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Safety Commission

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de sûreté nucléaire

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## STATUS REPORT ON POWER REACTORS

## RAPPORT D'ÉTAPE SUR LES CENTRALES NUCLÉAIRES

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This document summarized the status of the Power Reactor Facilities as of February 26, 2026.

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Ce rapport résume le rapport d'étape sur les centrales nucléaires en date du 26 février 2026.

Signed on / Signé le  
**09-March-2026**

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Directeur général, Direction de la réglementation des centrales nucléaires

**1. Power Reactors Status as of February 26, 2026**

**1.1 Bruce A and B**

<b>Operational Status</b>
Unit 1 is at Full Power
Unit 2 is at Full Power
Unit 3 is Shut Down for Major Component Replacement (MCR)
Unit 4 is Shut Down for Major Component Replacement (MCR)
Unit 5 is at Full Power
Unit 6 is at Full Power
Unit 7 is at Full Power
Unit 8 is Shut Down for a Planned Maintenance Outage
<b>Licensing</b>
Power Reactor Operating Licence expires on September 30, 2028.
<b>Comments</b>
<p>The Unit 3 MCR project started in March 2023 and remains on schedule.</p> <ul style="list-style-type: none"> <li>On February 16, 2026, CNSC staff released regulatory hold point 1 (RHP-1), allowing Bruce Power to load fuel.</li> <li>Bruce Power is currently performing the fuel load.</li> <li>Removing the Guaranteed Shutdown State (RHP-2) is scheduled for May 2026.</li> </ul> <p>The Unit 4 MCR project started in February 2025 and remains on schedule.</p> <ul style="list-style-type: none"> <li>End fitting removal is complete.</li> <li>Pressure tube removal is in progress.</li> <li>Preparations for steam generator replacement is in progress.</li> </ul> <p>Unit 5 MCR is scheduled to begin in November 2026.</p> <p>On January 17, 2026, Unit 8 was shut down for a planned maintenance outage, which is currently ongoing.</p>
<b>Event Notifications and Updates</b>
None
<b>Actions from previous Commission meetings</b>
The Commission directed CNSC staff to track on-going work on hydrogen equivalent concentration (Heq) research and development (R&D) in a Record of Decision (DEC 23-H103) issued on October 13, 2023.

A stand-alone CNSC staff update on the status of the licensee R&D program for elevated Heq in the pressure tubes of reactors in extended operation will be presented on March 24, 2026, as CMD 26-M10.

## 1.2 Darlington

<b>Operational Status</b>
Unit 1 is at Full Power
Unit 2 is at Full Power
Unit 3 is at Full Power
Unit 4 is currently at 30% FP and critical.
<b>Licensing</b>
Power Reactor Operating Licence 13.01/2045 came into effect on December 19, 2025, following an amendment to allow installation of Target Delivery System (TDS) on additional units. TDS to be installed on Unit 3 in Spring 2026.
<b>Comments</b>
<p>Unit 4 refurbishment started in July 2023. The following reflects the most current information on the refurbishment activities:</p> <ul style="list-style-type: none"> <li>• Secondary side commissioning in progress. Turbine has successfully reached 1800 RPM.</li> <li>• Repair of shutdown cooling P2 in progress.</li> <li>• Regulatory Hold Point 1 (fuel load) was removed on August 28, 2025.</li> <li>• Regulatory Hold Point 2 (approval to remove GSS) was removed on January 19, 2026.</li> <li>• Regulatory Hold Point 3 (approval to proceed beyond 1% FP) was removed on February 16, 2026.</li> <li>• Regulatory Hold Point 4 (approval to proceed beyond 35% FP) was removed on March 07, 2026.</li> </ul>
<b>Event Notifications and Updates</b>
None
<b>Actions from previous Commission meetings</b>
None

## 1.3 Pickering

<b>Operational Status</b>
Unit 1 is shut down and transitioning to Safe Storage
Unit 2 is in a Safe Storage State

Unit 3 is in a Safe Storage State
Unit 4 is shut down and transitioning to Safe Storage
Unit 5 is at Full Power
Unit 6 is at Full Power
Unit 7 is at Full Power
Unit 8 is at Full Power
<b>Licensing</b>
Power Reactor Operating Licence expires on August 31, 2028. OPG is authorized to operate Units 5-8 until December 31, 2026, up to a maximum of 305,000 equivalent full power hours.  The CNSC will hold a 2-part public hearing to consider an application from OPG to refurbish Units 5-8 and renew the licences for the Pickering NGS and Pickering Waste Management Facility for a 10-year period. The 2-part hearing will take place in the National Capital Region on June 23, 2026, and in Ajax, Ontario during the week of October 5, 2026.
<b>Comments</b>
Unit 8 will be shutdown for a planned maintenance outage starting on March 19, 2026.
<b>Event Notifications and Updates</b>
None
<b>Actions from previous Commission meetings</b>
None

**1.4 Point Lepreau**

<b>Operational Status</b>
The Unit is at Full Power
<b>Licensing</b>
Power Reactor Operating Licence expires on June 30, 2032.
<b>Comments</b>
None
<b>Event Notifications and Updates</b>
None
<b>Actions from previous Commission meetings</b>
None

**1.5 Darlington New Nuclear Project**

<b>Construction Status – DNNP-1</b>
Major construction work in progress: <ul style="list-style-type: none"> <li>Excavation of the Reactor Building (RB) shaft (Figures 1 and 2), Condenser Cooling Water (CCW) Tunnel Boring Machine (TBM) launch shaft, and the Forebay shaft</li> </ul>

continues. The RB shaft excavation is approaching its last phase of excavation. OPG currently estimates mid-March as the completion date for RB shaft excavation.

- All 56 Diaphragm Plate-Steel Composite (DP-SC) basemat assemblies (Figure 3) are on site, have been tack welded into place for final welding at the pre-assembly building. Once completed, this assembly will be installed into RB shaft, which is forecasted for end of April 2026.
- Concrete mock-up activities for the DP-SC modules are in progress and are forecasted for completion for Q1 of 2026.
- On-going foundation work is occurring for the Turbine Building, Radwaste, Service and Control Buildings. First layer of concrete pouring for the Turbine Building has commenced.

### Licensing

DNNP Power Reactor Construction Licence expires on March 31, 2035.

Status of OPG's progress toward each regulatory hold point:

- RHP-1: Installation of the RB Foundation (The current OPG target date is end of March 2026).  
CNSC staff confirmed OPG's closure of Commitment 5.4.4.0 on Robustness in Design.

OPG target date for requesting the release of RHP-1 is end of March 2026.

Status: 9 open, 11 closed, 20 total.

CNSC staff have agreed to the following changes to RHP-1 commitments. CNSC staff reviewed these changes and confirmed they remain within the licensing basis for the DNNP.

- The following commitments have been deferred to RHP 2
  - Commitment 5.2.4.1C "OPG is required to provide updated information regarding its SSC classification process, including updated documentation demonstrating its results."
  - Commitment 5.2.4.1D "OPG is required to provide updated documentation regarding seismic qualification for the BWRX-300 SSCs important to safety."
  - Commitment 5.2.10.4C "OPG to submit information identified in the Containment Isolation focused regulatory review team that satisfies the licensing actions identified in the USNRC-CNSC Joint Review report on the Containment Evaluation Methods."
  - Commitment 5.5.2.1 "OPG to submit "standard plant" design information regarding the Containment design."
- There is no anticipated incremental safety risk with this deferral of these commitments from RHP-1 to RHP-2 as all High-Priority comments related to RHP-1 have been resolved by OPG. The combination of these changes decreased the number of commitments associated with RHP-1 to 20 from the previously reported 24.

<ul style="list-style-type: none"> <li>RHP-2: Installation of the Reactor Pressure Vessel (RPV) (OPG target date is Calendar Q3 2027).</li> </ul> <p>Changes to RHP2 commitments: As described above, Commitments 5.2.4.1C, 5.2.4.1D, 5.2.10.4C, 5.5.2.1 were added to RHP-2 resulting in an increase in total commitments from 28 to 32.</p> <p>Status: 32 open, 0 closed, 32 total.</p> <ul style="list-style-type: none"> <li>RHP-3: Fuel-Out Commissioning (OPG target date is Calendar Q1 2028).</li> </ul> <p>Changes to RHP-3 commitments: An additional commitment for RHP-3 was created for Break Exclusion Zone. 5.2.10.2D, "OPG is required to submit the Break Exclusion Zone Operational and Aging Management Plan."</p> <p>Status: 8 open, 0 closed, 8 total</p>
<b>Comments</b>
None
<b>Event Notifications and Updates</b>
None
<b>Actions from previous Commission meetings</b>
None

**1.6 Other**

**CNSC staff assessment of progress on hydrogen equivalent concentration (Heq) research and development (R&D) program commitments by Bruce Power and OPG**

In [DEC 23-H103](#), the Commission directed “CNSC staff to provide updates on Bruce Power’s progress in its research and development (R&D) activities through the regular Status Report on Power Reactors, which is presented at each public Commission Meeting. CNSC staff shall develop a consolidated table to track and communicate the ongoing work to the Commission through the aforementioned Status Report on Power Reactors”.

Although the Commission’s direction was to report specifically on Bruce Power’s progress on its R&D activities, CNSC staff note that the Heq-related R&D program is conducted jointly between Bruce Power and OPG.

CNSC staff, OPG and Bruce Power will present a detailed update to the Commission during the Commission Meeting on March 24, 2026. The CNSC staff update will be presented as CMD 26-M10. Following this presentation, and considering completion of the R&D work, staff propose to stop providing updates on R&D Heq activities through the NPP status reports.

**1.7 Figures (DNNP Site)**



Figure 1: Reactor building shaft excavation top view (Source CNSC staff, February 2026)



Figure 2: Reactor building shaft excavation bottom view (Source CNSC staff, February 2026)



Figure 3: Top view of reactor building basement being assembled in Pre-assembly building (Source CNSC staff February 2026)