

Advisory Council to the
Nuclear Waste Management Organization

Record of Discussion: September 19, 2011 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. EDT on September 19, 2011

Advisory Council Members Present:

Hon. David Crombie Council Chairman
David Cameron
Marlyn Cook
Fred Gilbert
Rudyard Griffiths
Dougal McCreath
Donald Obonsawin
Michel Rhéaume

Regrets:

Derek Lister
Eva Ligeti

NWMO Staff Present:

Ken Nash President & CEO
Kathryn Shaver VP, APM Engagement and Site Selection
Pat Moran General Counsel & Corporate Secretary
Gillian Morris Assistant Board Secretary

Contributing Staff:

Mahrez Ben Belfadhel Director, APM Geoscience
Angelo Castellan VP Environmental Assessment and Corporate Support (Item 11)
Jo-Ann Facella Director, Social Research & Dialogue
John Fraser Director, Community Engagement
Chris Hatton Director, APM Repository Design & Development (Item 10)
Michael Hung Acting CFO (Item 6)
Frank King VP, Chief Engineer (Item 11)
Elena Mantagaris Manager, Government & External Relations
Pat Patton Director, Engagement & Aboriginal Relations
Jamie Robinson Director, Communications
Sean Russell Director, Repository Engineering
Peter Simmons Director, Municipal Engagement
Bob Watts Director, Aboriginal Community Relations
Derek Wilson Project Manager, OPG DGR, EPCM (Item 11)

ADVISORY COUNCIL BUSINESS

1. Constitution of Meeting / Approval of Agenda

The Chairman called the meeting to order at 9:00 a.m.

2. Minutes of Previous Meeting

The Advisory Council reviewed and approved the record of the previous meeting, convened on May 9, 2011.

UPDATES FROM NWMO

3. President's Report

The President reported on recent activities in NWMO's work programs, his report included the following:

- an overview of the status of the APM siting process;
- preparations for the feasibility studies phase of work;
- highlights of engagement activities including work to develop an agreement with the Grand Council of Treaty 3 for NWMO to learn about Aboriginal Traditional Knowledge and provide education on APM;
- continuing work with the Elders Forum on its re-development;
- progress in the APM technical program which includes development of the scope of a logistic study on transferring used fuel from reactor sites to the DGR and visits from SKB staff to advise on NWMO's container development program;
- completion of the APM cost estimate which is being submitted for Board approval and will be formally published in this year's annual report;
- continuing work on OPG's Low and Intermediate Level Waste (L&ILW) DGR;
- an update on staffing;
- developments in the national waste management scene; and
- NWMO's participation in the Canadian Nuclear Society conference on waste management, decommissioning and environmental restoration.

Council members discussed the following items related to Mr. Nash's report:

- the APM pre-project review by the Canadian Nuclear Safety Commission (CNSC); and
- the postponement of the co-location study on low and intermediate level waste.

Two Council members expressed their appreciation to NWMO for supporting their attendance at the CNS Waste Management, Decommissioning and Environmental Restoration conference.

4. Update on APM Site Selection Process – Feasibility Studies

Ms. Shaver provided an update on the eight communities engaged NWMO's site selection process noting that three communities are in Saskatchewan and five are located in Ontario. Ms. Shaver reported that these eight communities have passed the initial screening and are engaged in a range of capacity-building programs to broaden community understanding of the project and explore their communities' interest in the project. It was noted that it is expected that additional communities may yet join the site selection process.

Mr. Robinson outlined activities that were conducted in the eight interested communities. The communities have met with the Canadian Nuclear Safety Commission, attended municipal and waste management conferences, and are engaging independent experts. Week long open houses have been held by NWMO in each community. Communities are also working to form community liaison committees involving councilors and citizens from those communities.

Council discussed breadth of focus and effort required to address societal understanding of transportation aspects of the project and address public questions and concerns. Council offered the following advice:

- Council urged staff to continue to communicate fully the robustness of transportation containers and systems; and
- Members noted that transportation will not just be a regional issue, but will be an inter-provincial matter and emphasized the importance of NWMO continue to engage broadly to keep provinces and municipal associations informed.

The Council was also updated on NWMO's engagement activities, including recent meetings with Treaty 3.

Ms. Shaver reported that NWMO is preparing to initiate feasibility studies in 2012 with communities interested in proceeding to that next phase in the siting process. A feasibility study will further explore geoscientific and community well-being considerations, and will be supported by expanded dialogue led by NWMO and the community. These studies will assess, in a preliminary way, the suitability of a community and associated sites to host the project. Mr. Belfadhel discussed the establishment of a geoscientific review group to provide NWMO with guidance and advice during the feasibility studies phase of work.

Council discussed the work planned for the feasibility studies phase:

- Council members discussed the technical work program and sought clarification on plans to address scenarios that may involve sedimentary and/or crystalline rock;
- Council briefly discussed the work involved in characterizing crystalline sites; and
- Council members acknowledged the importance of providing communities with clarity on decision-making in assessments and who will make the assessments, particularly where qualitative judgments may be required in assessing strengths of a community or its evolving citizen support for the project.

Related to the siting process, Council had an important discussion about ensuring communities continue to be treated well throughout NWMO's siting process.

- recognizing that only one community will be selected, members discussed with NWMO importance of ensuring that communities do not regret their participation and efforts they had directed to siting process;
- Council members noted the importance of ensuring communities feel they were treated well by NWMO, through the assessments and also in the exit strategy adopted;
- Council urged that NWMO seek to understand and meet community expectations as to what a process of respect and integrity would involve, treating communities sensitively as they are screened out through future phases of assessments.

For future Agendas, Council requests that NWMO regularly begin meetings with a review of potential areas of risk associated with upcoming activities associated with APM implementation, to enable Council to direct and focus its deliberations to all key areas requiring counsel and guidance.

5. Re-Development of the Elders Forum (Niigani)

Mr. Watts briefed Council on the results of the consultations with the Elders Forum and National Aboriginal organizations regarding the re-development of the Elders Forum. The Elders Forum agrees change is required and the re-development of the Forum was discussed at their July meeting.

Mr. Watts summarized discussions and advice provided to date from members of the Advisory Council and from a number of National Aboriginal Organizations and institutions. He reported that additional meetings with regional or provincial Aboriginal organizations and some corporations who work with Aboriginal people will take place in October. NWMO will convene an Elders Forum in November to discuss the results of the consultations and a path forward. Ultimate decision-making on the path forward rests with the NWMO Board and will be discussed at its December meeting.

Council provided the following perspectives:

- Council supported the way NWMO was approaching the consultations with Aboriginal organizations for advice and guidance;
- there was a consensus amongst Council Members that it was important to give the Elders Forum structure with NWMO's clear expectations, a well-defined Terms of Reference and a clear code of conduct. Council members encouraged NWMO to ensure the scope of changes made (such as reduction in size) are sufficient and complete as required to allow the Forum to move forward effectively;
- Council concluded that it was important not to delay or protract the changes;
- Council encouraged NWMO to have set timeframes for Elders Forum appointments;
- Council supported having some male/female balance; and
- Council supports retaining "Niigani" as the name for new forum, as proposed by the Elders Forum members. This will signal that this important group, that

evolved through ceremony, that will continue. Elders created a legacy in establishing Niigani.

Council feels strongly that the voice of youth must continue, suggesting youth appointments be made independently from the Elders appointments. The importance of continuing to involve youth was emphasized by several members, and that allowing youth to have a forum of their own, linking from time to time with Elders may be a more productive way to ensure they have a voice.

Council members see the Elders Forum restructuring as a priority, and wish to work closely with NWMO. Council proposed a half-day Council meeting for October that will enable them to work with NWMO staff in preparing for the discussion at the November Elders Forum.

6. Review of NWMO Business Plan

Mr. Nash introduced the draft 2012-2016 Business plan for Advisory Council comment. He noted that the APM section of the plan is consistent with the approved 2011-2015 business plan and the preliminary 2012-2016 business plan reviewed at the June meeting of the Board of Directors.

Mr. Nash identified some elements of the plan that may change by December including the estimate of the number of communities engaged in feasibility studies and the timing and pace of these studies. Mr. Nash reviewed the expected timelines of work planned for the next five years.

On the work to support the OPG L&ILW DGR Mr. Nash discussed the timing assumptions underlying the workplan for the next five years leading to construction.

Council discussed the proposed business plan and sought clarification on areas of underspending in 2011.

7. Update on Advisory Council Appointments

Pat Moran updated the Advisory Council on the status of appointments, noting that all Council members' terms end on December 31, 2011. He reported that a search firm has been engaged and will be working with NWMO to contact Council members to explore their interest in continuing on the Council. Based on input provided from both the NWMO Board and Advisory Council on additional capabilities, the search firm will move forward with the candidate search as required.

Management asked for comment on the revised terms of reference proposed for the Advisory Council noting only minor amendments were made. The Council agreed with the Terms of Reference as proposed.

8. APM Technical Program Update

Sean Russell provided the Council with an update on the APM Technical program. Mr. Russell reported on the areas of:

- reference designs, cost estimates and safety cases;
- regulatory interface and pre-project review;

- repository design development; and
- research and confidence building.

Mr. Russell reported that SKB (Sweden) conducted a third party review of NWMO's used fuel transfer system program and will provide a detailed review of the engineering program for 2012-2018. On staffing, it was noted that a corrosion scientist was recently hired in the APM technical program area.

Council members asked questions about design assumptions related to the APM cost estimates.

9. Comparison of SKB & NWMO Safety Case

Sean Russell led a discussion regarding reference designs and assumptions in the NWMO plans and SKB (Sweden) plans for comparison. It was noted that since NWMO does not have an actual site for the repository as of yet, assumptions made by NWMO are hypothetical whereas Sweden has a defined site.

Council members discussed the following;

- regulatory dose limits, proposed dose acceptance criteria and the ALARA principle;
- testing methods for containers; and
- container integrity assumptions.

10. Used Fuel Transfer System Development Plan

Chris Hatton provided the Advisory Council with an outline plan for the development and demonstration of a system for transferring used fuel from interim reactor storage to long-lived repository containers and emplacement into the repository.

Advisory Council members asked questions about:

- re-packaging the fuel bundles for transportation;
- the possibility of using dry storage casks for transportation;
- road and rail transportation options;
- the waste owner's responsibility of re-packaging the used fuel; and
- the weight of containers that can be safely transported.

11. Review of NWMO Support to OPG

Frank King updated the Council on recent and planned activities in support of OPG L&ILW DGR project. Mr. King reviewed the status of the hearing preparations and the appointment of the Joint Review Panel. Mr. King also provided a summary of the post-submission activities and hearing preparation plan. He discussed NWMO's participation in the recent CNS Conference on Waste Management, Decommissioning and Environmental Restoration. NWMO contributed fifteen papers to the conference.

Derek Wilson reported on the activities in the design and construction phase work in support of OPG's L&ILW DGR. Mr. Wilson reported completion of two internal site audits and that there were no reportable health, safety or environmental incidents at the site. It was noted that the shaft pilot hole program was completed and grouting tests were also near completion.

11. **Upcoming Meetings**

The next meeting of the Advisory Council is Wednesday, November 30 from 9:00 am – 4:00 pm EDT.

Dougal McCreath noted that he will not be able to attend the November meeting.

12. **In Camera Session**

The Advisory Council met in camera without the presence of NWMO staff or management.

Termination of Meeting

The Chairman declared the meeting terminated at 3:30 pm.

Dated the 30th day of November, 2011

Vice President, APM Engagement and Site Selection