

## **Understanding the Choices – The Future Management of Canada’s Used Nuclear Fuel**

NWMO Discussion Session

Final Summary Report

**Tuesday, November 9, 2004**  
**Delta Prince Edward Hotel**  
**Charlottetown, PEI**

### **1.0 PARTICIPANTS**

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There were two participants at the discussion session in Charlottetown.

The NWMO representative was Pat Patton and the assessment team member was John Neate. Laurie Bruce and Subashna Moktan were present from DPRA Canada.

The following is a summary of the comments from the discussion session in Charlottetown.

### **2.0 MANAGEMENT APPROACHES**

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#### **What are the Strengths and Limitations of each Management Approach?**

##### *2.1 Storage at Reactor Sites*

###### 2.1.1 Strengths

It was felt that on-site storage is safe and economical

###### 2.1.2 Limitations

Participants expressed concerns that:

- The current available expertise at sites is related to nuclear generation and not nuclear disposal; therefore, if the nuclear waste was to be stored on-site, there would be a need for trained disposal experts on-site.
- The sites may become “nothing but a warehouse”.

###### 2.1.3 Other Comments on Storage at Reactor Sites

There were no additional comments on storage at reactor sites.

## 2.2 Deep Geological Disposal

### 2.2.1 Strengths

There were no comments regarding the strengths of deep geologic disposal.

### 2.2.2 Limitations

With respect to the limitations listed in Discussion Document #2, participants wondered why monitoring would be difficult with deep geological disposal.

### 2.2.3 Other Comments on Deep Geological Disposal

Participants felt that deep geological disposal should be a repository and not a nuclear waste disposal site. Due to the uncertainty in the future, participants noted that any nuclear waste at a storage site should be retrievable.

## 2.3 Centralized Storage

### 2.3.1 Strengths

There were no comments made regarding the strengths of deep geological disposal.

### 2.3.2 Limitations

A participant stated that the risk of terrorism will need to be considered for above ground nuclear waste storage sites.

### 2.3.3 Other Comments on Centralized Storage

There were no other comments regarding centralized storage.

## 3.0 ASSESSMENT FRAMEWORK

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**Is the assessment framework comprehensive and balanced? Are there gaps, and if so, what do we need to add?**

There were no comments provided.

## 4.0 IMPLEMENTATION PLAN

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**Are there specific elements that you feel must be built into an implementation plan? What are your thoughts on what a phased approach must include?**

- It was felt that the availability of expertise and the provisions for a nuclear expert on site should be clearly stated in the nuclear waste management plan.
- Participants felt that accountability should be stated in the implementation plan.
- Monitoring plans will need to be articulated.
- Transparent and accountable solutions are preferred.
- It was felt that it is necessary to maintain knowledge over the long term. One of the limitations of managing a nuclear waste storage site is that it is not possible to know

whether or not there will be “ongoing knowledge in the future to maintain the management of the site”.

- Whichever nuclear waste storage option is chosen, it must be secure and allow for improvements to be made in the future.
- A number of concerns were raised about funds for nuclear waste management:
  - It was felt that a contingency plan and funding for whatever management approach is selected is necessary. It was felt that it is important to “start putting away now”.
  - A timeline to build a trust fund for the management of nuclear waste is necessary.
  - The question of whether the public would have to “pay out of their pockets” was raised.
  - It was felt that it is important to clearly articulate a financial fund equation that is not compromising and is sufficient for any problems that may be faced in the future.
  - It was stated that the government should not be allowed to borrow money from the long-term funds established for nuclear waste management.
  - The amount of funding required for each option needs to be clearly articulated.
- There is the need for a precautionary approach in terms of nuclear waste management and transportation.
- Once the final decision is made on the nuclear waste site location and method, the public needs to be informed and/or involved at any stage that requires a change to the management of nuclear waste. It was felt that it is not necessary to send out annual reports to the public. It was felt that it is only necessary to involve the public when changes to the implementation plan need to be made. In addition, any changes to the implementation plan should be communicated to the public.
- A participant was pleased that opportunity is being left for future generations to make changes if needed. The participant felt that having some form of flexibility in the management and storage plan was important due to the uncertainty of the future.
- A participant stated that they would like to see a timeline for events in terms of the management of the nuclear waste and the storage site. It was felt that dates need to be set and that they should be adhered to.
- Real risks associated with each stage of implementation need to be communicated to the public.
- Whichever waste storage option is chosen, it needs to be clearly stipulated that the facility is specifically for nuclear waste only. Otherwise, it was felt that it might be a convenient way for the government to dispose of other unwanted waste.
- Acceptance criteria need to be defined for nuclear waste storage sites.
- It was felt that it is important to communicate the real risks at each stage of the implementation.

## **5.0 Additional Comments on Discussion Document 2**

**With respect to the document, “Understanding the Choices?”, the following comments were made:**

- It is important to make a decision now (i.e., on the storage option) when there it is not an emergency.

Participants asked about the possible risks associate with used nuclear fuel storage. Some questions and concerns are listed below:

- Possibility of sabotage and gaining access to the site.
- Various security risks including terrorism.

- Participants wondered if the nuclear waste storage sites would be affected by global warming (e.g., a rise in sea level). It was asked how high the storage sites would be located above sea level.
- There was concern in regard to the water used to cool the nuclear fuel bundles and whether or not it would be radioactive. Once a station is shut down, it was wondered whether or not radioactive water would contaminate surrounding areas.

## **6.0 Other Comments**

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**Other comments that were received by participants at the discussion session in Charlottetown which were not directly related to Discussion Document 2, have been grouped under thematic headings and are summarize below.**

### Governance

- A participant felt reassured that the government has little to do with the nuclear waste management and the assessment process.
- A participant was concerned about whether current investments in technology will still be useful in the future. The question, “Is what we are investing today going to be worth it in the future?” was raised.

### Siting

- It was asked how limited the siting options are (given the amount of nuclear waste that needs to be deposited). It was asked whether or not the Canadian Shield is limited with respect to the areas that can be considered for nuclear waste storage sites.

### Public Engagement/Communication Process

- It was stated that it is important to inform and make it clear to the public that the nuclear waste that is being transported is not dangerous.
- One social problem is that society is often paralyzed by uncertainty and therefore decisions are not made or are delayed. A participant was glad to see that a timeframe has been established.

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