

Advisory Council to the
Nuclear Waste Management Organization

Record of Discussion: February 13, 2017 Meeting

Record of discussion of the meeting of the Advisory Council to the
Nuclear Waste Management Organization (NWMO) /
Société de gestion des déchets nucléaires (sgdn)

Convened at 22 St. Clair Avenue East, Toronto, Ontario,
commencing at 9:00 a.m. EST On February 13, 2017

Advisory Council Members Present:

Hon. David Crombie, Council Chairman
David Cameron, Vice Chairman
Eva Ligeti
Derek Lister
Dougal McCreath
Donald Obonsawin (by phone)
Linda Thompson
Dean Jacobs
Diane Kelly (items 4- 16)
Joseph Cavalancia

Guest: Peter Keech

NWMO Staff Present:

Laurie Swami	President and CEO
Gillian Morris	Board Secretary (except Item 16)
Derek Wilson	VP Design & Construction (except items 15-16)
Chris Hatton	Director, Nuclear Design & Transportation (except items 15-16)
Paul Gierszewski	Director, Safety & Licensing (except items 15-16)
Marni Halter	Senior Counsel (except items 15-16)
Bob Watts	Associate VP, Aboriginal Relations (except items 15-16) (by phone)
Lisa Frizzell	Director, Corporate Affairs (except items 15-16)
Jo-Ann Facella	Director, Social Research & Dialogue (except items 15-16)
Mahrez Ben Belfadhel	VP Engagement & Site Selection
Elena Mantagaris	Director, Government & External Relations (except item 16)
Joe Gaboury	Director Aboriginal Relations (except items 15-16)

1. Constitution of Meeting / Approval of Agenda

The Chair called the meeting to order at 9:00 a.m. The agenda was agreed upon as written.

2. Minutes of Previous Meeting / Action Items

The Advisory Council reviewed and approved the record of the meeting convened on November 29, 2016.

Staff requested clarity on information requested by the Council on engagement audits. It was agreed that a verbal report on the engagement audits would be provided to the Council at the next meeting. (*)

3. President's Report

The President updated the Council on recent developments.

- Progress on work towards borehole drilling;
- Recent Aboriginal agreements;
- Completion of NWMO's Triennial Report;
- Continuing work on the OPG low and intermediate level waste (L&ILW) DGR;
- NWMO participation at the International Conference on Geological Repositories (ICGR); and
- the President's upcoming visit to the Waste Isolation Pilot Project (WIPP).

4. Report from International Conference on Geological Repositories (ICGR)

Mr. Cameron provided a report to the Advisory Council on his recent experience attending the December ICGR emphasizing that it was a significant event for NWMO with 250 people in attendance from 15 different countries.

Mr. Cameron discussed NWMO's participation and his experience at the conference noting that the extensive NWMO siting community participation symbolized the approach NWMO had taken on broad public engagement.

A Council member asked if there were any common threads of concern amongst NWMO's community participants. Ms. Facella noted that the participation of communities reinforced the strength of Canada's program and community delegates were pleased to participate in the conference.

5. APM Overview and Risk Assessment

Management highlighted key areas of business risk relevant to near-term activities in APM implementation.

The Council had an in camera discussion on some of the key risks facing NWMO.

6. Site Selection Process: Status Update

Management reviewed the progress on the siting program with Council members.

Mr. Belfadhel provided highlights of activities in the siting process, indicating that good progress has been made and all work is completed or advancing according to plans for both site selection and engagement. Council members asked about details of borehole drilling and how the samples would be analyzed and the boreholes closed. Staff outlined the plan for boreholes noting that there will be a storage facility in each siting area for the core samples where they will be analyzed and tested.

Council discussed various aspects of the borehole drilling plan and asked questions related to budget variances in the siting program. A Council member specifically noting that the siting budget is underspent so far in 2017 and asked if this was caused by a lack of resources or other issues. Staff reported that NWMO is currently working in a very large geographical area and that there had been funds budgeted for engagement in areas where communities were not involved. Council members discussed integrating the Municipal and Aboriginal engagement processes and how NWMO manages communities' varying speeds of progression through the process. A Council member suggested a partnership model will test the partners' needs for mutual understanding and progression in the process.

7. Geoscience Briefing

Management reviewed the findings from detailed geological mapping for two of the siting areas. The approach to initial borehole drilling and the next steps for the siting communities was also reviewed.

A Council member asked how much influence was given to the exclusion of lake areas in assessing potential repository site locations. Mr. Belfadhel advised that site choices were strongly influenced by the presence of lakes as often they were identified as areas of heavy recreational use and some were also identified as culturally sensitive areas.

8. Strategy for 2017 Stock-taking

Management briefed Council on plans for reviewing communities' progress in the Siting process during 2017.

Council members suggested that the next narrowing down decisions for NWMO will be more challenging noting that if a community exits the process as a potential host, they may remain in the process as part of a broader siting region. Council members also noted that as a focus narrows to a smaller number of communities, the external interest and pressure may increase dramatically. A Council member also noted that benefits received by communities in other similar international projects will shape expectations for NWMO's siting communities and NWMO should be prepared for this. Management noted it is working on how potential partnerships will work and what it will mean for a community to host the project.

9. Corrosion Peer Review Report

Staff discussed the results of the Corrosion Peer Review Report with the Council. In response to questions from Council members, NWMO staff indicated that impurities in copper have been considered, and that there are existing specifications. NWMO will be assessing these specifications further. Dr. Keech indicated that as copper coatings will not be welded, and are mechanically supported by steel, they will have a much higher tolerance to impurities versus the freestanding copper form in previous container designs. Analysis of archaeological/analogous samples that have a much lower copper purity and have shown very impressive corrosion resistance properties for millennia or longer was recommended by the Corrosion Review Panel, and NWMO has initiated work to support this. Also NWMO staff confirmed that water samples will be retrieved from the deep boreholes at the drill sites, and analyzed in order to better understand the actual water chemistry and its impact on corrosion.

Council members asked staff how NWMO will avoid unforeseen events such as occurred at the Waste Isolation Pilot Plant (WIPP) facility where a change in materials caused a serious issue. NWMO staff noted that in part, NWMO's safety assessment would consider unlikely scenarios, and the results will help avoid or minimize unforeseen events.

10. Building Relationships

Council received updates on the work of the Council of Elders, developments in the external landscape and an analysis of NWMO-related media stories.

11. Transportation Engagement

Staff provided an update on the work underway related to engagement on NWMO's transportation document. Discussions will be held on the topic of transportation in 2017 and further information will be collected by fall of 2017.

A Council member asked about what kind of information NWMO expects to collect from the engagement sessions. Mr. Belfadhel advised NWMO is gathering intelligence about the key issues and key stakeholders to allow NWMO to understand what is required to develop a socially acceptable transportation plan and develop mitigation measures.

12. APM Technical Program Update

Mr. Wilson provided the Council with an update on the engineered barrier design and proof testing work.

Council asked questions about the handling of defective fuel bundles and how they are identified. Mr. Wilson reported that defects were identified as the bundles are removed from the reactor. They are then stored in a separate area and are minimal in quantity. Mr. Hatton provided an update on the technical transportation work.

13. Review of Progress on OPG's L&ILW DGR

Council was provided with an update on the progress of work underway in OPG's low and intermediate level waste DGR Program.

Mr. Gierszewski reported that NWMO continued to support the completion and submission of OPG's responses to the additional information requested by the Minister of Environment and Climate Change. OPG submitted the response to CEAA on December 28th. A report from the Minister could come by the end of 2017.

14. **Next Meeting of the Advisory Council**

Monday, May 29, 2017
9:00 am – 4:00 pm
Toronto, Ontario

15. **Review and Confirmation 2016 Annual Tracking Matrix (In Camera)**

Council met in camera to review and confirm its 2016 annual tracking matrix.

16. **Review of 2014-2016 Triennial Report Transmittal Letter to Minister**

Council met in camera to confirm its transmittal letter to the Minister.

Termination of Meeting

The Chair declared the meeting for the day terminated at 3:00 pm.

Dated the 29th day of May, 2017

David Crombie
Advisory Council Chair