NUCLEAR WASTE MANAGEMENT ORGANIZATION (NWMO)

BOARD OF DIRECTORS

MEETING

February 19, 2016

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
6. Report from the Audit, Finance & Risk Committee
7. Report from the OPG L&ILW DGR Oversight Committee
8. Report from the Advisory Council Meeting
9. President’s Report
10. 2016-2020 Business Plan – Update on Contingency
11. APM Lifecycle Cost Estimate
12. Progress Against Proof Testing Project Execution Plan
13. Business Risk
15. Audit, Assessment Report
16. In Camera Session
17. Next Meeting of the Board

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 February 19, 2016
commencing at 9:00 a.m. EST

Present
Pierre Charlebois Chair
Wayne Robbins Vice Chair
Carlo Crozzoli Director
Ron Jamieson Director (Items 5-17)
Ken Nash Director, President & CEO
Josée Pilon Director
Deborah Poff Director
Ian Ross Director
Darren Murphy Director (via teleconference)

Staff in attendance:
Paul Gierszewski Director, Safety & Licensing (except items 1-4, 16, 17)
Paul Hader Performance Assurance Consultant (item 15 only)
Marni Halter Senior Counsel (except items 1-4, 16, 17)
Michael Hung CFO (except items 1-4, 16, 17)
Gillian Morris Assistant Board Secretary (except items 4, 16, 17)
Kathryn Shaver VP, APM Engagement & Site Selection (except items 1-4, 16, 17)
Jennifer Spragge VP, Human Resources (except item 16, 17)
Derek Wilson VP, Design & Construction (except items 1-4, 16, 17)
Bob Watts Associate Vice President, Aboriginal Relations (items 5, 6 only)
(via teleconference)

Guest:
David Crombie Chair, Advisory Council (item 8 only)

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.

The Chair welcomed Mr. Carlo Crozzoli, Interim Chief Financial Officer, and Senior Vice President Corporate Business Development and Chief Risk Officer at Ontario Power Generation (OPG), to replace Ms. Beth Summers on the Board of Directors.

The Chair also congratulated Mr. Ron Jamieson on receiving the Xerox Canada AFOA Excellence in Aboriginal Leadership National Award.
2. **Minutes of Previous Meeting**

The minutes and in camera minutes of the meeting of the Board of Directors held on December 3, 2015, copies having been sent to each member of the Board, were approved.

3. **Business Arising from the Previous Minutes**

The Assistant Board Secretary reported on the actions from the previous meeting noting that only one action remained outstanding. With respect to the outstanding item, the Chair asked the L&ILW DGR Oversight Committee Chair if timing was appropriate to invite the two mining experts on the Committee to the Board meeting. Mr. Robbins did not think it was appropriate timing as of yet and suggested this remain as an action.

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. Wayne Robbins, who assumed Chair from Mr. Jamieson for the majority of the Siting Committee meeting, reported on highlights of the meeting held on February 18, 2016 which included:

- A discussion with Mr. J. P. Gladu, President of the Canadian Council of Aboriginal Business (CCAB) who discussed the Progressive Aboriginal Relations (PAR) program offered by the CCAB;
- The Committee received a detailed update on the communities undergoing Phase 2 assessments which included reports by siting study area and the progress against the Siting Project Execution Plan;
- Management reviewed with the Committee a proposal for communicating the updated APM cost estimate, including the assumed in-service date for the APM project;
- Staff discussed further details regarding possible participation of siting area communities in two learning opportunities at key 2016 conferences. Mr. Robbins reported that the Committee was in agreement with the plan as presented. The Board Chair asked Board members to express their interest in attending the conferences discussed to the Assistant Board Secretary. (*)
- The Committee was provided with the status of work on transportation engagement; and
- As part of regular reporting to the Committee, management provided updates on the Council of Elders, the External Landscape, and Media Analysis.

A Director asked if management is considering participating in the PAR program discussed by Mr. Gladu of the CCAB. Mr. Crozzoli reported that Ontario Power Generation (OPG) is a member of the PAR program and would be happy to support NWMO in learning more about the program.

Further discussion on Mr. Robbins report was held in camera.
6. **Report from the Audit, Finance & Risk (AFR) Committee**

The Chair of the AFR Committee reported on the Committee’s discussions at the February 18, 2016 meeting.

Mr. Ross reported that the AFR Committee reviewed the 2015 audited financial statements and the auditor’s report. Mr. Ross reported that no significant issues were identified by Deloitte during the course of their audit and Deloitte will provide a signed audit report once the financial statements have been approved by the Board. He also reported that the Committee had an opportunity to meet with the Auditor without the presence of staff or management. The AFR Committee recommended that the Board approve the 2015 audited financial statements.

Mr. Ross noted that the auditors commended management and its cooperation in preparation of the financial statements and that there were no constraints on the auditor’s access to information.

**IT IS HEREBY RESOLVED THAT:**

On the recommendation of the AFR Committee, the Board approves the 2015 Financial Statements for the NWMO fiscal year ended December 31, 2015, as audited and presented by the external auditors, Deloitte LLP.

The motion was made, seconded and unanimously passed.

Mr. Ross also reported that the Committee discussed:

- the updated lifecycle cost estimate for an APM repository. Mr. Ross noted the approval of the updated cost estimate will be dealt with in a later agenda item;
- an update on the 2016-2020 NWMO Business Plan contingency levels;
- a review of NWMO’s 2015 internal audit assessment results;
- a review of key risks to NWMO;
- an update to the status of the NWMO pension plan;
- an update on the Lifecycle Liability Management (LLM) work programs;
- standing reports on financial results, cash flow and compliance;
- an update to the Organizational Authority Register (OAR); and
- a regular review of the Chair, President’s and top five executives’ expense reports.

Mr. Ross commented that the internal audit confirms that the organization is functioning well and the number of deficiencies reported were minimal. Mr. Ross commended management on successfully releasing findings of Phase 1 assessments.

The Board was also asked to consider changes to the employee business expense standard being recommended by the AFR Committee, which included adjustments to the daily meal allowance and reimbursement rates for the use of personal vehicles for management staff.
IT IS HEREBY RESOLVED THAT:

On the recommendation of the AFR Committee, the Board of Directors approves the revisions to the Employee Business Expense Standard as proposed.

The motion was made, seconded and unanimously passed.

7. Report from the OPG Low and Intermediate Level Waste (L&ILW) DGR Oversight Committee

Wayne Robbins, Chair of the L&ILW DGR Oversight Committee reported on its February 18, 2016 meeting.

Mr. Robbins reported that the Committee discussed the following:

- an update on the work related to obtaining waste characterization samples from OPG;
- a progress report on the regulatory approvals and detailed design phase of work;
- the approved 2016-2020 business plan and the key assumptions in the 2016 work plan;
- an update on the expected judicial review challenges and associated timelines; and
- an update on the process to be accepted to OPG’s approved suppliers’ list.

Directors discussed the process to be accepted on OPG’s approved suppliers list, how that could be achieved and how the approach would be viewed by the regulator.

A Director asked to confirm that costs associated with any work completed by NWMO to assist in responding to information requests by the Minister of Environment on the low and intermediate level waste DGR would be borne by OPG. Mr. Nash confirmed any associated costs to NWMO would be paid OPG.

8. Report from the Advisory Council Meeting

David Crombie delivered his report on the highlights of the Council’s February 10, 2016 meeting, which included discussions on the following:

- an update from the President on recent NWMO activities and developments in nuclear waste management both nationally and internationally;
- an update on developments in the APM siting process including a thorough briefing on recent activities in regional siting areas and an update on NWMO’s progress against its siting project execution plan;
- a report on NWMO’s plans for transportation engagement work; and
- standing reports related to APM’s proof testing and engineered barrier design, NWMO’s support to the OPG L&ILW DGR project.

Mr. Crombie reported that the Council also devoted part of the meeting to Council business discussing the following topics:
• planning for the development of Council’s comments that will be included in NWMO’s next Triennial Report;
• review of the Council’s letter to the Minister regarding NWMO’s 2015 Annual Report; and
• finalization of the Advisory Council’s 2015 Advice Tracking Matrix.

Mr. Crombie also reported that in discussions of NWMO’s engagement with Aboriginal communities the Council suggested some additional information to assist them with understanding Aboriginal territories and decision-making processes. Directors noted that the information requested by Council in understanding Aboriginal territories and decision-making processes would also be helpful to the Board. (*)

9. **President’s Report**

Mr. Nash reported on key developments and activities since the June Board meeting:

• The Advisory Council continues to function well and provide NWMO with helpful advice;
• NWMO has an approved business plan for the next five years and work in all areas is proceeding according to plan;
• NWMO continues to focus on important areas related to: site selection field activities; building relationships with municipalities and First Nations in siting areas; further developing NWMO’s business processes and project controls; and, working to locate staff in siting areas where possible; and
• Work continues to identify and manage key areas of risk.

Mr. Nash also reported on key developments in the Canadian nuclear industry and internationally. He noted that officials from the U.S. Department of Energy recently visited NWMO to learn about NWMO’s site selection process. It was also anticipated NWMO would provide some assistance to the UK in reviewing their re-developed site selection plans.

Mr. Nash also addressed the letter received by OPG from the Minister of the Environment related to the OPG L&ILW DGR indicating that NWMO will work to understand possible impacts to APM and OPG’s planned response to the Minister. Board members suggested that management report back to the Board in advance of the Minister’s April deadline, convening an additional meeting of the Board if required. (*)

10. **2016-2020 Business Plan – Update on Contingency**

Michael Hung reported that the Board approved NWMO’s 2016-2020 Business Plan at its December Board meeting. Management was asked to consider whether the planned contingency for 2016 in the Phase 2 site selection budget was required in its entirety or could be reduced. Mr. Hung reported that, after careful consideration and review, management has reduced the Phase 2 contingency for 2016.
11. **APM Lifecycle Cost Estimate**

Derek Wilson discussed the APM Lifecycle Cost Estimate with the Board of Directors. He noted that NWMO’s obligation under the Nuclear Fuel Waste Act is to maintain an updated lifecycle cost estimate for the implementation of APM. As such NWMO will be submitting an updated APM lifecycle cost estimate to the Minister of Natural Resources as part of the 2016 Annual Report in March 2017.

**IT IS HEREBY RESOLVED THAT:**

On the recommendation of the Audit, Finance & Risk Committee, the Board approves the revised APM lifecycle estimate of $18.3B (2015 $’s)

The motion was made, seconded and unanimously passed.

The Chair noted the Board's appreciation of staff and management for work to prepare the lifecycle cost update. He remarked that early involvement of the Board in preparing the estimate was very helpful in assisting the Board and Member organizations to establish a comfort level with the estimate and would like to see a similar process undertaken for future estimates.

12. **Progress Against Proof Testing / Project Execution Plan**

Management reported on work in the APM engineered barrier and proof testing areas since the last Board meeting. Highlights of the work in the last period included:

- Completion of machining of the steel shell for the pressure test used fuel containers;
- shaping of the first full-size bentonite buffer block;
- completion of the fabrication of the slip-skid mechanism; and
- continuing review with the Canadian Nuclear Safety Commission engineered barrier design and proof testing process.

A Director suggested that the Board would be interested in visiting the NWMO test facility at an appropriate time as determined by management. (⋆)

13. **Risk Review**

Michael Hung reviewed the key areas of risk for both APM and NWMO’s work on the OPG L&ILW DGR project. He also reviewed with the Board the results of the external review of IT security. The conclusions reported that NWMO has sufficient processes and controls established to protect its IT systems.

Directors discussed whether changes in areas of focus for the new Federal government provided any new risks to APM.

14. **Occupational Health and Safety Review and Statistics**

Management provided the Board with an annual update on NWMO’s performance on occupational health and safety and environmental protection in 2015 for the work on the OPG DGR, APM fieldwork and at the head office. Management reviewed work in
each area to support providing a safe and healthy environment for all employees. There were no reportable incidents related to the test facility, APM field work or the OPG DGR project fieldwork. The Joint Health and safety Committee met throughout the year and the 2015 report revealed that there were not issues or concerns to be addressed at the head office. NWMO’s CSA Z1000 and ISO 14001 certifications remained in place in 2015 and re-certification is expected for 2016.

15. **2015 Audit Activities**

Paul Hader, NWMO’s Performance Assurance Consultant joined the meeting to summarize the results of the execution of the NWMO 2015 Audit and Assessment Plan. Mr. Hader reported that 24 audits were conducted with a focus on financial controls, internal processes for planning, quality, safety, environment and supplier processes for quality and safety assurance.

He reported that certification audits continued to find NWMO fully compliant with ISO 9001:2008, ISO14001:2004 and CSA Z1000-06. NWMO also maintained conformance with CSA N286-05 and CSA N286-12. He noted that the number of non-conformances were consistent with the previous year and that corrective actions were in place to address all non-conformances. He also discussed the audit plan for 2016.

A Director asked if the internal audit plan was reviewed or approved by the Audit, Finance & Risk Committee or the Board. Mr. Nash indicated it was not currently approved by the Board or AFR Committee. The Director suggested NWMO should consider having the internal audit plan approved by the Board annually. (*) Directors also discussed the findings and the process of escalating any repeat findings and what follow up would be on those weaknesses.

16. **In Camera Session**

Board Members held an in camera session.

17. **Next Meeting of the Board**

The next meeting of the Board of Directors will take place as follows:

- **Tuesday, June 7**
  L&LW DGR Oversight Committee Meeting

- **Wednesday, June 8**
  Committee meetings

- **Thursday, June 9**
  Board of Directors Meeting

  Annual General meeting – To be determined

**Conclusion of Meeting**

There being no other business, the Chair declared the meeting adjourned at 1:30 pm.
* Denotes actions to be taken.

Pierre Charlebois
Chair