help guide implementation.

Objectives

The process for selecting a site should help Adaptive Phased Management achieve the objectives set for it by citizens:

Fairness – To ensure fairness (in substance and process) in the distribution of costs, benefits, risks and responsibilities, within this generation and across generations.

Public Health and Safety – To protect public health from the risk of exposure to radioactive or other hazardous materials and from the threat of injuries or deaths due to accidents.

Worker Health and Safety – To protect workers and minimize hazards associated with managing used nuclear fuel.

Community Well-being – To ensure the well-being of all communities with a shared interest.

Security – To ensure the security of facilities, materials and infrastructure.

Environmental Integrity – To ensure that environmental integrity is maintained over the long term.

Economic Viability – To ensure the economic viability of the waste management system, while simultaneously contributing positively to the local economy.

Adaptability – To ensure a capacity to adapt to changing knowledge and conditions over time.

Of these objectives, people consider safety, security and fairness to be paramount: the management approach must ensure *safety and security* for people, communities and the environment, and it must be seen to be safe and secure from the perspective of current and future generations.

Characteristics

The process for selecting a site should also be responsive to the characteristics which Canadians said would be important for any siting process:

- Be open, inclusive and fair to all parties, giving everyone with an interest an opportunity to have their views heard and taken into account.
- Ensure that groups most likely to be affected by the facility, including through transportation, are given full opportunity to have their views heard and taken into account, and are provided with the forms of assistance they require to present their case effectively.
- Respect all Aboriginal rights, treaties and land claims.
- Be free from conflict of interest, personal gain or bias among those making the decision and/or formulating recommendations.
- Be informed by the best knowledge from the natural and social sciences, Aboriginal Traditional Knowledge, ethics and technology development – relevant to making a decision and/or formulating a recommendation.
- Be in accord with the precautionary principle, which seeks to avoid harm and the risk of harm, and which demands ethical justification for such harm that is unavoidable.

- Ensure that those who could be exposed to harm or risk of harm, or other losses or limitations, are fully consulted and are willing to accept what is proposed for them.
- Take into consideration the possible costs, harms, risks, and benefits of the siting decision, including financial, physical, biological, social, cultural, and ethical costs.
- Ensure that those who benefited most from nuclear power (past, present and perhaps future) bear the costs and risks of managing used fuel and other materials.
- Address scientific and technical factors that may help ensure safety.

Implementation of the approach will respect the social, cultural and economic aspirations of affected communities.

A matter of ethics:

The process for selecting a site should strive to:

Respect life in all its forms, including minimization of harm to human beings and other sentient creatures.

Respect future generations of human beings, other species, and the biosphere as a whole.

- Respect peoples and cultures.
- Promote justice across groups, regions, and generations.

Be fair to everyone affected, particularly to minorities and marginalized groups.

Respect the values and interpretations that different individuals and groups bring to dialogue and other means of collaboration.

Canadians told the NWMO they want to be sure, above all, that the site for the deep geological repository is safe and secure. The process for choosing that site must be grounded in values and objectives that Canadians hold important. The process must be open, transparent, fair and inclusive. And the NWMO believes it must be designed in a way that citizens across this country are confident meets the highest scientific, professional and ethical standards.

The NWMO makes commitments as to how such a process must work:

1. The decision by a community to host the site must be informed and made willingly.

2. The site selected must meet strict, scientifically-determined safety requirements.

3. In the interest of fairness, the process should focus on the provinces directly involved in the nuclear fuel cycle: New Brunswick, Québec, Ontario and Saskatchewan. Communities in other regions that express an interest will also be considered.

4. Communities that decide to engage in the process for selecting a site, as potential hosts, shall have the right to withdraw consistent with any agreements between themselves and the NWMO

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V. BACKGROUNDER 3: LEARNING FROM OTHERS

Learning from others

In beginning to think about the design of a process for selecting a site for Canada's used nuclear fuel, we take the view that a process for Canada needs to be designed by Canadians. In the study phase of our work, citizens told us a great deal about their concerns and expectations.

At the same time, siting experiences here and abroad involving nuclear waste and other hazardous substances, as well as comparable decision-making processes—offer insight about what might be challenging and about what might work well. Overall, these experiences seem to confirm the merit of a siteselection process for Canada that seeks an informed and willing host community, that is collaborative and that considers technical, social, environmental and social factors together.

The following are some challenges and opportunities that may be important to consider:

Being inclusive

Canadians told us that the success of the process for selecting a site hinges on open and fair collaboration with all potential host communities and other interested people and organizations at every step. At some point, the process will need to focus on candidate host communities and ultimately on the selected community. How can we ensure that the process for selecting a site involves the right people at the right times without leaving anyone out unfairly? Participation also carries important responsibilities for all participants. We seek the advice of Canadians in identifying those responsibilities and ensuring they are shared and applied fairly.

Defining 'community'

We want to ensure that people and communities can participate in all aspects of the site selection decision that affect them. It will be important to identify what constitutes a 'community' and who can best speak on its behalf. Should a community be defined narrowly and by political boundaries, such as the confines of a town, or should it be based on patterns of economic activity and include the surrounding area?

Measuring community acceptance

We believe that any community which eventually hosts the nuclear waste management facility must be willing to do so. It will be important to identify how we might gauge the willingness of any community that expresses an interest. In what ways might potential host communities demonstrate they have the permission and trust of their residents to explore hosting the facility? And how might we consider the needs of future generations in considering expressions of interest?

Demonstrating fairness

Fairness demands that any community expressing willingness to host a facility do so in a way which is free and informed. This means that the community has the information it needs to assess how it might be affected by the decision, and that it is not under undue influence of economic considerations. Key decisions must be taken through full and deliberate engagement. How can this be best accomplished?

Balancing social acceptability with other factors

If more than one community wishes to host the site, how might we decide between them? Each site is likely to have its own but different strengths. One site may be closer to where used fuels are currently stored, but require more engineering to make sure the facility is safe. Another community may have more support among residents but require more technical research to ascertain whether the physical characteristics of the site are appropriate.

Strengthening community capacity

People and communities must have the wherewithal to take part in the process. Different groups will have their own requirements, ideas and way of doing things. Particularly important are the time and resources that potential host communities will require to make informed choices. We need to understand the requirements of participants and seek tools that can aid their involvement. What suggestions do you have for ensuring that people are equipped to take part?

Partnership

Experience suggests that the building of long-term relationships and partnerships is vital to the success of the process for selecting a site. This takes time and effort, but the benefits can range from sharing information and resources to building trust and improving communication. What are the essential ingredients for building real and lasting relationships and partnerships? What kinds of agreements should be forged?

Ensuring community well-being

We are committed to ensuring that any community that decides to host the facility will be better off for having done so. The well-being of a community might be affected in a broad range of ways, from traditional use of land to economic development and socio-cultural cohesion. It will be important to understand how a community might be affected by its decision and to ensure this is weighed appropriately before proceeding. What processes need to be put in place to ensure that the community continues to benefit from the facility well in to the future? How do we resolve potential conflicts and differences in perspective?

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