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SUPPLEMENTAL/COMPLÉMENTAIRE

CMD: 23-H9.A

Date signed/Signé le : 18 JANUARY 2023

Reference CMD(s)/CMD(s) de référence : CMD 23-H9

Amendment to a Recommendation

Modification à une recommandation

**Ontario Power
Generation Inc.**

**Ontario Power
Generation Inc.**

**Darlington Waste
Management Facility**

**Installation de gestion
des déchets de
Darlington**

Commission Public Hearing

Audience publique de la Commission

Scheduled for:

Prévue pour :

January 26, 2023

Le 26 janvier 2023

Submitted by:

Soumise par :

CNSC Staff

Le personnel de la CCSN

e-Doc 6948297 (WORD)

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Summary

This supplemental Commission Member Document (CMD) presents additional information with respect to:

- Ontario Power Generation Inc. (OPG) name change of the Darlington Waste Management Facility (DWMF) in the proposed licence

CNSC staff recommend the Commission take the following action:

- As part of the renewal for the OPG Waste Facility Operating Licence, use the name Ontario Power Generation Inc. Darlington Waste Management Facility in the proposed licence

The following item is attached:

- The proposed Waste Facility Operating Licence (WFOL) WFOL-W4-355.00/2033

Résumé

Le présent CMD présente de l'information supplémentaire concernant :

- Le changement de nom de l'installation de gestion des déchets de Darlington d'Ontario Power Generation Inc. (OPG) dans le permis proposé

La Commission pourrait considérer prendre les mesures suivantes :

- Dans le cadre du renouvellement du permis d'exploitation de l'installation de gestion des déchets d'OPG, utiliser le nom de Ontario Power Generation Inc. Installation de Gestion des Déchets de Darlington dans le permis proposé.

La pièce suivante est jointe :

- Le nouveau permis d'exploitation d'une installation de déchets proposé (WFOL) WFOL-W4-355.00/2033

Signed/signé le

18 January 2023

Kavita Murthy

Director General

Directorate of Nuclear Cycle and Facilities Regulation

Directrice générale de la

Direction de la réglementation du cycle et des installations nucléaires

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EXECUTIVE SUMMARY

This Commission Member Document (CMD), CMD 23-H9.A, is supplemental to [CMD 23-H9](#), the submission from Canadian Nuclear Safety Commission (CNSC) staff regarding the application from Ontario Power Generation Inc. (OPG) to renew the waste facility operating licence.

OPG requested in its application that the Darlington Waste Management Facility be identified in the licence as Nuclear Sustainability Services – Darlington. Section 5.7 *Name change of the facility* of CMD 23-H9, concluded that the name change had no impact on the activities authorized in the licence or on CNSC regulatory oversight. The [proposed licence](#) attached to CMD 23-H9 identifies the waste management facility as Nuclear Sustainability Services – Darlington.

Since the submission of [CMD 23-H9](#), CNSC staff have reassessed the request for a name change of the facility. Nuclear Sustainability Services-Darlington is not a separate legal entity for the purposes of the *Nuclear Safety and Control Act*; it is a division within OPG, who is the licence applicant and the licensee identified in Part (II) of the licence. In accordance with CNSC’s licensing regime, the proposed licence specifies the type of licence as a Waste Facility Operating Licence, identifies the licensee as Ontario Power Generation and describes the activity to be licensed as the operation of a waste management facility.

CNSC staff recommend to the Commission that the title in the licence appear as “Ontario Power Generation Inc. Darlington Waste Management Facility”. This would also address a number of concerns raised by intervenors that the licensed activity at the facility was not clearly reflected in the name that appeared in the licence.

This revised recommendation does not alter other CNSC staff findings, conclusions, or recommendations to the Commission as presented in CMD 23-H9.

This CMD also identifies some errata that were noted by CNSC staff in [CMD 23-H9](#) following its submission to the Registry.

Referenced documents in this CMD are available to the public upon request. When available, CNSC staff have included web hyperlinks to facilitate information sharing.

1 BACKGROUND

In 2021, Ontario Power Generation Inc. (OPG) renamed its Nuclear Waste Management division the Nuclear Sustainability Services. As a result, the Darlington Waste Management Facility (DWMF) was renamed the Nuclear Sustainability Services – Darlington (NSS-D).

On December 16, 2021, OPG submitted an [application](#) for the renewal of its Class IB Waste Facility Operating Licence for DWMF. In its renewal application, OPG requested that the DWMF be identified in the licence as Nuclear Sustainability Services –Darlington.

In Canadian Nuclear Safety Commission (CNSC) staff’s [CMD 23-H9](#), Section 5.7 *Name change of the facility*, CNSC staff concluded that this change was administrative, had no impact on the activities authorized in the licence or on CNSC regulatory oversight of the waste management facility. The new name of the facility appears in the proposed licence under the main title of the licence and in section IV paragraph (i)

“operate the Nuclear Sustainability Services-Darlington (herein referred to as “the facility”), a waste management facility located at the Darlington Nuclear Generating Station, Township of Darlington, Municipality of Clarington, Regional Municipality of Durham, Province of Ontario”

2 DISCUSSION - NAME CHANGE OF THE FACILITY

CNSC staff [CMD 23-H9](#), which included the proposed licence, was published on October 20, 2022 to allow potential intervenors to review the proposal and intervene if interested.

Since the submission of [CMD 23-H9](#), CNSC staff have reassessed the request for a name change of the facility. The name Nuclear Sustainability Services-Darlington is not a legal entity for the purposes of the *Nuclear Safety and Control Act*, it is part of a division under the larger organization OPG, who is the licence applicant and holds the current licence.

A licence, and associated Licence Condition Handbook, must clearly delineate and describe the licensee, nature of the facility, and the activities to be authorized. The proposed licence, which is a Waste Facility Operating Licence, identifies the licensee, OPG in Part (II), the facility as a waste management facility, and the activities to be authorized in Part (IV). Pursuant to paragraph 19(a) of the [General Nuclear Safety and Control Regulations](#) and section 1 of the [Class I Nuclear Facilities Regulations](#), the facility is a Class IB nuclear facility for radioactive waste management.

Accordingly, the title that appears on the licence should identify the licensee and not the division within the licensee organization. Thus, CNSC staff conclude that it is more appropriate to use the title “Ontario Power Generation Inc. Darlington Waste Management Facility” in the licence.

Furthermore, the CNSC’s waste management regulatory framework uses the term radioactive waste management facility and thus the use of the title of Darlington Waste Management Facility aligns better with the framework.

CNSC staff note that the use of the name Nuclear Sustainability Services-Darlington in the proposed licence for the waste management facility also resulted in concerns raised by intervenors related to decreased transparency. CNSC staff maintain that neither the licensed activities authorized nor CNSC regulatory oversight are a function of the waste management facility name. However, CNSC staff acknowledge that for the public, the transparency in the activity authorized could be enhanced by identifying the facility based on the activity carried out therein and the use of the name as proposed in this CMD achieves that objective.

3 CONCLUSIONS

Following a reassessment of the request for the change of facility name, based on the rationale provided in Section 2 of this CMD, CNSC staff are recommending to the Commission that the title “Ontario Power Generation Inc. Darlington Waste Management Facility” be used in the licence. CNSC staff recommend the following changes to the proposed licence that was included in [CMD 23-H9](#):

- 1- Change the name of the facility in the title section
from: Nuclear Sustainability Services-Darlington
to: Ontario Power Generation Inc. Darlington Waste Management Facility
- 2- Change paragraph (i) of section IV) as follows:
From: “operate the Nuclear Sustainability Services-Darlington (herein referred to as “the facility”), a waste management facility located at the Darlington Nuclear Generating Station, Township of Darlington, Municipality of Clarington, Regional Municipality of Durham, Province of Ontario”
To: “operate a waste management facility (herein referred to as “the facility”) located at the Darlington Nuclear Generating Station in Township of Darlington, Municipality of Clarington, Regional Municipality of Durham, Province of Ontario”

Other conclusions and recommendations made in [CMD 23-H9](#) remain unchanged.

CNSC staff’s proposed licence with the revised title is appended. Should the Commission accept this recommendation and renew the licence, CNSC staff will update the Licence Condition Handbook accordingly.

4 ERRATA

CNSC staff would like to bring to the Commission’s attention minor errors in [CMD 23-H9](#)

- Section 3.3.2, page 21, paragraph 2: Should have stated “at the end of March 2022” and not “at the end of 2021” as follows:
At the end of March 2022, there were 408 DSCs in storage at UFDSB#1 and 372 DSCs in storage at UFDSB#2, totaling 780 DSCs in storage at the facility.
- Section 3.3.3, page 24, paragraph 5: The number of inspections conducted was 23 not 22

- Section 3.3.3.1, page 25, paragraph 3, second sentence: “The safety significance of the non-compliances were low with the exception of two medium findings.
- Section 3.9.2, page 47, table 8: The tritium stormwater release value in 2014 is 487 Bq/L instead of 1,159 Bq/L.

These errors have no bearing on CNSC staff’s conclusions or recommendations.

PROPOSED LICENCE

e-Doc 6951709 WORD

e-Doc 6953738 PDF



WASTE FACILITY OPERATING LICENCE
ONTARIO POWER GENERATION INC.
DARLINGTON WASTE MANAGEMENT FACILITY

- I) LICENCE NUMBER:** **WFOL-W4-355.00/2033**
- II) LICENSEE:** Pursuant to section 24 of the *Nuclear Safety and Control Act*
this licence is issued to:
- Ontario Power Generation Inc.**
700 University Avenue
Toronto, Ontario
M5G 1X6
- III) LICENCE PERIOD:** This licence is valid from **March 30, 2023** to **April 30, 2033**,
unless suspended, amended, revoked, replaced, or transferred.

IV) LICENSED ACTIVITIES:

This licence authorizes the licensee to:

- (i) operate a waste management facility (herein referred to as “the facility”) located at the Darlington Nuclear Generating Station in Township of Darlington, Municipality of Clarington, Regional Municipality of Durham, Province of Ontario;
- (ii) possess, transfer, use, process, package, manage, and store nuclear substances that are required for, associated with or arise from the activities described in (i);
- (iii) transport Category II nuclear materials that are associated with the activities described in (i) on the site of the Darlington Nuclear Generating Station;
- (iv) carry out the site preparation, construction, or construction modifications at the facility associated with the authorized additional storage structures, when on completion will result in a total of no more than 2 used fuel dry storage buildings and 2 used fuel dry storage structures, and no more than 1 intermediate level radioactive waste storage building; and,
- (v) possess and use prescribed equipment and prescribed information that are required for, associated with or arise from the activities described in (i), (ii), (iii), and (iv).

V) EXPLANATORY NOTES:

- (i) Unless otherwise provided for in this licence, words and expressions used in this licence have the same meaning as in the *Nuclear Safety and Control Act* and associated Regulations.
- (ii) Darlington Waste Management Facility licence conditions handbook (LCH) provides compliance verification criteria used to meet the conditions of this licence. The LCH also provides information on delegation of authority and document version control.

VI) CONDITIONS:

G GENERAL

G.1 Licensing Basis for Licensed Activities

The licensee shall conduct the activities described in Part IV of this licence in accordance with the licensing basis, defined as:

- (i) the regulatory requirements set out in the applicable laws and regulations;
- (ii) the conditions and safety and control measures described in the facility's or activity's licence and the documents directly referenced in that licence;
- (iii) the safety and control measures described in the licence application and the documents needed to support that licence application;

Unless otherwise approved in writing by the Canadian Nuclear Safety Commission (hereinafter "the Commission").

G.2 Notification of Changes

The licensee shall give written notification of changes to the facility or its operation, including deviation from design, operating conditions, policies, programs and methods referred to in the licensing basis.

G.3 Financial Guarantee

The licensee shall maintain a financial guarantee for decommissioning that is acceptable to the Commission.

G.4 Public Information and Disclosure

The licensee shall implement and maintain a public information and disclosure program.

1 MANAGEMENT SYSTEM

1.1 Management System

The licensee shall implement and maintain a management system.

1.2 Management of Contractors

The licensee shall ensure that every contractor working at the facility complies with this licence.

2 HUMAN PERFORMANCE MANAGEMENT

2.1 Human Performance Program

The licensee shall implement and maintain a human performance program.

2.2 Training Program

The licensee shall implement and maintain a training program.

3 OPERATING PERFORMANCE

3.1 Operations Program

The licensee shall implement and maintain an operating program, which includes a set of operating limits.

3.2 Reporting Requirements

The licensee shall implement and maintain a program for reporting to the Commission or a person authorized by the Commission.

4 SAFETY ANALYSIS

4.1 Safety Analysis Program

The licensee shall implement and maintain a safety analysis program.

5 PHYSICAL DESIGN

5.1 Design Program

The licensee shall implement and maintain a design program.

5.2 Pressure Boundary

The licensee shall implement and maintain a pressure boundary program and have in place a formal agreement with an Authorized Inspection Agency.

6 FITNESS FOR SERVICE

6.1 Fitness for Service Program

The licensee shall implement and maintain a fitness for service program.

7 RADIATION PROTECTION

7.1 Radiation Protection

The licensee shall implement and maintain a radiation protection program, which includes a set of action levels. When the licensee becomes aware that an action level has been reached, the licensee shall notify the Commission within seven days.

8 CONVENTIONAL HEALTH AND SAFETY

8.1 Conventional Health and Safety Program

The licensee shall implement and maintain a conventional health and safety program.

9 ENVIRONMENTAL PROTECTION

9.1 Environmental Protection

The licensee shall implement and maintain an environmental protection program, which includes a set of action levels. When the licensee becomes aware that an action level has been reached, the licensee shall notify the Commission within seven days.

10 EMERGENCY MANAGEMENT AND FIRE PROTECTION

10.1 Emergency Preparedness Program

The licensee shall implement and maintain an emergency preparedness program.

10.2 Fire Protection Program

The licensee shall implement and maintain a fire protection program.

11 WASTE MANAGEMENT

11.1 Waste Management Program

The licensee shall implement and maintain a waste management program.

11.2 Decommissioning Plan

The licensee shall maintain a preliminary decommissioning plan.

12 SECURITY

12.1 Security Program

The licensee shall implement and maintain a security program.

12.2 Construction

The licensee shall not carry out the activities referred to in paragraph (ii) of Part IV of this licence that relates to completed construction activities in paragraph (iv) of Part IV of this licence until the submission of the proposed security arrangements and measures for the new structure, or any potential modifications to the protected area that may be associated with this new structure, that is acceptable to the Commission or a person authorized by the Commission.

13 SAFEGUARDS AND NON-PROLIFERATION

13.1 Safeguards Program

The licensee shall implement and maintain a safeguards program.

14 PACKAGING AND TRANSPORT

14.1 Packaging and Transport Program

The licensee shall implement and maintain a packaging and transport program.

15 FACILITY-SPECIFIC

15.1 Construction Plans

The licensee shall not carry out the activities referred to in paragraph (iv) of Part IV of this licence until the submission of an environmental management plan, a construction verification plan, the project design requirements and a preliminary safety analysis report without prior written approval of the Commission or a person authorized by the Commission.

15.2 Commissioning Report

The licensee shall not carry out the activities referred to in paragraph (ii) of Part IV of this licence that relate to completed construction activities in paragraph (iv) of Part IV of this licence until the submission of a commissioning report that is acceptable to the Commission or a person authorized by the Commission.

SIGNED at OTTAWA, this ____ day of _____, 2023

Rumina Velshi, President
On behalf of the Canadian Nuclear Safety Commission