

2024 Nuclear Performance Scorecard

Performance Outcomes	Measures (single-year unless otherwise noted)	2020	2021	2022	2023	2024		Historical Trend	2025 Target	
		Actual	Actual	Actual	Actual	Actual	Target			
Safety	Total Recordable Injury Frequency (#/200k hours worked)									
		Pickering	0.19	0.10	0.27	0.20	0.20	0.20	● -	0.20
		Darlington	0.25	0.07	0.08	0.00	0.20	0.20	● +	0.20
	Total Industrial Safety Accident Rate (#/200k hours) ¹									
		Pickering	0.00	0.03	0.00	0.00	0.00	0.00	● +	0.00
		Darlington	0.00	0.00	0.00	0.00	0.00	0.00	● +	0.00
	Collective Radiation Exposure (person rem/unit)									
		Pickering	107.41	67.74	69.99	67.17	103.50	78.90	● +	59.30
		Darlington	29.97	110.47	29.90	15.64	19.81	84.80	● +	25.57
	Airborne Tritium Emissions (curies/unit)									
		Pickering	2,918	2,331	2,229	2,164	1,820	2,170	● +	2,000
		Darlington	879	905	1,157	1,000	958	1,305	● -	1,215
	Fuel Reliability Index (microcuries /gram)									
		Pickering	0.0001	0.0008	0.0002	0.0003	0.0002	0.0005	● +	0.0005
		Darlington	0.0035	0.0002	0.0001	0.0001	0.0029	0.0005	● +	0.0005
Reactor Automatic and Manual Trip Rate (#/7000 hours) ²										
	Pickering	0.000	0.000	0.139	0.247	0.320	0.500	● -	0.500	
	Darlington	0.000	0.000	0.000	0.100	0.100	0.500	● -	0.500	
Auxiliary Feedwater System Unavailability (#)										
	Pickering	0.0118	0.0085	0.0010	0.0000	0.0000	0.0000	● N	0.0000	
	Darlington	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	● N	0.0000	
Emergency AC Power Unavailability (#)										
	Pickering	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	● N	0.0250	
	Darlington	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	● N	0.0000	
High Pressure Safety Injection Unavailability (#)										
	Pickering	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	● N	0.0200	
	Darlington	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	● N	0.0000	
Reliability	WANO Nuclear Performance Index Rolling Average (%) ³									
		Pickering	82.50	73.80	80.90	81.20	84.95	85.00	● +	82.75
		Darlington	93.60	85.80	91.40	89.40	74.74	78.90	● -	80.20
		OPGN	85.30	76.80	82.40	82.30	83.25	84.20	● +	82.24
	Forced Loss Rate (%)									
		Pickering	2.65	6.22	1.81	2.78	2.56	3.50	● +	3.50
		Darlington	1.54	3.52	7.51	1.44	12.07	4.61	● -	3.61
	Unit Capability Rate (%) ⁴									
		Pickering					96.36	96.37	● -	96.20
		Darlington					86.97	94.12	● -	95.28
		OPGN					92.71	95.54	● -	95.67
	Unit Capability Factor (%) ⁴									
		Pickering	76.25	78.92	80.01	80.66	83.30	80.91	● +	89.14
		Darlington	93.05	82.66	86.99	96.99	74.58	81.26	● -	94.19
		OPGN	84.45	80.70	82.66	86.68	79.90	81.04	● -	91.99
Chemistry Performance Indicator (Index)										
	Pickering	1.06	1.06	1.03	1.18	1.22	1.15	● -	1.09	
	Darlington	1.01	1.01	1.00	1.01	1.03	1.00	● N	1.05	
On-line Deficient Non-Critical Backlog (work orders / unit)										
	Pickering	88.00	68.00	39.80	29.50	20.20	20.00	● +	14.00	
	Darlington	96.00	70.33	61.00	29.00	17.33	20.00	● +	14.00	
On-line Deficient Critical Backlog (work orders /unit)										
	Pickering	0.50	1.30	0.80	0.67	0.60	0.00	● +	0.00	
	Darlington	1.33	0.00	0.00	0.00	0.00	0.00	● +	0.00	
On-line Corrective Non-Critical Backlog (work orders /unit)										
	Pickering	3.00	6.30	3.80	0.83	1.20	1.00	● +	0.00	
	Darlington	2.30	2.00	0.50	0.00	0.00	0.00	● +	0.00	
On-line Corrective Critical Backlog (work orders /unit)										
	Pickering	0.00	0.30	0.00	0.00	0.00	0.00	● +	0.00	
	Darlington	0.30	0.00	0.00	0.00	0.00	0.00	● +	0.00	
Cost Effectiveness ⁵	Total Generating Cost per Net MWh (\$/MWh)									
		Pickering	67.87	64.75	60.05	69.98	64.30	67.51	● +	74.88
		Darlington	54.30	79.27	101.52	108.85	141.94	127.08	● -	71.94
		OPGN	60.66	71.53	76.38	85.73	91.78	89.35	● -	73.2
	Normalized Total Generating Cost per Net MWh (\$/MWh)									
		Pickering	47.94	44.76	39.55	48.02	41.74	44.22	● +	34.09
		Darlington	32.23	45.59	33.88	36.60	51.27	42.85	● -	33.83
		OPGN	39.71	45.15	37.32	43.40	45.15	43.71	● -	33.95
	Total Generating Cost per Unit (\$M/unit)									
		Pickering	232.32	227.59	214.11	250.49	228.49	231.25	● -	295.48
		Darlington	389.17	489.03	663.52	796.56	780.21	755.89	● -	505.78
		OPGN	287.43	314.74	331.65	387.01	372.79	362.41	● -	385.61
	Normalized Total Generating Cost per Unit (\$M/unit)									
		Pickering	177.15	169.54	151.79	184.98	159.69	163.50	● +	163.52
		Darlington	241.83	297.90	238.91	287.92	308.25	278.33	● -	247.89
	OPGN	184.49	212.33	174.57	210.71	198.55	192.21	● -	199.68	
Non-Fuel Operating Cost per Net MWh (\$/MWh)										
	Pickering	59.97	57.24	54.40	63.24	57.65	60.75	● -	61.27	
	Darlington	36.91	57.64	64.98	67.14	95.70	88.53	● -	48.10	
Normalized Non-Fuel Operating Cost per Net MWh (\$/MWh)										
	Pickering	--	--	--	--	--	--	● -	--	
	Darlington	31.33	47.29	41.51	41.83	63.04	55.44	● -	37.72	
Fuel Cost per Net MWh (\$/MWh)										
	Pickering	3.89	3.72	3.75	3.90	4.29	4.31	● -	6.80	
	Darlington	4.22	4.00	3.82	4.32	5.29	4.62	● -	5.02	
Capital Cost per MW Design Electrical Rating (\$k/MW)										
	Pickering	26.59	25.79	13.12	19.71	16.27	16.31	● +	34.71	
	Darlington	107.55	123.88	243.57	311.66	256.36	229.91	● -	150.71	
Normalized Capital Cost per MW Design Electrical Rating (\$k/MW)										
	Pickering	--	--	--	--	--	--	● -	--	
	Darlington	82.96	90.52	104.28	133.09	111.39	106.91	● -	110.40	
Human Resources	18-month Human Performance Error Rate (#/200k ISAR and contractor hours)									
		Pickering	0.0200	0.0200	0.0600	0.0600	0.0000	0.0000	● N	0.0000
		Darlington	0.0200	0.0180	0.0000	0.0000	0.0019	0.0000	● +	0.0000

Note 1 : Industrial Safety Accident Rate (ISAR2) has been replaced by Total Industrial Safety Accident Rate (TISA2) in Q1 2024 to align with NPI methodology transition from Method 4 to Method 10. ISAR included only permanent employees when counting industrial safety accidents, while the new indicator TISA includes both contractors and permanent employees.

Note 2 : Reactor Trip Rate was replaced by Reactor Automatic & Manual Trip Rate following the NPI Method 10 transition in 2024. The indicator change includes the change from Unplanned Automatic Scrams (UA7) to Unplanned Total Scrams (US7). Method 4 utilized UA7 metric which only included the automatic scram data. The new indicator, US7, which includes both automatic and manual scrams.

Note 3 : The Nuclear Performance Index Method 10 is a WANO sponsored performance measure and is a weighted composite of ten WANO Performance Indicators related to safety and production performance reliability. In Q1 of 2024, Method 10 replaced Method 4: Unit Capability Factor (UCF) was replaced by Unit Capability Rate (UCR), Automatic Reactor Scrams (UA7) was replaced by Automatic and Manual Scrams (US7), and Industrial Safety Accident Rate (ISAR2) – replaced by Total Industrial Safety Accident Rate (TISA2). NPI is calculated using a 2-year rolling average for PN and a 3-year rolling average for DN.

Note 4 : UCR replaced UCF due to NPI methodology change from Method 4 to Method 10 in Q1 of 2024. UCF will continue to be reported as UCF incorporates additional factors that impact production (i.e. Unbudgeted Planned Outages).

Note 5 : Value for Money metric targets are subject to change upon finalization of assumptions and cost allocations.

Current Year	+	Favourable
● Target met	-	Unfavourable
● Target not met	N	Neutral