NUCLEAR WASTE MANAGEMENT ORGANIZATION (NWMO)

BOARD OF DIRECTORS

MEETING

September 24, 2015

AGENDA

1. Constitution of Meeting and Approval of Agenda
2. Minutes of Previous Meeting
3. Business Arising from the Previous Minutes
4. In Camera Session
5. Report from the Siting Committee (in camera)
6. Report from the Audit, Finance & Risk Committee
7. Report from the Advisory Council Meeting
8. President’s Report
9. Progress Against Proof Testing Plan
10. 2016-2020 Draft Business Plan
11. APM Five-Year Review of Lifecycle Cost Estimate
12. CNSC Update
13. Business Risk
14. Update on Alternative Fuel Cycles
15. Draft 2016 Performance Measures
16. Safety Case Presentation
17. Strategic Planning with the Advisory Council
18. Legal / Corporate Secretary Report
19. Next Meeting of the Board
20. In Camera Session

Conclusion of Meeting
MINUTES

OF THE MEETING

OF THE BOARD OF DIRECTORS OF THE

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

convened in Toronto, ON
on September 24, 2015
commencing at 9:00 a.m. EDT

Present
Pierre Charlebois       Chair
Wayne Robbins           Vice Chair
Ron Jamieson            Director
Ken Nash                Director, President & CEO
Josée Pilon             Director (via conference call)
Deborah Poff            Director
Ian Ross                Director
Beth Summers            Director (except items 1-6)
Darren Murphy           Director

Staff in attendance:
Paul Gierszewski        Director, Safety & Licensing (except items 1-4, 20)
Chris Hatton            Director, APM Repository Design Development (except items 1-4, 20)
Michael Hung            CFO (except items 1-4, 20)
Pat Moran               General Counsel and Corporate Secretary (except items 4, 20)
Gillian Morris          Assistant Board Secretary (except items 4, 20)
Kathryn Shaver          VP, APM Engagement & Site Selection (except items 1-4, 20)
Jennifer Spragge        VP, Human Resources
Derek Wilson            VP, Design & Construction (except items 1-4, 20)
Bob Watts               Associate Vice President, Aboriginal Relations (except items 1-5, 20)

1. Constitution of Meeting and Approval of Agenda

Notice of the meeting having been given to all of the Directors of the Company in accordance with the by-laws and a quorum being present, the Chair declared the meeting duly constituted for the transaction of business and called the meeting to order at 9:00 am.

2. Minutes of Previous Meeting

The minutes and in camera minutes of the meeting of the Board of Directors held on June 11, 2015 copies having been sent to each member of the Board, were approved.
3. **Business Arising from the Previous Minutes**

Pat Moran reviewed the actions list from the previous meeting. Directors discussed the action related to the use of the recognition funds by communities. A Director asked if the communities were following the guidelines NWMO provided for the funds. The Board was advised that the guidelines had been followed and municipalities were required to establish reserve funds and usage of the funds was decided upon in communities’ Council meetings.

4. **Report from the Human Resources & Compensation Committee (In Camera)**

The Board convened an *in camera* session to receive the report from the Chair of the Human Resources and Compensation (HRC) Committee.

5. **Report from the Siting Committee**

Mr. Jamieson reported highlights of the September 23 meeting of the Siting Committee:

- the Committee received a detailed report on the status of preliminary assessment work and the status of municipal and Aboriginal engagement in communities currently undergoing Phase 2 Assessments;
- the Committee also reviewed the progress against the Siting Project Execution Plan (PEP);
- information was provided to the Committee on planned communication of siting timelines for inclusion in the Implementation Plan;
- the Committee also reviewed and provided advice on a number of issues related to NWMO’s early policy development with respect to Aboriginal engagement; and
- standing reports on items including engagement and the external landscape were also tabled with the Committee.

The remainder of Mr. Jamieson’s report was given in camera.

6. **Report from the Audit, Finance & Risk (AFR) Committee**

The Chair of the AFR Committee reported on the Committee’s September 23, 2015 discussions as follows:

- Deloitte LLP attended the AFR Committee meeting to provide a review of the External Audit Plan for both NWMO and the NWMO Pension Fund. The AFR Committee approved the proposed audit plans presented and recommended that the Board approve the audit fees for both the audit of the financial statements and the pension fund statement.

- The Committee reviewed the proposed remuneration for the external audit, determining that they were reasonable and recommended the following for Board approval:
IT IS HEREBY RESOLVED THAT:

On the recommendation of the Audit, Finance and Risk Committee, remuneration of the external auditors, for undertaking the external audit of NWMO's financial statements for the fiscal year ending December 31, 2015, is approved as proposed.

The Motion was made, seconded and unanimously passed.

- The draft 2016-2020 NWMO Business Plan was reviewed by the Committee and in response to a Board request estimate on staffing to strengthen succession planning were provided. The Plan will be tabled for Board approval in December;

- Other items discussed included:
  - business risks;
  - a draft of the 2015 Performance Report and draft 2016 Performance Objectives;
  - an update on the Five Year review of the APM Lifecycle Cost Estimate;
  - a report from the Pension Management Committee; and
  - other regular management reports.

Report from the Advisory Council Meeting

On behalf of the Chair, David Crombie, Kathryn Shaver delivered his report on the highlights of the Council's September 23 meeting, which included the following:

- The Council welcomed its newly appointed members, Mr. Joseph Cavalancia and Diane Kelly;
- Council reviewed and discussed developments in the APM siting process related to the final community undergoing a Phase 1 Preliminary assessment and developments related to communities in Phase 2 of the process;
- Much of the Council’s agenda focussed on strategic topics requested by Council. Council discussed and provided advice on items including:
  - a review of NWMO’s business planning sub-objectives related to safety and partnership;
  - NWMO’s draft 2016-2020 Business Plan and NWMO’s Implementation Plan;
  - planning timelines; and
  - a review of NWMO’s transparency policy.

A number of standing reports were also provided to Council and a detailed presentation was given to Council on NWMO’s work on the APM engineered barrier system.

David Crombie also asked Ms. Shaver to pass on his positive comments on the dynamics of the Council’s meeting and on enthusiasm of NWMO staff.

President’s Report

Mr. Nash reported on the following key developments and activities since the June Board meeting:
- the June Board approval of the site selection and proof testing Project Execution Plans (PEPs) provides NWMO with a good foundation for planning and control;
- development of the 2016-2020 Business Plan continues and is further streamlined by the approval of the PEPs;
- APM site selection continues to progress well; it will be necessary to seek ongoing feedback from the Board on how policy on Aboriginal engagement will be translated into practice as the site selection process proceeds;
- the Canadian Environmental Assessment Agency’s (CEAA) public comment period for the proposed licence conditions for the Joint Review Panel Report on OPG’s low and intermediate level waste DGR closed on September 1 with a Minister’s statement expected on December 2. NWMO continues to monitor developments related to this project; and
- NWMO continues to strengthen its staffing capability with new hires in key areas and planning for replacement of staff who will be retiring.

Mr. Nash also reported on nuclear-related developments in Canada and internationally. He reported that NWMO continues to have international visitors interested in NWMO’s program, most recently from Australia, Belgium and the United States.

Directors discussed with Mr. Nash the kind of information that was of interest to the international visitors. Directors also discussed recent presentations to communities as part of the APM capacity building program.

9. Progress Against Proof Testing Plan

The Board was updated on NWMO’s work on the APM Engineered Barrier and Proof Testing program which included:
- discussion of a number of technical papers being written and one to be published in Nuclear Engineering on the weld crush test;
- demonstration of the bentonite pellet placement;
- completion of the full-size Mark 2 steel container crush test;
- completion of fabrication of the prototype slip skid pallet; and
- meetings with the Canadian Nuclear Safety Commission (CNSC) to provide an overview of NWMO’s engineered barrier design.

Directors discussed the results of the crush tests and future tests planned. Mr. Hatton reported that results of the crush test were as predicted.

10. 2016-2020 Draft Business Plan

The draft 2016-2020 Draft Business Plan was shared with the Board. Management provided an overview of the key planning assumptions for APM and the work on the OPG L&ILW DGR. Also discussed was an additional strategic objective related to advance planning for the construction and operation of the DGR and the Centre of Expertise.

Management reviewed the APM Phase 2 siting objectives, milestones and assumptions. Plans were discussed for work in Aboriginal engagement. It was noted that as NWMO learns how capacity can be built in an individual community, additional funds may need to be reallocated to capacity building. NWMO
would consider these exceptions on a case by case basis, while keeping the total expenditures within the overall cost envelope.

Directors discussed different ways of building capacity in communities and recognized that each community has individual needs.

The objectives, milestones and assumptions for the Engineered Barrier Proof Testing program and for the work related to the OPG L&ILW DGR were reviewed.

Directors discussed issues related to future staffing and acquisition and ownership of specialized equipment.

As Members base their contribution amounts on NWMO’s planned budget, the Board asked management to ensure budget forecasts be as accurate as possible. A Director asked management to identify risks that were evaluated to justify contingency levels estimated in 2016 and to identify key milestones that will have a significant impact if moved. Management committed to coming back with information at the December meeting. (*)

11. **APM Five-Year Review of Lifecycle Cost Estimate**

The Board was provided with an update on work agreed upon at the June Board meeting as well as on the proposed life-cycle estimate plan to support agreement of the cost estimate at the December Board meeting and final approval in February 2016.

It was reported that stakeholder reviews were conducted and discussions with NWMO Members continue. Finalization of the estimate is expected to be completed on schedule.

Michael Hung discussed funding structures of other international long term nuclear waste management projects.

12. **Canadian Nuclear Safety Commission (CNSC) Update (In Camera)**

The Board was provided with an update on discussions with CNSC on the pre-licensing involvement of CNSC in APM.

13. **Business Risk**

Michael Hung reviewed the key areas of business risk for both APM and NWMO’s work on the OPG L&ILW DGR. Mr. Hung also discussed NWMO’s IT Security controls with the Board.

14. **Update on Alternative Fuel Cycles (In Camera)**

Derek Wilson provided an update to the Board on developments related to alternative fuel cycles.

15. **Draft 2016 Performance Measures**

Michael Hung presented the Directors with NWMO’s draft 2016 Performance Measures which will be used both to track and assess performance. He reported that, consistent
with the approach used in 2015, a small number of high level key measures are proposed. It was noted that the performance measures will be finalized for approval in December and a more detailed program for the new strategic objective will be provided.

16. **Safety Case Presentation**

As an educational initiative requested by the Board, Paul Gierszowski provided a high level overview of the safety case. The Directors stated that the presentation was clear and helpful.

17. **Strategic Planning with the Advisory Council**

In 2015, at the Advisory Council’s request, an addition was made to the Council’s Terms of Reference to include an opportunity for an annual interaction between the Board and Council to enable Council to provide the Board with its assessment of key strategic issues.

Mr. Nash and Ms. Shaver discussed with the Board possible topics for this session. Directors provided suggestions for a number of topics for this meeting. The Board Chair requested management review the draft agenda for the planning session with the Chair of the Siting Committee. (*)

18. **Legal / Corporate Secretary Report**

Pat Moran reported on the status of the judicial review of the environmental assessment and licensing process relating to OPG new build project at Darlington.

19. **Next Meeting of the Board**

- Strategic Planning with the Advisory Council
  Tuesday, December 1 (3-5 pm)
- Committee Meetings
  Wednesday, December 2
- Board Meeting
  Thursday, December 3

20. **In Camera Session**

Board Members held an in camera session.

**Conclusion of Meeting**

There being no other business, the Chair declared the meeting adjourned at 2:00 pm.

* Denotes actions to be taken.