



Status Report on Power Reactors

Rapport d'étape sur les centrales  
nucléaires

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This document summarizes the status of  
the Power Reactor facilities as of  
January 7, 2021.

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Ce rapport résume le rapport d'étape sur  
les centrales nucléaires en date du  
7 janvier 2021.

Signed on / Signé le  
2021-01-12

**Viktorov,  
Alexandre**

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**1. Power Reactors Status as of January 8, 2021**

**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 at Full Power.
Unit 4 is at Full Power.
Unit 5 is at Full Power.
Unit 6 is Shut Down for Major Component Replacement (MCR).
Unit 7 is at Full Power.
Unit 8 is at Full Power.
<b>Licensing</b>
Power Reactor Operating Licence expires on September 30, 2028.
<b>Comments</b>
Unit 6 Major Component Replacement (MCR) started in January 2020. Feeder removal is complete. Removal of reactor bridge and carriage, and setup of equipment to begin retube/detube is the next phase.
<b>Event Notifications and Updates</b>
None.
<b>Actions from previous Commission meetings</b>
None.

**1.2 Darlington**

<b>Operational Status</b>
Unit 1 is at Full Power.
Unit 2 is at 0.2% Full Power.
Unit 3 is Shut Down for Refurbishment.
Unit 4 is at Full Power
<b>Licensing</b>
Power Reactor Operating Licence expires on November 30, 2025.
<b>Comments</b>
Unit 2 was shut down on December 30th 2020 to perform maintenance on a fuelling machine which had become stuck on a fuel channel during normal fuelling operations.
Prior to the beginning of the reactor outage, OPG submitted their proposed strategy for the fuelling machine maintenance to the CNSC for review and approval. CNSC staff approve such requests if the proposed strategy is within the bounding safety case and the licensing basis set by the Commission.
The maintenance strategy proposed by OPG varied from the standard method for ice plug installation on the inlet feeder pipe with manual overpressure protection to temporarily isolate the fuel channel and enable disengagement of the fuelling machine. The variation in the strategy was the use of one ice plug rather than two, due to the configuration of how the fuelling machine was connected to the channel.

CNSC staff reviewed the submission and concluded that the proposed approach did not pose an increased risk and that the work was within the licensing basis approved by the Commission. On this basis, CNSC staff concurred with this request. The repairs were safely completed by OPG and at the time of writing this report, the unit is being returned to Full Power.

Unit 3 refurbishment started in September 2020. All fuel was removed from the reactor in November 2020. Bulkhead installation is currently underway and a Commissioning Containment Pressure Test is scheduled to begin January 7.

#### Event Notifications and Updates

None.

#### Actions from previous Commission meetings

None.

### 1.3 Pickering

#### Operational Status

Unit 1 is at 86% of Full Power.

Unit 2 is in a Safe Storage State.

Unit 3 is in a Safe Storage State.

Unit 4 is at Full Power.

Unit 5 is at Full Power.

Unit 6 is at 2% of Full Power.

Unit 7 is at Full Power.

Unit 8 is at Full Power.

#### Licensing

Power Reactor Operating Licence expires on August 31, 2028.

#### Comments

Unit 1 is de-rated to 86% of Full Power due to a fuelling deficit caused by fueling machine unavailability.

Unit 6 is returning to service following a planned maintenance outage.

#### Event Notifications and Updates

None.

#### Actions from previous Commission meetings

Potassium Iodide (KI) Pill Working Group update:

- The draft Phase I report is currently undergoing translation and is anticipated to be posted on the Working Group webpage in February 2021 for a 45-day public review period. (<https://www.nuclearsafety.gc.ca/eng/resources/emergency-management-and-safety/potassiumiodide-pill-working-group.cfm>)
- CNSC staff will be presenting information on the KI Pill Working Group to the Durham Nuclear Health Committee on January 22, 2021. This will also provide an opportunity to raise awareness of the upcoming public review phase of the draft Phase I report.

**1.4 Point Lepreau**

Operational Status
The unit is at Full Power.
Licensing
Power Reactor Operating Licence expires on June 30, 2022.
Comments
None.
Event Notifications and Updates
None.
Actions from previous Commission meetings
None.

**1.5 Other**

**Power Reactor Regulatory Program (PRRP) COVID-19 Activities**

Compliance

CNSC staff continue their oversight, by having access to the licensees Virtual Private Network (VPN), attending meetings remotely and conducting regular surveillance activities. Inspections are being conducted on sites, with remote support from subject matter experts.

To date CNSC staff have not identified any non-compliances caused by the pandemic and are satisfied with the measures taken by the licensees.

Licensing

DPRR continues to ensure all licensing activities are completed in support of continued safe operation of all Canadian NPPs.

International Collaboration

A virtual WGIP conference is scheduled for the end of February 2021 where nuclear regulatory bodies from nine (9) countries will present on their regulatory body’s experience inspecting nuclear facilities, vendor sites, and human and organizational factors during the pandemic.

**Licensee COVID-19 Activities****Business Continuity Plan Status**

All licensees have active business continuity plans (BCP) in effect. Licensees have protocols in place for responding to positive test results for their workers and report to CNSC regularly. CNSC staff are monitoring and evaluating licensees' COVID-19 responses and are satisfied with the current provisions.

**Bruce Power**

Bruce County is currently subject to the Ontario Province-wide Shutdown, effective December 26, 2020 to January 23, 2021. The provincial colour coding system is on hold during the shutdown.

To date forty (40) Bruce Power workers (employee and contract) have tested positive for COVID-19. Twenty-nine (29) of these cases are considered recovered with eleven (11) remaining active. There has been no evidence of workplace transmission of COVID-19 and there has been no impact on minimum shift complement or the safe operation of the units from positive COVID-19 cases. In addition to the previous measures that Bruce Power has implemented, enhanced testing is being conducted on contract staff travelling to site from health unit regions that were previously identified as orange, red or lockdown under the Ontario tiered system. All Bruce Power staff and other workers at the site are being tested on a voluntary basis.

**Ontario Power Generation**

Durham Region is currently subject to the Ontario Province-wide Shutdown, effective December 26, 2020 to January 23, 2021. The provincial colour coding system is on hold during the shutdown.

To date fourteen (14) OPG Darlington workers (employee and contract) have tested positive for COVID-19. Nine (9) of these cases are considered recovered with five (5) remaining active. There has been no evidence of workplace transmission of COVID-19 and no impact on minimum shift complement or the safe operation of the units resulting from positive COVID-19 cases.

To date twenty-two (22) OPG Pickering workers (employee and contract) have tested positive for COVID-19. Sixteen (16) of these cases are considered recovered with six (6) remaining active. There has been no impact on minimum shift complement on the safe operation of the units resulting from positive COVID-19 cases.

**Point Lepreau**

There have been no new COVID-19 cases identified at site since the last update. To date, there have been two positive cases at Point Lepreau NGS; these cases did not have an impact on station operation or minimum shift complement and were not the result of workplace transmission. The PLNGS COVID Response Team (CRT) continue to manage the COVID-19 response at site. As of January 6th, the entire province of New Brunswick has transitioned from the yellow alert level to the orange alert level as a result of rising COVID-19 cases.

CNSC staff are monitoring and evaluating licensees COVID-19 responses and are satisfied with the current provisions.

## Reporting of COVID-19 Cases to CNSC

On December 10, 2020 the Directorate of Power Reactor Regulation issued clarifications to promote consistent reporting of COVID-19 cases:

1. Formal event reports, in accordance with REGDOC-3.1.1, *Reporting Requirements for Nuclear Power Plants* are to be submitted for situations:
  - where a person who had entered the protected area was later found to be COVID-19 positive, leading to isolation measures being imposed in case the virus had been transmitted to others
  - any impact, attributed to COVID-19, on the Minimum Shift Complement (MSC) positions outlined in the respective Licence Condition Handbooks
2. For all other COVID-19 related events, not having operational or safety impacts, courtesy informal notification will continue to be made to the Regulatory Program Directors.

The following represent cases reported to the CNSC under the clarified reporting requirements of REGDOC-3.1.1. These cases occurred after December 10, 2020:

### **Bruce Power**

There have been four (4) reportable cases. There has been no evidence of workplace transmission of COVID-19 and no impact on minimum shift complement or the safe operation of the units resulting from positive COVID-19 cases. CNSC staff are satisfied with the response and protective measures taken by Bruce Power.

### **Ontario Power Generation**

OPG Darlington has reported one (1) case. There has been no evidence of workplace transmission of COVID-19 and no impact on minimum shift complement or the safe operation of the units resulting from positive COVID-19 cases. CNSC staff are satisfied with the response and protective measures taken by OPG Darlington.

OPG Pickering has reported five (5) cases. There has been no impact on minimum shift complement on the safe operation of the units resulting from positive COVID-19 cases. CNSC staff are satisfied with the response and protective measures taken by OPG Pickering.

### **New Brunswick Power**

There have been zero reportable cases.