The Nuclear Waste Management Organization (NWMO) was established in 2002 by Ontario Power Generation Inc., Hydro-Québec and New Brunswick Power Corporation in accordance with the Nuclear Fuel Waste Act (NFWA) to assume responsibility for the long-term management of Canada’s used nuclear fuel. NWMO’s first mandate was to study options for the long-term management of used nuclear fuel. On June 14, 2007, the Government of Canada selected the NWMO’s recommendation for Adaptive Phased Management (APM). The NWMO now has the mandate to implement the Government’s decision.

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

NWMO Social Research

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

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

Disclaimer:

This report does not necessarily reflect the views or position of the Nuclear Waste Management Organization, its directors, officers, employees and agents (the “NWMO”) and unless otherwise specifically stated, is made available to the public by the NWMO for information only. The contents of this report reflect the views of the author(s) who are solely responsible for the text and its conclusions as well as the accuracy of any data used in its creation. The NWMO does not make any warranty, express or implied, or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information disclosed, or represent that the use of any information would not infringe privately owned rights. Any reference to a specific commercial product, process or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or preference by NWMO.
NWMO-Stratos Multi-Party Dialogues
Montreal, October 15, 2008

Summary Report

Submitted to:
Nuclear Waste Management Organization
22 St Clair Ave. E.
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January 21, 2009

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1 Introduction

Purpose & Context

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

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

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

Individuals with a wide range of perspectives were invited, including those from Aboriginal organizations, business associations, municipal groups, non-governmental organizations (NGOs), academia, nuclear industry, and professional associations. While many of the participants were affiliated with organizations, they were asked to participate as individuals. A total of 13 participants, as well as staff from NWMO and Stratos, attended the session held in Montreal, Quebec on October 15, 2008 (see Appendix A for a list of the participants.)

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

Organized according to the agenda, this report provides a summary of perspectives and ideas expressed and exchanged during the dialogue. The dialogue session was not intended to reach consensus among participants, though the report notes areas of general agreement.

Dialogue Opening

Dr. Mahrez Ben Belfadhel, Manager - Geoscience at the NWMO, welcomed participants to the dialogue session and provided an overview of the history of the NWMO, its mandate, and the Adaptive Phased Management (APM) approach recommended by the NWMO and selected by the Government of Canada on June 14, 2007. He explained that the NWMO’s
next step is the development of a draft site selection process in 2009, and that ideas exchanged during the dialogue sessions will serve as input to this process. Finally, Dr. Belfadhel indicated that a report capturing the views heard in the dialogues would be shared with participants following the sessions.
2 What is Important in a Siting Process

To initiate the dialogue, all participants shared their initial thoughts on what is important in a siting process. A range of requirements for the siting process were identified by individual participants:

- The process must present to the public a project that is environmentally, socially, and technically sound, well-defined, and economically feasible.
- The process needs to be highly collaborative and allow a community to adapt it to their context.
- The process must build strong public awareness and understanding to ensure informed-decision making and informed consent.
- The process must respect democratic processes.
- The process should respect the concept that responsibility for long-term management should rest with those who benefit from nuclear power (i.e. the four nuclear provinces).
- The process must give thorough consideration of geologic suitability and must involve effective communication of all risks of the project.

Some participants stated that the NWMO must, as a first step, provide clarity on the process it is following, on what the siting criteria are, and establish a hierarchy of criteria (e.g. primary and secondary criteria).

A major theme of the discussion was how the process would address the broader context of nuclear power and sustainable energy in Canada. Several participants believed that nuclear power should be part of the discussion on siting and warned that attempts to exclude this discussion would be counterproductive. Specifically, they thought the process should provide clarity and transparency on issues such as the following:

- The impacts and costs of nuclear power in each province
- The distinction between the current estimate of the quantity of waste (fuel bundles) and potential future quantities arising from new nuclear power plants (new build)
- The costs associated with new build over the long term

However, others argued that if the objective of the process is to select a site, there is a need to limit the scope of the discussion. Participants did not express opinions on the phase-out of nuclear power but stated that clearer signals and decisions by provincial governments on energy policy, and nuclear energy in particular, would be helpful. They also added that the process needs to communicate the presence of nuclear reactors in Canada and the case for why waste cannot be stored at reactor sites indefinitely. It was pointed out that in Quebec especially, public attention with respect to energy is focused on hydro power and related issues.
One participant emphasized the important role of the government in the siting process, including the ministerial approval required in the environmental assessment process. This participant urged the NWMO to communicate the government’s commitments thus far to its process, and to take careful account of this political engagement in the design of the siting process.

Related to this issue, other participants warned that the public’s views on consultation and regulatory processes for other nuclear facilities in their province would affect attitudes towards the NWMO’s process. Therefore, the NWMO must maintain its credibility by being transparent and, if necessary, distinguish itself from other nuclear industry organizations.

A few participants emphasized the need to draw on international experience so that Canada can benefit from lessons-learned in other jurisdictions (US, Russia, Sweden, and other European countries). Having international experience inform the process may also help to counteract any perceptions of nuclear industry bias in the process and the NWMO.
3 Testing the Set of Objectives, Ethical Principles and Characteristics

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

Overall, participants expressed support for the framework and agreed that the process must communicate the values on which decisions will be based.

One participant suggested that the NWMO develop criteria to measure performance against this framework. Another participant stated that choosing a site is a responsibility that comes with producing the waste, consistent with the *polluter pays* principle, and asked whether the issue of compensation needs to be addressed more explicitly in the framework.

Several participants offered suggestions to add clarity and specificity to the framework statements, as described below.

**Objectives**

Some participants warned that the values expressed in the objectives will at times be in conflict with each other and that the NWMO must explain how it will trade off among them, when required. For example, decisions about building capacity among local workers vs. bringing in workers, or choosing the lowest bidder, may result in a conflict between the objectives of economic viability and fairness. The message from participants was that the statements on objectives should not give the impression that all objectives can be satisfied or at least not equally.

**Characteristics**

NWMO was commended for referring to the precautionary principle in its statements on characteristics, but one participant stated that it must be prepared to elaborate on the implementation of such principles and suggested that it consult experts on the application of the precautionary principle in particular.

**Ethics**

A few participants found the statements on ethics to be too vague and requested that these be articulated more precisely to give them meaning. For example, one participant wondered how the process honours the statement on ‘respecting future generations’, given the perception held by some people that the present generation is ‘imposing’ the long-term management of used nuclear fuel on future generations.
4 Major Activities in a Siting Process

Breakout groups discussed the major activities in a siting process. Most participants envisioned a siting process that would initially involve engaging with the public and a larger group of communities, work towards a progressively smaller list of sites, and culminate in the selection of a single site. Overall, participants identified four categories of activities.

Defining and applying exclusion criteria

Some participants suggested that the NWMO should consider the use of exclusion or ‘eligibility’ criteria to narrow the scope of communities to be considered. These criteria could be based on geological characteristics, transportation factors, or other logistical considerations.

Raising public awareness and engagement

Most participants identified public awareness as a key activity at the beginning of the process. The NWMO must identify the groups to be engaged, including the broader public, targeted geographical areas (i.e. based on the application of exclusion criteria), governments, and potential transportation route communities. A key objective of public awareness should be to clarify and communicate the process, the project, and the timetable. Many identified the development of a clear project description as a key aspect of NWMO’s communication material.

In developing its public engagement approach, a few participants emphasized that the NWMO must understand how communities, especially communities experiencing economic hardship, may be vulnerable to undue influence.

Call for submissions

Several participants envisioned a step in the siting process involving the NWMO issuing a request for proposals or submissions. The call should include information on the framework (terms of reference) for proposals and timelines for submissions. The call for proposals and proposal requirements should be cognizant of government and democratic processes, and specifically address the role of the Quebec provincial government.

Consultation with regulators

One participant urged the NWMO to begin discussions with the Canadian Environmental Assessment Agency (CEAA) and other regulatory authorities to develop a shared understanding of the regulatory process and to discuss different strategies and options for the environmental assessment process (e.g. Should multiple sites go through the EA process and be presented as alternatives?).
5 Who should be involved? What should their level of influence be in decision-making?

Some participants identified groups who they thought should be involved in the siting process in terms of three broad categories: affected parties, interested parties, and experts. Specific groups within each category are listed in the figure below:

**Who should be involved?**

- **Affected parties**
  - Communities (municipal and regional councils)
  - Workers (e.g. truckers)
  - First Nations

- **Interested parties**
  - Civil society organizations
  - Funders

- **Experts**
  - International experts

However, most participants focused on considerations for involvement rather than on the identification of specific communities of interest or stakeholders.

Many participants stated that the process should engage Canadians broadly, and include both interested and potentially impacted groups in decision making including, but not limited to, local and regional councils, civil society, and First Nations. Others warned against engaging too broadly and that influence on decision making should focus on those potentially impacted by the project. One participant stated that inclusiveness needs to be balanced with necessary input from experts, including experts from other jurisdictions and countries with experience in siting processes and nuclear waste management.

One participant indicated that the NWMO should be prepared for receiving expressions of interest from potential new actors such as the province of Alberta, where the construction of nuclear power plants has been considered, or from other provinces.

Throughout the dialogue, a few participants emphasized the importance of addressing the risks and concerns related to transportation communities and other broader communities. One participant stated that transportation issues are not given sufficient prominence in current NWMO documents, given that this will be a significant public perception issue.
6 Ensuring a fair site selection process

Participants discussed and identified a range of measures to ensure a fair site selection process.

Transparency

Transparency was identified as a key characteristic of a fair siting process, especially in the dissemination and handling of information. Participants stated that information must be of high quality and accessible to all parties, and the NWMO must be responsive to all requests for information. The accessibility of information was described in two ways: i) information being physically available to everyone, ii) presenting information in language that is accessible to a wide range of education levels. One participant emphasized that there should not be any perceptions of certain information being held back.

Financial incentives and support vs. coercion

A few participants emphasized that the NWMO must have a clear policy and rules to define and manage the funds and resources that flow to communities and groups during the siting process and afterwards. The objectives of the policy and rules would be to:

- avoid the occurrence or perception of bribery or other forms of financial coercion;
- and
- ensure that the distribution of economic benefits is equitable, recognizing who are the major ‘consumers of risk’ in the community.

Furthermore, the policy and rules must address these issues at two levels:

- Financial support for building capacity during the development of proposals/expressions of interest to ensure a level playing field
- Financial/economic benefits of the project itself

Participants agreed that the latter issue will be especially important for communities currently facing economic hardship, and pointed out that the current economic crisis may increasingly affect community response to economic incentives.

Open and inclusive public engagement

Most participants expressed support for a process based on open and inclusive public engagement. However, some participants qualified their support by stating that the quality of engagement should not be defined by its breadth and must focus on potentially impacted communities. In terms of openness, one participant stated that the NWMO should not have preconceived notions as it receives input from the public and specific groups.
Other specific suggestions included the following:

- The NWMO should consider public participation models currently used in Quebec, such as that of the BAPE (Bureau d’audiences publiques sur l’environnement).
- To ensure inclusive engagement within communities that are submitting expressions of interest, the NWMO should include in its evaluation of proposals a rating of the quality of engagement within communities.
- Consultation needs to be carefully defined, especially with respect to Aboriginal peoples.

A few participants suggested that following the decision, there will be a need to ‘sell’ the decision to the whole community or take other steps to mend divisions. Other participants were uncomfortable with using any marketing-type approaches during the process.

**Ongoing collaboration**

A few participants favoured the NWMO having a collaborative relationship with communities throughout the process. Some even suggested the establishment of a formal partnership or an impacts and benefits agreement (IBA) between the willing host community and the NWMO that would be protected by contract.

**Assessing willingness**

Some participants indicated that communities should provide their own description of the process to assess willingness, and identify “responsible agents” for the process. Others suggested that NWMO representatives should go into communities and make their own observations on expressions of willingness. Suggested sources of information for assessing willingness include media reports, records of meetings, and the results of referenda.
7 Considerations, Factors and/or Criteria Guiding Decision-making

The agenda was modified slightly and this question was not addressed explicitly as a separate item. However, throughout the dialogue participants identified a variety of considerations, factors, and criteria guiding decision-making as described in the following table.

<table>
<thead>
<tr>
<th>Technical Considerations / Factors / Criteria</th>
<th>Social Considerations / Factors / Criteria</th>
<th>Exclusionary Criteria</th>
</tr>
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<tbody>
<tr>
<td>• Safety</td>
<td>• Social acceptability</td>
<td>• Geologic suitability (lack thereof)</td>
</tr>
<tr>
<td>• Security</td>
<td>• Use of fair and democratic processes</td>
<td>• Transportation and related logistics considerations (feasibility)</td>
</tr>
<tr>
<td>• Environmental integrity</td>
<td>• Economic viability</td>
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</tr>
<tr>
<td>• Climate change impacts on the project</td>
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<tr>
<td>(Environment Canada and UN resources that</td>
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<td>could inform this assessment.)</td>
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Some participants suggested that there should be mechanisms for addressing social acceptability and reaching a final decision in situations where all other criteria have been satisfied. It was recognized that social acceptability criteria could be the most challenging criteria to satisfy.

Most participants suggested that the NWMO at least consider the development of exclusion criteria based on geologic suitability, transportation, and other factors to focus initial engagement efforts with potential willing host communities.
8 Information & Tools to Facilitate Stakeholder Participation

Participants discussed the information and tools that would be required to facilitate stakeholder participation, primarily from the perspective of a potential host community.

Information

There was broad agreement among dialogue participants that a clear and comprehensive description of the project was required to enable communities to consider their level of interest in becoming a host community. The following elements of a project description were identified:

- A rationale for the project (why is the site necessary?)
- Information on the process
  - Eligibility requirements and acceptable geographic zones
  - The steps of initially identifying many candidate sites and progressively narrowing down the selection
  - Project schedule
- A description of the characteristics of the waste
- Potential risks to the community
  - Safety risks
  - Security risks
  - Environmental risks
- Economic benefits
  - Scope and magnitude of benefits
  - Potential jobs and their characteristics (skill level, community jobs vs. external expertise requirements)
  - Potential for developing a “knowledge community” around project and information on how a community can best realize these benefits
  - Implications of being a host community in a remote vs. an urban area in terms of the type and scope of the economic benefits available
- Information on the potential future quantities of used fuel
- Transportation details and risks
  - Clear description of transportation logistics and options
  - Risks and planned mitigation
- The community’s level of control throughout the duration of the project, in the short and long term

While most participants emphasized the need for a balanced project description covering both the potential negative and positive impacts, a few participants were concerned that current information from NWMO is too cautious in this regard. These participants felt that a strong and more compelling case needs to be made for becoming a host community and that the NWMO needs to find the right balance between credible and balanced promotion and a “marketing” approach. Some participants suggested that the
description should also present some contextual information by discussing some of the positive and negative impacts of nuclear energy.

A few participants recognized that while the NWMO should present a clear project description and criteria to communities, some aspects should remain flexible and be open for negotiation.

**Tools**

Participants presented ideas on a range of services and tools to aid community participation and decision-making. In some cases, participants indicated that these services and tools would be best provided by an independent third party. The ideas discussed included the following:

- Establish a third party research service and research funds to be at the disposal of community. Access to credible third party experts (including international experts) could help the community understand and resolve different perspectives on the risks of the project.
- Provide the means for a community to conduct its own risk assessments.
- Provide dispute resolution tools and build capacity to resolve conflicts.
- Consider the establishment of regional NWMO offices to coordinate some of these services.
- Establish a requirement and tools for baseline surveys, which will be the basis for future monitoring activities.
9 NWMO’s Future Challenges & Opportunities – Best Advice

In the final plenary, participants were asked to provide their best advice to the NWMO for the design of the siting process. Participants emphasized points raised earlier in the dialogue including the importance of a clear project description, addressing issues related to transportation, and opening the discussion to include broader contextual issues, such as nuclear power.

Participants offered advice and identified challenges that they thought the NWMO and the siting process would face:

- The NWMO should move forward with its plans. If possible, the siting process should be completed in less than 10 years in an effort to maintain momentum and to recognize the limited length of political terms and careers. Where possible, the NWMO should consider having activities running in parallel, instead of sequentially.
- Technology is developing rapidly. The NWMO should not minimize the potential impact of new technologies on the project, and therefore maintain flexibility in the process. Also, while technological development is driven by a variety of factors, purposeful investment in certain areas could benefit the NWMO.
- The NWMO should monitor the developments in Aboriginal rights and unsettled land claims, especially under the current government.
- There needs to be a holistic view of the energy future, and careful consideration needs to be given to imposing this waste legacy on our children. Therefore, the NWMO should strengthen its consultation with youth, as they will be the generation who will have to manage the waste.
- The NWMO needs to address perceptions of risk, but without drowning people with technical information.
- The NWMO will always face the stigma attached to nuclear power and waste and the challenge of developing and maintaining positive and credible messages. It must act proactively against rumours and misinformation.
- The NWMO should consider forming partnerships with industries that will be involved in implementing the project. These partners could become allies in promoting the project.
- Interim shallow storage and retrievability may have implications for siting and need further discussion.
- The NWMO should have a goal of having the best public consultation process in the world. This could involve using this process as a social laboratory by applying innovative and experimental approaches. Best practices from international processes should be adopted.
# Appendix A – List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>M. Claude Beaulac</td>
<td>Ordre des urbanistes du Québec</td>
</tr>
<tr>
<td>Mme Sylvie Bouchard</td>
<td>Independent Consultant</td>
</tr>
<tr>
<td>M. Michel Duguay</td>
<td>Université Laval</td>
</tr>
<tr>
<td>Mme Corinne Gendron</td>
<td>Université du Québec à Montréal</td>
</tr>
<tr>
<td>M. Pierre Lachance</td>
<td>Conseil des entreprises de services environnementaux</td>
</tr>
<tr>
<td>Mme Ginette Lajoie</td>
<td>Administration régionale crie</td>
</tr>
<tr>
<td>Mme Hélène Lauzon</td>
<td>Conseil patronal de l’environnement</td>
</tr>
<tr>
<td>Mr. Alan F. Penn</td>
<td>Grand Council of the Crees</td>
</tr>
<tr>
<td>M. Michel R. Rhéaume</td>
<td>Société Nucléaire Canadienne - Section Québécoise</td>
</tr>
<tr>
<td>Mme Louise Royer</td>
<td>Assemblée des Évêques catholiques du Québec</td>
</tr>
<tr>
<td>Dr. Barry Stemshorn</td>
<td>Ottawa University</td>
</tr>
<tr>
<td>M. Claude Tessier</td>
<td>Association québécoise pour l’évaluation d’impacts</td>
</tr>
<tr>
<td>Elder Billy Two Rivers</td>
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Appendix B – Agenda

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

Objectives

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

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