August 13, 2007

CD# 00216-CORR-00531-00033

Mr. B. Howden
Director General
Directorate of Nuclear Cycle and Facilities Regulation
Canadian Nuclear Safety Commission
280 Slater Street
Ottawa, Ontario
K1P 5S9

Dear Mr. Howden:

Deep Geologic Repository for Low and Intermediate Level Waste (DGR) –
Application for the Site Preparation and Construction Licence

References: 1. OPG Letter from K. E. Nash to B. Howden, “Intent to Construct a
Geologic Repository for Low and Intermediate Level Waste”,
December 2, 2005, CD# 00216-CORR-00531-00001.

The purpose of this letter is to apply for a Site Preparation and Construction Licence for the Deep Geologic Repository (DGR) for Low and Intermediate Level Waste (L&ILW), as proposed in Reference 1.

Submission of a Preliminary Safety Report and other material to support this application will be made according to a schedule of submissions to be provided to CNSC in a future communication. A compliance matrix will also be submitted showing how OPG submissions link with the specific information requirements for licence application under the Nuclear Safety and Control Act (NSCA) and the Regulations under it. A preliminary list of the documents which we propose to submit is provided in Attachment 1. This list will be revised after formal determination of the pre-requisites for the site preparation licence and the construction licence.

Other information required by the applicable regulations under the NSCA, in support of this application, is as follows:

Applicant’s Name and Business Address:
Ontario Power Generation
700 University Avenue
Toronto, Ontario
M5G 1X6
Facility:

The Deep Geologic Repository for Low and Intermediate Level Waste (DGR) will be located on the Bruce nuclear site in the Municipality of Kincardine, in the Province of Ontario. The facility will be located entirely within or beneath the boundaries of the OPG-owned and retained lands (i.e. lands not leased to Bruce Power) at the Bruce nuclear site. The DGR will consist of above- and below-ground facilities for the receipt of L&ILW, transfer of L&ILW underground, and emplacement of L&ILW in rooms excavated at a nominal depth of 500 m to 700 m below surface in competent sedimentary rock.

The DGR will provide safe long-term management of L&ILW. The DGR will receive L&ILW currently in storage at the Bruce nuclear site, as well as additional L&ILW produced by OPG-owned nuclear generating stations. The facility will be operated in a safe and environmentally acceptable manner.

Activity to Be Licensed:

Preparation of the site for and construction of the DGR.

Persons Responsible for the Management and Control of the Licensed Activity:

The management and control of site preparation and construction of the DGR is the overall responsibility of Mr. Ken Nash – Senior Vice President, Nuclear Waste Management Division.

OPG will contact you to discuss the pre-requisites for the site preparation and construction licence. Meanwhile, the attached preliminary list of proposed submissions provides an indication of the type of information OPG may submit in support of this licence application.

The Designated Licensing contact for the Project is Ms. T. Kempe, Senior Advisor Safety Requirements and Licensing, Repository Safety Department, Nuclear Waste Management Division. For additional information, please contact her at 647-259-3027.

Sincerely,

K. E. Nash
Senior Vice-President
Nuclear Waste Management

Enc.

cc:
Mr. R. Barker – CNSC (Ottawa)
Mr. D. Howard – CNSC (Ottawa)
**ATTACHMENT 1**

Preliminary List of Proposed Submissions in Support of the Site Preparation and Construction Licence Application for the Deep Geologic Repository (DGR)

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<td>1</td>
<td>Preliminary Safety Report (PSR) addressing the requirements for a Site Preparation and Construction Licence</td>
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<td>2</td>
<td>Supplementary Information and supporting references addressing any additional requirements for a Site Preparation Licence*</td>
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| 3 | Supporting Technical Reports to PSR – coordinated with Technical Study reports for Environmental Impact Statement (EIS). These may include: a) Geoscientific Site Characterization Plan  
   b) Reference Waste Inventory  
   c) Preliminary Design Report  
   d) Geosynthesis  
   e) Postclosure Safety Assessment  
   f) Preclosure Safety Assessment |
| 4 | Preliminary General Arrangement Drawings |
| 5 | Proposed Construction Program and Schedule |
| 6 | Project Design Requirements |
| 7 | Compliance Matrix showing where/how all prerequisites are/will be addressed in OPG submissions |

*It is expected that the requirements for a Site Preparation Licence will be covered by the information to be contained in the PSR and in the Environmental Impact Statement to be prepared in support of the Environmental Assessment under the Canadian Environmental Assessment Act.*