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.
**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

1. NWMO Citizen Panel Background
   a. Citizen Panel
   b. Panelist profiles
   c. Panel methodology

2. Panelist Dialogue
   a. Overview
   b. Panel Notes
      i. Disclaimer

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. NWMO CITIZEN PANEL BACKGROUND

a. Citizen Panel

The Kingston, Ontario Phase Four Citizen Panel was held on June 14, 2008 at a neutral third party facility in Kingston.

The Panel was held over three hours from 12PM – 3PM with 11 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 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 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-6A | City: Kingston  
|               | Age: 55-64  
|               | Gender: Male  
|               | Occupation: Self-employed, financial planner |
| Panelist: K-11A | City: Kingston  
|                | Age: 35-44  
|                | Gender: Male  
|                | Occupation: Employed, Development and recruitment officer |
| Panelist: K-13A | City: Kingston  
|                | Age: 18-24  
|                | Gender: Female  
|                | Occupation: Employed, cell centre representative |
| Panelist: K-15A | City: Kingston  
|                | Age: 35-44  
|                | Gender: Female  
|                | Occupation: Self-employed |
| Panelist: K-17A | City: Kingston  
|                | Age: 35-44  
|                | Gender: Male  
|                | Occupation: Employed, stationary engineer |
| Panelist: K-4A | City: Kingston  
|               | Age: 65+  
|               | Gender: Female  
|               | Occupation: Retired |
| Panelist: K-7A | City: Kingston  
|               | Age: 55-65  
|               | Gender: Male  
|               | Occupation: Retired |
| Panelist: K-12A | City: Kingston  
|                | Age: 45-54  
|                | Gender: Male  
|                | Occupation: Unemployed |
| Panelist: K-14A | City: Kingston  
|                | Age: N/A  
|                | Gender: Male  
|                | Occupation: N/A |
| Panelist: K-16A | City: Kingston  
|                | Age: 25-34  
|                | Gender: Female  
|                | Occupation: Student |
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.
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 some 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.

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 Montreal and stands alone as a record of the Citizen Panel discussion on June 14, 2008. A larger Aggregate Report on this phase of Panel discussions, including the Panels in Regina, Toronto, Sault Ste. Marie, Scarborough, Saint John, Saskatoon, and Montreal has also been submitted to the NWMO.
II. PANELIST DIALOGUE

a. Overview

The Phase Four Citizen Panel discussion of June 14, 2008 took place in Kingston, 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 and used three “backgrounder” sheets for reference. The five questions were listed in Section I of this document.

Kingston Panelists, by and large, appreciated the NWMO’s framework of objectives and found it to be thoughtful. The Discussion Leader asked about the importance of defining what is meant by “community” and asked Panelists if they could offer any advice on how the NWMO should best do that. One Panelist suggested that the NWMO should allow for a more organic process that prepares for input from all angles:

*I think they need to be inclusive and be prepared for all groups that might come forward. Prepare for the worst and hope for the best.*

Additionally, that Panelist expressed some confusion about the word “willing,” as used in the term “willing host community”:

*Another term that jumps out at me is that the community must be informed and the decision must be made “willingly.” Again, what does that mean? A majority?*

Many Panelists discussed the obligation to consult both potential host communities and transportation route communities. This Panelist, like many others, considered the notion of developing a purpose-built community in order to limit the need for extensive community consultation:

*I think they should try to avoid community all together. There are towns all over the north that were nothing until someone discovered something like gold, ore, etc. and a company came in and created a town.*

Others thought that the potential benefits would be so great that many communities would express willingness to host the repository. This Panelist assumed that areas facing economic challenges would welcome the enhanced infrastructure and broadened tax base that might accompany this project:

*There’s no shortage of economically-depressed communities. I think you look at what communities can most benefit.*
The Panelist conceded that there were other factors (beyond economic need) to be considered in siting. Nevertheless, they reiterated what they thought made hosting a repository so attractive:

At the end of the day, a job is a job.

Discussion of the third and forth questions led to a healthy discussion of domestic and local experiences that could guide the NWMO in its project. Earlier in the discussion, one Panelist suggested that while it occurred decades in the past, the process used to locate Canada’s nuclear reactors is a natural choice upon which to model today’s challenge:

A 40 year-old process may be out of date but I still think it’s a starting point.

Another Panelist drew upon a local experience with one of Kingston’s correctional facilities. The Panelist cited an incident that received negative publicity that could have been avoided had the facility been proactive instead of reactive:

A local example is they just moved the Portsmouth correctional centre to a more secure halfway house. … One learning experience in retrospect was trying to be proactive and not reactive. … If they’d thought ahead you’d see that it was only a matter of time before we’d be in this situation, they could have been more proactive. More time to plan.

Not all of the Kingston Panelists drew from local experience. This Panelist was aware that repository projects were already underway in Northern Europe and Scandinavia. Additionally, he noted, the European counterparts to the NWMO had to contend with the challenge of a more densely concentrated population:

We should look at other countries. As I remember, some of those Nordic countries have started the process. I think it’s highly instructive to look at that. If they can do it with tight communities in small places and have it work, surely we can do it in big spaces and less tight communities. It’s got to be instructive. How did they get around those objections? Europeans are far more environmentally conscious than we are!

Several Panelists discussed the problem of transporting waste. One view, expressed by this Panelist, was that as long as the proper safety precautions were in place, there did not need to be any additional degree of disclosure to transit route communities because hazardous waste – admittedly of a different type – was carried by rail and road every day:

The way I look at that situation is “out of sight, out of mind.” We already trust trucking and train companies with all these chemicals on the road so I don’t understand how it’s going to
affect communities that much. Stuff like this happens every day. You have no clue what is actually being held in those containers.

Another Panelist recognized that opposition can quickly emerge in small-but vocal groups, and that such an organized effort might prevent transportation of used fuel through a community:

Yes, but nuclear waste is hugely emotive. All you need is a relatively small group that says “not to our town.” That’s terrible P.R., bad for business. Transportation is a much bigger problem.

Kingston Panelists formed a highly engaged group that was especially willing to discuss external models which the NWMO could look for guidance. Their discussion, as in previous phases, was highly productive and generated valuable insights.
b. 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 Lanny Cardow, a Navigator research professional.

General Discussion

**Discussion Leader:** Did anyone talk about this topic with friends or family or co-workers? Anyone hear about it on the news?

**K-2A**
I talk to people about it and they aren’t aware of the problem. They didn’t even know it existed. When they think about it, they suddenly think that it is a problem, but it’s not a problem that’s on the radar. Is it a major problem? No. But is it really? Yes, of course. It’s the disposal – they think “wow, what do we do with this stuff?”

**K-6A**
I remember being a kid watching a TV program about nuclear power and how it stays active for 10,000 years and I remember thinking “wow, that’s going to be a problem.”

**K-11A**
I think one of the reasons people aren’t aware of it is because, for me, before I started this Panel, I didn’t realize there was nuclear waste. I knew there was nuclear energy, but didn’t know there was waste.

**K-2A**
A lot of the NWMO’s material is, to put it mildly, dry and won’t be read by anyone.

**Discussion Leader:** When we gave you material that wasn’t dry, when they took a more marketing-style approach, you hated it and tried to throw me out of here! You wanted straight facts, a more low key document.
Discussion Leader: One of the things we want to talk about today is the process that the organization must undergo to decide where this site might be. People at the NWMO are going to be designing the site selection process. They’re going to be thinking about what’s got to go into the process so that when the result comes out, people are going to think it’s fair, ethical, effective, and a good process. Today I am looking for help on what that process should look like, what it should take into consideration. The NWMO has laid down two major requirements: It has to go somewhere safe and secure and it also has to go to a community that is both willing and informed. Additionally, the sites looked at initially must be in the four nuclear provinces, to be fair. What do you think of the kind of framework they have proposed in these handouts? Is it on the right track? Does it cover the right things? Any advice?

K-17A The mission statement. They should have a mission statement for the whole organization that they have to live by. I like that they respect all life forms. That is what it comes down to, right there.

Discussion Leader: On the other side of that page, they essentially have a mission statement under their objectives. Is this what you were thinking about?

K-17A Definitely. It all comes back to that; the end product is going to be us. It’s going to affect us and other species.

K-7A One of the things that almost always helps is if they take on a nature project as part of their setup. They should make it known that they are actively doing that.

K-14A They are going to put a great deal of thought and time into how they define community. For instance, how they define aboriginal community.
**Discussion Leader:** Recognizing the importance of defining community, any advice on how they should go about doing that.

**K-14A** I think they need to be inclusive and be prepared for all the groups that might come forward. Prepare for the worst and hope for the best. Another term that jumps out at me is that the community must be informed and the decision must be made willingly. Again, what does that mean? A majority?

**K-12A** And not just the City Council.

**K-6A** I wonder what they’re contemplating when they say community? I mean, you look at a map of Canada and it’s full of empty space. Are there no places where there are no communities? I would think no matter where you try to plunk something, an aboriginal group would say “that’s our land, our community.” So then who are the community leaders? How do you find legitimate leadership within that community? Who are they going to talk to? The more grassroots the better, but you have to hold a referendum.

**K-12A** You’ve got to hold a referendum. You don’t want City Council taking a vote.

**K-2A** That’s our system, but with something like this you need a referendum.

**K-11A** I completely disagree. With something this scientific, you don’t want to leave it up to the masses.

**K-12A** If the vote is really close, like 51-49, I’m not saying don’t let City Council have a role, but don’t let them make the decision on their own.

**Discussion Leader:** There is this idea as to what is the community. How would you figure out what it was? You can imagine that, even if there weren’t people there, there would be people along the route. What about those folks?
K-2A They’re storing it now in certain places and there’s no uproar, no problem. Why is that? How did that happen? Is that a good precedent?

Discussion Leader: I would go further, but the municipality of Bruce is actually now on a campaign to get the next nuclear reactor and the community is making a campaign. What that demonstrates is that different communities can come to different conclusions about what they want and don’t want. Not only is this not a worry for them, but a net benefit for their community.

K-6A Two differences, what they’re talking about in Bruce has economic benefits. If they’re driving trucks through somewhere, there’s no economic benefit. Just to K-11A’s point about representative government, I agree if your community is very broad, it’s difficult to get everyone educated and inform. If it comes down to whether the trucks go through the community, I wouldn’t contemplate a referendum in that case. If they have to get permission to drive a truck through a community, they’re going to have a tough time with that.

Discussion Leader: A referendum would be one way to decide if a community was willing. The challenge with the siting process is that this is just one little piece at the end of the process. There is still the problem, how are we going to figure out what community to choose. There are choices of great swaths of area. There has to be a process to come up with a handful of communities to do exploration.

K-2A Put out a submission for proposals!

Discussion Leader: That’s another good idea. Say you get 50 of them expressing an interest; you need some sort of process to evaluate those against each other. Are the things on this sheet the right things to evaluate those against? Have they missed anything?
K-12A I love the green sheet. It took us a while to get most of that together. To see it all in one spot is great.

K-16A They could probably do polls in each community. Whichever one had the best result, the least amount of controversy.

Discussion Leader: That sort of comes second. It has to be a scientifically sound place first, an appropriate place that honours the kinds of things they outlined here first.

K-11A If people are submitting RFPs, there would need to be some sort of a decision made already from some governing body. Let’s say it was a town council or something, they would have to submit an RFP, so you already have a community saying that they are interested. Any RFP you would judge it according to these things, yes. Not only do they seem sensible and practical, but I was thinking, for example, when it says we have fuel bundles stored safely at licensed facilities, there must have been a process from 40 years ago that they went through and that is a process the could take into consideration when coming up with a long-term site. Obviously there will be technical differences but rather than reinvent the wheel, they’ve clearly gone through a process before.

Discussion Leader: Do you think that our values in terms of community consultation or our approach would still be valid today or do you think we’ve changed our views?

K-11A A 40 year old process may be out of date but I still think it’s a starting point. One of the things that I find confusing is the term site and community – they seem to be interchanged and I’m not sure that’s appropriate. There have to be a bunch of sites out there that aren’t represented by any community.

Discussion Leader: Community should not be used as a synonym for site?
K-11A There’s a high chance they’re not going to be the same.

K-12A Is it worth more to have it closer to a community than have it further away? If there is a need for staffing? You need people!

K-6A I think they should try to avoid community altogether. There are towns all over the north that were nothing until someone discovered something like gold, ore, etc. and a company came in and created a town. It seems they could find somewhere where the community was so miniscule they could probably avoid doing that. There are many stages that they have to look at, things like other technical considerations, but first you have to put those 50 sites, for instance, through a sieve.

Discussion Leader: Any other ideas on what the screens are?

K-6A Focus groups in the area, polls to get a sense of the area. You wouldn’t want to put this in a left wing, environmentalist community!

K-2A From a procedural point of view, this is federally mandated, right? They have to work with the provinces and the provinces own the land – not all of it but they have jurisdiction for the most part to deal with the land. How do you put these proposals out structurally? It’s probably better to put them out through each province and then the province can deal with the sub entities, I think you have to do it that way, because if you bypass the province, you’ll create difficulties from a structural point of view.

K-14A There’s no shortage of economically-depressed communities. I think you look at what communities can most benefit.

Discussion Leader: Does anyone agree that? This could be used as an economic development tool?

K-14A It’s only one factor but it certainly eases the process if you chose a community that’s
desperate, for lack of a better term. At the end of the day, a job is a job.

K-12A Then it becomes a question of a community. If you have it in the middle of nowhere, you have to truck people in and that becomes a huge cost.

K-17A They’re doing that in Alberta right now. They’re in the middle of nowhere. People have to go out on the oil rigs and camp for weeks at a time.

K-15A They are different things, if you have the community, then you have people that could maybe have jobs. They’ll need people to unload too.

K-11A But what they’re proposing building isn’t going to be for your average person on the street, they can’t do that job.

K-15A So then you have to go entice those people to go out and stay in a camp.

K-11A This will pay big bucks, no doubt, you can always find people.

K-17A People forget that once this thing is up and running, that’s it. You only need a skeleton staff to run it.

K-12A Do you build a train track from the nearest town? Do you truck it in? There’s more going on, every time I look at it, I keep adding another thing.

K-11A There are too many dimensions to it.

**Discussion Leader:** We make decisions about locating unpopular things all the time. A dump has to go somewhere, bus terminal, all kinds of things we need as communities. They might not be the most welcome thing, and there might or might not be advantages. But we need an overall community match. Have you seen any other processes you’ve observed that we could draw lessons from?
K-14A  A local example is that they just moved the Portsmouth correctional center to a more secure halfway house. There was a lot of pressure for them to do that for several years and it’s just now in the process where they are shutting it down. One learning experience in retrospect was trying to be proactive and not reactive. It really came to a head and there were a couple of guys that walked away from the site and that brought a lot of attention. If they’d thought ahead you’d see that it was only a matter of time before we’d be in this situation, they could have been more proactive. More time to plan.

Discussion Leader:  If you know you’re going to go there, might as well go there now…

K-11A  I don’t think in any process you’ll ever get total agreement. Here, they built the new arena downtown. There were a lot of people against building it downtown. I just think that’s the nature of the beast. Some people drink Coke, some drink Pepsi. You’re never going to get full agreement. There’s reactive policy and constructive policy. It doesn’t matter how much you try to inform people, there are always going to be people who have a “knee jerk” reaction.

Discussion Leader:  Some say that even though you can’t get full agreement, but you can have people at least see that it is a legitimate choice.

K-11A  The whole organization and process needs to be transparent. People who might be opposed have legitimate concerns but it’s reality and the reality of it is that we have to deal with this stuff. The whole approach is admitting to that, point blank, we recognize you have legitimate issues but you have to put it somewhere.

K-6A  Defining the community, I would suggest it has to be broad and patterns of economic activity, I think you have to consider them part of the community. I took exception to “it is not under undue influence for economic consideration.” There is no such thing as undue economic
consideration. What’s going to make people say yes is that the benefits are going to outweigh the costs. That’s going to be the key.

K-2A I had exactly the same thought. There is absolutely no benefit to it other than economic and to try and hide that would be a major mistake. Of course you’re being bought off! It’s a reality!

Discussion Leader: Somebody told me that when the mayor benefits, it’s a bribe. When the entire community gets something, it’s a benefit.

K-12A Does the site have an online hospital? Do they need to get to the nearest town? Do they have their own trucking set up, right there? Do they use people? It gets complicated.

K-17A If you had an elected board that could oversee everything, they could deal with the issues that arose each day. It would have to be people that would be genuinely interested in doing this, not for any gain, but purely for the benefit of the community.

K-12A I may be running ahead of what we’re trying to do in my head, but I agree about the undue influence, there’s no way you can get past that. I took exception to defining people and communities – people are communities. You make it sound like it’s something separate. There’s no community without people.

K-13A There are people outside communities, especially up north. They could care less about what’s going on in the communities but they need to know about it.

K-11A If a tree falls in the forest does anyone hear? Sometimes I don’t know if all this about a community is politically correct? I understand this whole bit about community but am not sure it’s that relevant to the whole process. If there’s one person per 1000 miles, I’m not sure because it’s at a federal government level and involves 4 provincial organizations that all this community
consultation is necessary. It’s very politically correct but when the federal government made the decision to invade Afghanistan they didn’t consult the whole world... they did it. More of the issue is the actual transportation through communities rather than this particular community that may not in fact exist. That’s where I think you’re going to get public opposition.

K-13A  The way I look at that situation is ‘out of sight, out of mind.’ We already trust trucking and train companies with all these chemicals on the road so I don’t understand how it’s going to affect communities that much. Stuff like this happens every day. You have no clue what is actually being held in those containers.

K-6A  Yes, but nuclear waste is hugely emotive. All you need is a relatively small group that says “not to our town.” That’s terrible PR, bad for business. Transportation is a much bigger problem. You can find a community that looks at the repository as an opportunity or find a community with no one around...

K-12A  They need a big sign on the truck.

K-13A  It’s a target for someone to aim at too.

K-2A  Why can’t we build a special transit system for this? You could go around communities.

K-13A  Because it’s taxpayer’s money.

K-11A  You’d still need to go through communities. The waste is in the south and it’s going north. I’m still curious to see what happens. Most people don’t know or don’t care that there is nuclear waste in their backyards.

K-6A  I’d say go by water as much as possible. Then you don’t need to go through communities.

K-15A  I thought that was interesting that you said about going by water. If it was to fall over or the contents were to come out of the container...
during transport, would it be less dangerous over the water than over land? It could still affect the water.

**Discussion Leader:** Our expert told us previously that there was an international standard for transportation of this material. Also, there are places where this is being transported all over the place every single day. There’s an A package and B package and the A package is built to virtually withstand anything. Obviously, theoretically, something could go wrong, but this is not something they take lightly and there’s a very long track record of this being transported safely.

**K-6A** They talk about community, community, community. If they have been learning from Europe, no wonder, you can’t throw a dart without hitting a community. That’s not the case in Canada so I wonder if they’ve overemphasized this whole community thing.

**Discussion Leader:** What about the experience from other countries. Is it relevant, not relevant? Should we be looking to them? Or do we need a made in Canada solution?

**K-2A** We should look at other countries. As I remember, some of those Nordic countries have started the process. I think it’s highly instructive to look at that. If they can do it with tight communities in small places and have it work, surely we can do it in big spaces and less tight communities. It’s got to be instructive. How did they get around those objections? Europeans are far more environmentally conscious than we are!

**K-6A** They have to be. They have more affinity for nuclear power because they don’t have the natural resources we have in North America.
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.
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.
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.
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?
• 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?
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.
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.
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, sitting 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 site-selection 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 into the future? How do we resolve potential conflicts and differences in perspective?