

S-99 Reports

In accordance with regulatory standard entitled S-99 Reporting Requirements for Operating Nuclear Power Plants, power reactors operating in Canada must issue formal reports to the Canadian Nuclear Safety Commission (CNSC) on events defined in the S-99 regulatory standard.

The following is a list of S-99 event reports* that were generated for Pickering operations in 2011, excluding those containing confidential or security-related information. Ontario Power Generation provides an update to this list on a quarterly basis.

Questions? For more information on the Event Reports listed, Event Reports from prior years or other reports on OPG's operations, contact **Kevin Powers, Director Nuclear Public Affairs** at 416-592-8470.

Pickering A Nuclear Generating Station 2011 S-99 Reporting

Event Number	S-99 Report Title
1st Quarter	
P-2010-28165	Actuation of Containment System: Unit 1 Reactor Building Box-up
P-2010-29387	Unit 1 Safety Related Test was not Performed as Written and couldn't be Credited as Complete by Late Date.
P-2011-00097	Cracks Found on U4-BY2 Class I Battery Casing
P-2011-00183	Unit 4 Reactor Building Box-Up on High Activity
P-2011-00339	Unit 1 Reactor Trip from 99.5% FP on SDSA High Heat Transport System Temperature Trip Parameter
P-2011-00662	Low Pressure Service Water Pumps Functional Test Was Not Performed Within the Required Test Interval, With No Approved Deferral in Place
P-2011-00908	Radiation Protection Instrumentation Not Calibrated before Due Date
P-2011-01702	Use of Non-Pressure Boundary Fitting in a Pressure Boundary Application
P-2011-01857	Temporary Equipment not Removed from Airlock Prior to Start-up
P-2011-03012 / 03132	Employee Fell and Injured Wrist in Parking Lot
P-2011-03057	Back Up Instrument Air Supply to Airlock Seals Exceeding Leakage Limit Due to Failed Relief Valve
P-2011-03111	Frazil Ice in the Forebay Causes Exceedence of the Allowed Daily Temperature Excursion of 11.1°C (as per Certificate of Approval)

Event Number	S-99 Report Title
2nd Quarter	
P-2011-01803	Resin Slurry Hose Not Posted
P-2011-04368	Planned Reactor Trip During Unit 4 Shutdown / Level 2 Impairment of ECI
P-2011-05282	Unit 1 Manually Tripped on SDSE to Repair Degraded Component
P-2011-05357	Loss of Power to IAEA Digital Multi Optical System (DMOS)
P-2011-05369	Use of Non-Pressure Boundary Fitting in a Pressure Boundary Application
P-2011-05441	Two Emergency Low Pressure Service Water Pumps Unavailable During Strainer Maintenance
P-2011-05516	Unit 1 Emergency Low Pressure Service Water System Unavailable
P-2011-05561	Operational Past Unavailability incurred in Dec 2010 on Unit 4 Emergency Low Pressure Service Water
P-2011-05860	Category C Demineralized Water Spill
P-2011-06744	Temporary Loss of Power to Lighting and Cameras in the Irradiated Fuel Bay due to a bus (1-53200-BUB) trip
P-2011-06747	Unit 1 Manual Trip on SDSA due to Partial Loss of Class IV Power
P-2011-07247	Back Up Instrument Air Supply to Pressure Relief Duct Airlock Failed Air-Holding Test
P-2011-07289	Emergency Low Pressure Service Water Unavailable for a Short Time due to Air Leak on Control Valve
P-2011-08155	Duct Tape Found on Horn Located in East Accessible Area
P-2011-08511	Impairment of Negative Pressure Containment
P-2011-08533	Auxiliary Boiler Feed Pump Unavailable.
P-2011-09106	Emergency Low Pressure Service Water System Unavailable
P-2011-09114	Emergency Low Pressure Service Water System Unavailable
P-2011-09173	Unit 1 Automatic Box-Up on High Activity
P-2011-09589	Float Valves Installed in Main Volume Pump may not be Environmentally Qualified
P-2011-09858	Auxiliary Boiler Feed Pump Unavailable.
P-2011-11179	Pressure Boundary Degradation: Rupture Causing Steam Leak at Expansion Joint near Steam Release Valve
P-2011-11613	Technical Operability Evaluation Initiated on Standby Generator Battery Bank
P-2011-11703	Standby Generators Unavailable for a Short Time during P-012 Test on 012-54600-SG2.
P-2011-11908	Unit 4 Manually Tripped

Event Number	S-99 Report Title
P-2011-12104	Daily Average Limit for Total Residual Chlorine Exceeded Certificate of Approval Limit
P-2011-12338	Pickering A ECI Recovery Strainers High Stresses Due to Thermal Expansion During a LOCA
P-2011-12394	Unit 1 Reactor Tripped Manually on SDSE Heat Transport System High Pressure
P-2011-12552	Unit 1 Planned Manual Reactor Trip
P-2011-12584	Unit 1 AL6 Access Control Lock Found Not Engaged
P-2011-12689	Site Electrical System Does Not Meet Design Intent
P-2011-12788	Site Electrical System Does Not Meet Design Intent
P-2011-12868	OP&P non compliance due to Equipment Failure
Event Number	S-99 Report Title
3rd Quarter	
P-2011-12784	Site Electrical System Does Not Meet Design Intent Impairment
P-2011-13562	Technical Operability Evaluation Initiated on the New Automatic Voltage Regulator on Pickering A Standby Generators
P-2011-14335	Auxiliary Boiler Feed System Unavailable due to Recirculation Valve Not Fully Open
P-2011-14752	Deficiencies in Inspection and Maintenance of Chemistry Laboratory Fumehoods
P-2011-14756	Class III Standby Generators Unavailable
P-2011-14978	Pickering A went below Minimum Shift Complement due to a Medical Emergency
P-2011-15113	Expired Fire Extinguishers in the field
P-2011-15408	Fire Extinguishers and Exit Sign found Not Installed per National Fire Code
P-2011-15659	Unit 1 Auxiliary Boiler Feed Pump Does Not Meet Design Intent Impairment due to Valve Stuck Closed
P-2011-15681	Relief Valve not Tested per Requirements of Pressure Boundary Program
P-2011-16723	Technical Operability Evaluation Raised on Extent of Condition of Standby Generator's Power Turbine Blades
P-2011-16983	Small amount of Lubricating Oil Spilled to the Lake,
P-2011-18617	Missed Test: Low Pressure Service Water Pump Test Not Performed and No Approved Deferral Was in Place
4th Quarter	

Event Number	S-99 Report Title
P-2011-18755	Back Up Air Supply Unavailable to Steam Reject Valves
P-2011-20058	Seismic Concerns Identified Due to Unsecured Equipment
P-2011-21714	Operator Action Credited in Safety Report Not Reflected in Operating Procedures
P-2011-21791	NFC Non-Compliance: PA Speaker not Working
P-2011-22581	Operability Concern Raised Over ECI Recovery Strainers Thermal Expansion During a LOCA
P-2011-22702	Load Shedding Impairments Discovered during P-089 Test
P-2011-22758	Pre-maintenance Test Not Performed As Required on Shutdown Cooling Valves
P-2011-22816	Containment Boundary not Established During Maintenance Work in the Fuel Receiving Bay
P-2011-23396	Oil Residue Identified during Boiler Blowdown Excavation (retraction pending)
P-2011-23419	TSSA Approval Not Obtained Prior to Performing Pressure Boundary Work
P-2011-23423	Unplanned Loss of Auxiliary Irradiated Fuel Bay Lighting
P-2011-24067	Thickness below Code Allowable Limit for Line 71340-L598 at Location NFA-12-1
P-2011-24430	Back-Up Instrument Air Unavailable to Two Depressurization Valves
P-2011-24990	Wall Thickness below Code Allowable Limit for Line 71340-L516 at Location NFA-446
P-2011-25084	Three Standby Generators Unavailable for a short period of time
P-2011-25298	Unposted Radiation Hazard found in the Pickering A Turbine Loading Bay
P-2011-25585	Inspection of Underground Piping not Performed within 5 year Interval as Required by CSA N293-95.
P-2011-25829	Level 2 Impairment of SDSA
P-2011-25968	Level 2 Impairment of ECI

Pickering B Nuclear Generating Station 2011 S-99 Reporting

Event Number	S-99 Report Title
1st Quarter	
P-2010-28695	Level 2 Impairment Declared Due to Main HPECI System Below Minimum Allowable Temperature
P-2010-28718	Level 2 Impairment of Negative Pressure Containment for 4 minutes and 40 seconds due to Damper 73130-MDP604 Failed Closed
P-2011-00660	Potential Non-Conservatism in PHAST Calculated Recall Times
P-2011-00795	Fire Code non compliance due to Public Address System Unavailability
P-2011-01123	Reactor Trip: Unit 5 SDS2 Spurious Trip Caused by Safe Failure of ROP Amplifier
P-2011-01402	Test S2-008 on SDS2 Channel J Was Not Performed Within the Required Test Interval, With No Approved Deferral in Place
P-2011-01516	EWS Recovery Pump NPSH and Cavitation Analysis Required
P-2011-02545	U5 Shutdown due to Frazil Ice in the Forebay which Blocked the Cooling Water Intake for Unit 5
P-2011-03955	Technical Operability Evaluation Initiated Due to use of Under-Rated Elbows in Instrument Air System
P-2011-04449	Small (approximately 13 litres) Fuel Oil Spill
2nd Quarter	
P-2011-02531	Heavy Water Drums Not Posted
P-2011-03387	National Fire Code non-compliance – Findings from Type II inspection
P-2011-07285	U5 Moderator Gadolinium Concentration Lower Than Expected
P-2011-09327	Whole Body Monitor Found with LCD Damaged
P-2011-10031	Low Wall Thickness Found on Unit 5 Reheater Drains Pump Suction Piping
P-2011-11449	Un-posted Bag Placed In Front of Unit 5 Airlock 1
P-2011-11799	Estimated 1500 L of Sewage Spilled to the Environment
P-2011-12557	Unit 5 Reactor Tripped Manually
P-2011-12683	Technical Operability Evaluation Initiated for Emergency Water System Leak near Pickering-B Screenhouse.
Event Number	S-99 Report Title
3rd Quarter	

Event Number	S-99 Report Title
P-2011-13678	Fire Code Non-Compliance – Storage of gas bottles in stairwell.
P-2011-13791	Access to a Fire Extinguisher Blocked in Pickering B Screenhouse
P-2011-13929	Reactor Trip: Unit 7 Reactor Trips on SDS2 during Channelized Maintenance
P-2011-14289	Missed Test: Amplifier Calibration for Ion Chamber was not Performed within the Required Test Interval, without an Approved Deferral in Place
P-2011-14763	Employee Felt Faint during Work
P-2011-15243	Fire Code Non-Compliance - PA System not audible in all locations of Penthouse.
P-2011-15509	Potential Exceedence of Certificate of Approval Limit for Morpholine in Condenser Cooling Water
P-2011-16832	Level 2 Impairment of ECI due to Heat Tracing Circuits Being Unavailable
P-2011-17167	Reactor Building High Water Level Indication and Alarm for Emergency Water System Unavailable
P-2011-17175	Bleed Condenser Isolation Does Not Meet Design Intent due to Isolation Valves Failed to Close Automatically
P-2011-17522	Missed Test: Unit 8 SDS2 Test S2-8 Channel G Not Performed and No Approved Deferral Was in Place
P-2011-17526	Level 2 Impairment of NPC, SDS1, SDS2 and ECI
P-2011-17560	Fire Extinguisher Blocked by Scaffolding
P-2011-17602	Fire Extinguisher Not Mounted in Accordance to National Fire Code
P-2011-17743	Potential Exceedence of Certificate of Approval Limit for Morpholine in Condenser Cooling Water
P-2011-18635	Nameplate Missing from Pressure Vessel
Event Number	S-99 Report Title
4th Quarter	
P-2011-04934	Missing Seismic Tubing Support for ECI line (unapproved modification)
P-2011-17879	Tampering With Public Announcement Speakers
P-2011-18469	Hydrostatic Pressure Test on Liquid Injection Shutdown System Did not Meet Pressure Boundary Code Requirements
P-2011-19646	Loss of Sponge Cleaning Balls to Lake
P-2011-20200	Auxiliary Boiler Feed Pump Unavailable due to Excessive Water in Oil
P-2011-20216	Auxiliary Boiler Feed Pump Unavailable due to Excessive Water in Drive End Bearing Housing
P-2011-20731	Eight Dead Fish Observed near Station Outfall following Algae Debris Run

Event Number	S-99 Report Title
P-2011-20865	Auxiliary Boiler Feed Pump Unavailable due to Mechanical Seal Failure
P-2011-21667	Small Oil Leak to Tundish reported to the Environment
P-2011-23351	High Deuterium Concentrations Measured in Heat Transport Collection Tank
P-2011-24371	While in Guaranteed Shutdown State SDS1 Level 1 Impairment was Declared.
P-2011-24649	Hilborn Checks were not Performed Prior to their Late Date without an Approved Deferral in Place
P-2011-25467	Control Valve (6-33320-CV123) Failed to Close Making the Bleed Circuit of the HTS Unavailable.

*This list is for events reportable under section 6.3 of the S-99 regulatory standard, including immediate and next business day reportable events. In accordance with S-99, additional reporting is required on a quarterly and annual basis.