## **MINUTES**

#### FROM THE MEETING

#### OF THE BOARD OF DIRECTORS OF THE

# NUCLEAR WASTE MANAGEMENT ORGANIZATION (NWMO) / SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES (SGDN)

convened on January 27<sup>th</sup>, 2005 commencing at 1:30 P.M. EST.

Present

Ken Nash Director, Acting Chairman

Laurie Comeau Director Adèle Malo Director Michel Rhéaume Director

and

Elizabeth Dowdeswell President

Kathryn Shaver Corporate Secretary
Sean Russell NWMO Staff (Items 5 -11)

Marvin Stemeroff (Gartner Lee) (Item 6) John Davis (Golder Associates) (Item 6)

Absent:

Richard Dicerni Director

Fred Long Director, Treasurer

#### 1. Approval of Agenda

Mr. Nash chaired the January 27, 2005 Board meeting.

Notice of the meeting having been given to all of the Directors of the Company and a quorum of the members being present, Mr. Nash declared the meeting duly constituted for the transaction of business at 1:30 P.M. EST.

The Directors approved the Agenda for the January 27<sup>th</sup>, 2005 meeting.

## 2. Minutes of Previous Meetings

The minutes of the meeting of the Board of Directors held on December 10<sup>th</sup> 2004, copies having been sent to each member of the Board, were approved.

## 3. Business Arising from the Minutes

The President reviewed the status of actions arising from the previous Board meetings.

# 4. <u>Annual Report</u>

The President tabled a preliminary draft copy of the NWMO's Annual Report with the Board of Directors for general comments. She reviewed the key areas of focus for the 2004 Annual Report. Noting that the draft was continuing to be developed and refined, she welcomed Board comments on the general approach to reporting on the 2004 fiscal year.

The Chairman opened up the discussion for Board comments:

- Board members supported the comprehensive approach proposed for reporting on the full scope of key messages from the public arising from NWMO's 2004 engagement.
- In reviewing the engagement record for 2004, the Board observed that
  notwithstanding NWMO's advertising in print and on radio in advance the Public
  Information and Discussion sessions and invitations to draw out the general public
  to these 121 meetings across the country to share their views, just under 900
  individuals participated in total.
- Board members underscored the importance of NWMO reporting both on the comments received through the public engagement activities, and the extensive analytical work led by NWMO on the review of management options.
- NWMO was encouraged to report transparently on its interim findings from the research and assessments of the management approaches, and foreshadow possible directions for NWMO's development of recommendations.
- Board members suggested some additional points for coverage in the Report.

The President thanked the Board members for their comments. She indicated that the Annual Report would be undergoing further development in the coming weeks, to support a final copy being presented for Board approval at the February 16, 2005 meeting. (\*)

## 5. <u>Draft Study Report</u>

The President reviewed with the Board highlights from an annotated outline that had been developed to guide staff's drafting of the Draft Study targeted for release around the end of April 2005.

- The Draft Study will begin with a description of NWMO's preferred management approach, and the underlying rationale supporting the NWMO's recommendation.
- A significant part of the document will be devoted to addressing explicitly the specific study requirements under the Nuclear Fuel Waste Act relating to the comparative assessment of the management options.
- An important component of the Draft Study would be the Advisory Council's paper finalized at their January 22 meeting. The President distributed copies of the Council paper to the Board which outlines how the Council intends to discharge its mandate under the Act with respect to its comments on the NWMO study.

The Chairman invited preliminary Board discussion on the proposed outline for the Draft Study.

- Board members expressed approval of the general approach proposed for this document.
- The Board emphasized the importance of communicating in this report how NWMO considered the various risks and concerns identified by the public. The President confirmed that the Draft Study will report on what Canadians said about the issue, as well as what NWMO found and concluded based on its thorough assessment of and research on the many dimensions of the management options.

Mr. Russell, Mr. Stemeroff and Mr. Davis joined the meeting.

# 6. <u>Comparative Assessment Costs, Benefits and Risks</u>

The President introduced this item, which was intended to present the Board with an update on additional analytical work commissioned by NWMO to build on the Assessment Team work by contributing additional insights to the consideration of the three options under study. Golder Associates and Gartner Lee Limited were commissioned by NWMO to undertake this work which was designed to:

- Bring additional quantitative information and qualitative insights to bear to further NWMO's consideration of the three options; and
- Elaborate on the costs, benefits and risks of the three management approaches, in a way that would take into account the economic regions in which the approaches may be implemented, to illuminate the impacts that might arise across regions and that would need to be considered in implementation.

The NWMO required Golder Associates and Gartner Lee Limited to take as the foundation for this work the preliminary analysis of the NWMO Assessment Team, and the eight objectives identified by the Team to guide the evaluation of the management approaches. The results of their analysis and discussion are presented in reports which provide the technical analysis and the summary of the assessment of management approaches which addresses risks/costs/benefits, against illustrative economic regions.

The NWMO also requested advice on the range of measures that might be considered to avoid or minimize negative socio-economic impacts that might arise from the implementation of any of the three management approaches. Results of this analysis is presented in a separate report.

The Board invited guest presenters Marvin Stemeroff of Gartner Lee Limited and John Davis of Golder Associates to share draft findings on the options when compared against the eight objectives established by NWNO as the framework for the analysis.

 The presenters reviewed the methodology adopted to select illustrative Economic Regions for purposes of understanding how impacts might vary across locations.
 They emphasized that NWMO did not ask them to advise on Regions for implementation. Rather, they were asked to consider the characteristics of a range

- of representative regions, differing in their physical and socio-economic composition, in order to illuminate the types of implementation issues arising in different types of regions.
- The presenters outlined the range of quantitative and qualitative indicators applied to compare the three management options against the eight objectives of: public health and safety; worker health and safety; environmental integrity; security; fairness; community well-being; economic viability and adaptability.
- The presenters spoke about their work which addressed opportunities in implementation plans to include measures to:
  - avoid or minimize socio-economic effects in implementing a management approach;
  - manage community change;
  - o enhance a community's ability to capture benefits; and
  - o gain and maintain public trust.

Board discussion ensued as the presentation was being made.

- Board members sought clarification on the assessment of the three management options against objectives of safety and security:
  - Mr. Stemeroff and Mr. Davis reported that all three management methods deep geological disposal; centralized storage; and reactor site storage – were found to perform comparably.
  - This finding applied to both the public health and safety and worker health and safety objectives. All three options were found to be safe and secure if designed and implemented as envisaged in the conceptual designs. The presentation simply identified areas of relative difference between the three management approaches as it relates to benefits, risks, and costs.
- The Board inquired in particular about findings with respect to transportation risk.
  - O Mr. Davis and Mr. Stemeroff reported that they did not find transportation risks associated with potential radiation releases to be significantly different between the three approaches. However, risks associated with traffic accidents, while very low, are directly proportional to the transportation distance. It was noted that storage at reactor sites involves no transportation and as such avoids the safety and security issues that must be managed in the other two centralized management approaches.
- Board members initiated discussion on the assessment of the options in terms of economic viability:
  - The presenters found that the cost estimates developed by the Joint Waste Owners in their view represented thorough and reasonable cost estimates for the options based on the conceptual stage of definition.

- The Board inquired about Golder/Gartner Lee's presentation of costs over time using undiscounted cash flow diagrams, noting that an alternative approach used in financing such projects is discounted present value.
  - Mr. Stemeroff distinguished between:
    - financing an acknowledged and accepted practice of financing is based on present value estimates; and
    - understanding socio-economic impacts -- for which undiscounted cash-flow profiles for each management approach is helpful in outlining the timing, repeat cycles and magnitude of socio-economic impacts on communities from the project.
- Board members sought additional clarification on the indicators applied by Golder/Gartner Lee in addressing other areas of the assessment. It was stated that the consultants relied on the Assessment Team's measures and indicators as a basis for their quantitative analysis.

Mr. Stemeroff and Mr. Davis withdrew from the meeting.

Responding to the Chairman's inquiry about the next steps associated with this work, the President noted:

- Golder/Gartner Lee would be finalizing their reports in the upcoming weeks.
- This work of Golder Associates and Gartner Lee would represent one of the sources of analysis to which NWMO would refer as it finalized its own internal assessment of the management options.
- The NWMO, in arriving at its own final assessment of the three options, would be taking into account the work of the Assessment Team, the various bodies of research considered by NWMO, including its own commissioned work.
- She noted that NWMO was currently undertaking further review of the security considerations in relation to the management approaches, in that this was a particular area of concern highlighted by the public.

## 7. Management Approach

The President invited Sean Russell, NWMO staff, to summarize the key features of a management approach presently under development by NWMO.

 The management approach under development seeks to bring together positive features of the three options specified for study in the Nuclear Fuel Waste Act in such a way that NWMO believes may better respond to the values and expectations held by Canadians.  The NWMO reviewed its observations on key features of this management approach, which draw on findings from both NWMO's analytical work and public engagement activities.

#### The Chairman invited Board discussion:

- Members noted the importance of NWMO's responsiveness to the views of Canadians in developing its recommendations under the Nuclear Fuel Waste Act. In this regard, there was support for NWMO considering how best to tailor a management approach that would seek to meet public expectations.
- The Board expressed support for the general direction of this new approach proposed by NWMO in this initial discussion around the concept being designed, and looked forward to learning more about the approach as the design and costing is completed.

## 8. <u>2004 Budget Update</u>

The President provided the Board with an update on expected 2004 year-end expenditures. The preliminary estimate for year-end expenditures is \$8.9 million.

The external audit will confirm the 2004 expenditures and the amount of the NWMO budget unspent as of December 2004. The President reported that, consistent with the direction supported by the Audit, Finance and Risk Committee, she would be bringing forward for Members' approval the year-end waivers to confirm that the unspent 2004 budget may be retained and used in 2005, as needed and subject to prior Board approval. (\*)

## 9. Report from the Audit, Finance and Risk Committee

On behalf of the Chair of the Audit, Finance and Risk Committee, Ms. Malo debriefed the Board of Directors on the Committee's meeting convened January 7, 2005.

In addition to standing items related to budgetary reviews and business risk the Committee addressed the terms of the NWMO's external audit of its 2004 financial statements.

- The Committee received a presentation by the external audit team from Deloitte & Touch which addressed the auditors proposed plan for the NWMO's 2004 year-end audit. The auditors reviewed the objectives of the external audit and the respective obligations of management, the Audit Committee and the external audit team.
- The auditors reviewed the proposed areas of focus for the audit, and invited Committee discussion and suggestions on other areas of focus that they would like addressed in the audit.
- The Committee convened an in-camera meeting with the external auditors, Mr.
   Gunn and Ms. Zviedre, without the presence of NWMO management.
- Following discussion with the external auditors, the Committee resolved to adopt the audit plan and terms of engagement as proposed by Deloitte & Touche for the external audit of the NWMO's financial statements for fiscal year ending December 31, 2004.

## 10. Engagement

The President provided a brief introduction to the series of written reports that were tabled for the information of the Board of Directors:

- Report from the December 2004 Opinion Leader Roundtable convened by the Public Policy Forum
- o A Draft Executive Summary from NWMO's Public Discussion Sessions
- o Highlights from NWMO's first two E-Dialogues
- o Preview of findings from NWMO's December 2004 focus groups.

The Chairman and President reported on:

- A meeting convened on January 25, 2005 with the President of the Canadian Nuclear Safety Commission;
- An upcoming meeting scheduled for January 31, 2005 with Minister Efford, Minister of Natural Resources Canada. They would be accompanied by a member of the NWMO Advisory Council;
- Plans in progress for a Board member to undertake a brief research visit to SKB, the agency responsible for long-term used fuel management in Sweden.

# 11. <u>Meeting Calendar</u>

The 2005 meeting calendar was reviewed with the Board of Directors.

## **Termination of Board Meeting**

There being no other items for discussion, the Directors concluded their session at 5:00 PM EST.

Corporate Secretary
Dated this 16th day of February, 2005