

Table 11 – Status of Canadian Nuclear Fleet - PLEX and Expected Closures

Reactor	Operator	Grid Connection	Refurbishment <sup>(a)</sup>	Planned Closure <sup>(b)</sup>	Licensed to <sup>(c)</sup>
Bruce-1	Bruce	1977	Restarted in 2012	2064	2028
Bruce-2		1976	Restarted in 2012		
Bruce-3		1977	01/02/23–30/06/26		
Bruce-4		1978	01/01/25–31/12/27		
Bruce-5		1984	01/07/26–30/06/29		
Bruce-6		1984	17/01/20–05/11/23		
Bruce-7		1986	01/07/28–30/06/31		
Bruce-8		1987	01/07/30–30/06/33		
Darlington-1	OPG	1990	15/02/22–18/04/25	2055	2025
Darlington-2		1990	10/16–06/20 <sup>(d)</sup>		
Darlington-3		1992	30/07/20–02/01/24		
Darlington-4		1993	15/09/23–16/10/26		
Pickering-1	OPG	1971		30/09/2024 <sup>(e)</sup>	2028 <sup>(f)</sup>
Pickering-4		1973		13/12/2024 <sup>(e)</sup>	
Pickering-5		1982		31/12/2025 <sup>(e)</sup>	
Pickering-6		1983		31/12/2025 <sup>(e)</sup>	
Pickering-7		1984		31/12/2025 <sup>(e)</sup>	
Pickering-8		1986		31/12/2025 <sup>(e)</sup>	
Point Lepreau	NB Power	1982	03/2008–03/2012	2039–2040 <sup>(g)</sup>	2032 <sup>(h)</sup>

Sources: Compiled by WNISR, from IESO, Operators, CNSC, 2022

Notes: OPG = Ontario Power Generation

(a) - IESO, “Annual Planning Outlook - A view of Ontario’s electricity system needs”, Independent Electricity System Operator, January 2020, see <http://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Annual-Planning-Outlook-Jan2020.pdf?la=en>, accessed 1 August 2020; Updated with IESO, “Annual Planning Outlook - Ontario’s electricity system needs: 2022-2040”, December 2020, see <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Annual-Planning-Outlook-Dec2020.ashx>, accessed 12 June 2021; and IESO, “Annual Planning Outlook - Ontario’s electricity system needs: 2023-2042”, December 2021, see <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/Dec2021/2021-Annual-Planning-Outlook.ashx>, accessed 18 May 2022.

(b) - As announced by operator.

(c) - As listed on Canadian Nuclear Safety Commission’s (CNSC) website for each station.

Bruce: <https://www.cnsccsn.gc.ca/eng/reactors/power-plants/nuclear-facilities/bruce-nuclear-generating-station/index.cfm>;

Darlington: <https://www.cnsccsn.gc.ca/eng/reactors/power-plants/nuclear-facilities/darlington-nuclear-generating-station/index.cfm>;

Pickering: <https://www.cnsccsn.gc.ca/eng/reactors/power-plants/nuclear-facilities/pickering-nuclear-generating-station/index.cfm>;

Point Lepreau: <https://www.cnsccsn.gc.ca/eng/reactors/power-plants/nuclear-facilities/point-lepreau-nuclear-generating-station/index.cfm>.

(d) - Refurbishment of Darlington-2 was completed in June 2020, with the reactor being reconnected to the grid on 2 June 2020. OPG, “Darlington Unit 2 powers on—Refurbishment now complete on first unit”, 4 June 2020, see <https://www.opg.com/news/darlington-unit-2-powers-on/>, accessed 28 July 2020.

(e) - Pickering Units 1 and 4 are expected to be closed in 2024, and Units 5–8 in 2025. OPG, “The future of Pickering Generating Station”, n.d., see <https://www.opg.com/powering-ontario/our-generation/nuclear/pickering-nuclear-generation-station/future-of-pickering/>, accessed 12 June 2021.

(f) - The Pickering Power Plan is licensed to 2028 but operation beyond 2024 would require additional authorizations. CNSC, “Pickering Nuclear Generating Station, Updated 24 February 2022, see <https://nuclearsafety.gc.ca/eng/reactors/power-plants/nuclear-facilities/pickering-nuclear-generating-station/index.cfm>, accessed 17 August 2022.

(g) - NB Power, “NB Power’s 10-Year Plan - Fiscal Years 2021 to 2030”, September 2019, see <https://www.nbpower.com/media/1489656/10-year-plan-2021-to-2030.pdf>, accessed 13 May 2020; Updated with NB Power, “Integrated Resource Plan”, November 2020, see <https://www.nbpower.com/media/1490323/2020-irp-en-2020-11-17.pdf>, accessed July 2021.

(h) - CNSC, “CNSC renews the power reactor operating licence for the Point Lepreau Nuclear Generating Station for a 10-year period”, Canadian Nuclear Safety Commission, Updated 22 June 2022, see <https://www.canada.ca/en/nuclear-safety-commission/news/2022/06/cnsc-renews-the-power-reactor-operating-licence-for-the-point-lepreau-nuclear-generating-station-for-a-10-year-period.html>, accessed 23 June 2022.