

July 7, 2014

Ms. Laurie Swami
Vice-President Nuclear Services
Ontario Power Generation
889 Brock Road, 6th Floor
Pickering, ON L1W 3J2

Dear Ms. Swami:

Thank you for providing the [Updated DGR Project Consolidated Commitment Lists Report](#) and the [Annotated Description of the DGR Project](#) to the Joint Review Panel on June 6, 2014. The Panel has one request and one question for Ontario Power Generation in relation to the commitment report and one request in relation to the project description.

1. The Panel requests that some editing and reorganization of the Commitment Lists Report be undertaken by Ontario Power Generation to facilitate ongoing use of the document. The Panel recognizes that the resumption of the hearing in September 2014 may result in the identification of new or modification of existing commitments. This possibility should not be cause to delay the following revisions.

All redundancies are to be removed and the commitments should be organized by topic as outlined below. Bullets indented under the main topics are provided as examples and are not intended to be sub-headings nor comprehensive. Further, the use of auxiliary verbs such as 'may' and 'could' is to be avoided and the use of vague qualifiers such as 'few' and 'small' should be limited.

List of Commitment Topics:

Site Characterization

- geoscience verification plan

Geology - Long Term Performance

- shaft seal material testing
- follow-up and monitoring

Geology - Safety Case

- geoscience verification plan
- follow-up and monitoring

Management of Low and Intermediate Level Radioactive Waste

- waste characterization plan
- waste container inspection
- waste acceptance criteria

Accidents, Malfunctions and Malevolent Acts

- emergency response
- mine rescue agreements

Occupational Health and Safety

- worker safety – underground
- worker safety – surface
- training

Air Quality

- dust abatement
- follow-up and monitoring

Noise

- noise abatement
- follow-up and monitoring

Terrestrial Environment (including wildlife and species at risk, soil quality)

- habitat preservation
- habitat reclamation
- follow-up and monitoring

Human Health (including radiation)

- worker safety – underground
- worker safety – surface
- follow-up and monitoring

Aquatic – Groundwater

- waste rock management and leachate control
- shallow ground water management and testing
- follow-up and monitoring

Aquatic – Surface Water, Habitat and Aquatic Biota

- surface water management
- storm water pond management
- storm water treatment
- wetland management
- habitat reclamation
- follow-up and monitoring

Communication and Consultation

- local
- regional
- international

Aboriginal Interests

- Aboriginal heritage sites
- Aboriginal approval/consent
- sponsorship

Licensing, Permits and Authorizations

- geoscience verification plan
- shaft construction
- emplacement room construction
- financial guarantees
- follow-up and monitoring

Decommissioning/Post-closure

- follow-up and monitoring
- financial guarantee

Management Systems

Socio-Economic Issues

- work force training and local commercial opportunities
- traffic and transportation
- follow-up and monitoring

2. In the Ontario Power Generation response to IR EIS-13-514, appraisal of increased gas generation potential of revised waste inventories as modelled for various Normal Evolution and Disruptive Case Scenarios, yielded minimal dose effect response in cases where reduced and severe gas seal performance was postulated. No indicated effect of increased gas pressure effect on degradation of seal or geologic materials was extrapolated.

CNSC Recommendation #2 in Panel Member Document PMD 13-P1.3 recommended that the Ontario Power Generation waste characterization program be reviewed and revised to conform to international guidance. CNSC identified uncertainties associated with the radioactive waste inventory, such as organic materials and metals (e.g. - iron) characterization, that would provide data to refine predictions of gas pressure in the postclosure safety assessment. CNSC found that Ontario Power Generation's proposed methodology was sound and acceptable and was satisfied that the Inventory Verification Plan will provide sufficient data to refine the prediction of gas pressure.

Additionally, CNSC stated that Ontario Power Generation has committed to studying gas generation processes which will require a long term effort and that this is considered to be an important feature of the Geoscientific Verification Plan.

In the DGR Project Consolidated Commitment Lists (NWMO DGR-TR-2013-02 R001), in which commitments are referenced up to June 6, 2014, no reference was made by Ontario Power Generation to a commitment for modeling of gas generation processes as they apply to the Geoscientific Verification Plan, nor consideration of impacts to safety case studies made for

implementation of the Inventory Verification Plan. Does Ontario Power Generation intend to make this commitment as it applies to the Geoscientific Verification Plan?

3. The annotated version of EIS Chapter 4 (Description of the Project for EA Purposes) provides a record of the project as it was proposed by Ontario Power Generation in April, 2011 and all of the modifications that have been made since then. What is required for the permanent record of the DGR review is a revised, stand-alone version of the project description that incorporates all of the changes into the text.

The Joint Review Panel requests that Ontario Power Generation prepare this re-write of the project description and incorporate any additional changes that may arise through to the date that the Panel announces the deadline for submission of closing remarks. Ontario Power Generation may then submit the revised project description along with its closing remarks.

As always, please direct any questions that you may have to either of the Panel Co-Managers, Kelly McGee at (613)947-3710 or Debra Myles at (613)957-0626.

Sincerely,

original signed by

Stella Swanson
Chair, Deep Geologic Repository Joint Review Panel

c.c.: James F. Archibald, Joint Review Panel Member
Gunter Muecke, Joint Review Panel Member

Allan Webster, Ontario Power Generation
Paul Gierszewski, Nuclear Waste Management Organization