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Event Initial Report

Rapport initial d'événement

Ontario Power Generation

Ontario Power Generation

**Pickering Nuclear Generating Station
Unit 4: Unplanned Outage due to
Condenser Cooling Backpressure**

**Centrale nucléaire de Pickering,
tranche 4 : Arrêt imprévu causé par la
contre-pression du refroidissement du
condenseur**

Commission Meeting

Réunion de la Commission

August 22, 2018

Le 22 août 2018

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EVENT INITIAL REPORT (EIR)

E-DOCS-# 5605974

EIR: Pickering Nuclear Generating Station Unit 4 Unplanned Outage due to Condenser Cooling backpressure	
Prepared by: Directorate of Power Reactor Regulation, Pickering Regulatory Program Division	
Licensee: Ontario Power Generation	Location: Pickering NGS Unit 4
Date Event was Discovered: July 4, 2018	Have Regulatory Reporting Requirements been met? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Proactive Disclosure: Licensee: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> CNSC: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Overview	
Reporting Criteria: REGDOC-3.1.1 - 11(b)	
The licensee shall report on:	
b. A reactor shutdown or an unplanned change in reactor power	
Description: On August 4, 2018, Pickering NGS Unit 4 started to experience high condenser backpressure alarm due to a clogged condenser debris filter. The clogged filter coupled with a four (4) degree Celsius increase in lake temperature reduced the effectiveness of the Unit 4 condenser. The high condenser back pressure alarm caused an automatic reactor set back to 87% of Full Power. Concurrently, operators manually tripped the turbine to account for the reduction of power. During the manual turbine trip, Unit 4 incurred a partial loss of class IV power; the loss was due to a circuit breaker that failed to close during the transfer of class IV power to the System Service Transformer. The System Service Transformer provides electrical power from the grid to the unit.	
Impact of the Event	
On People:	
How many workers have been (or may be) affected? 0	
How many members of the public have been (or may be) affected by the event? 0	
How were they affected?	
Not Applicable	
On the Environment: A spill of demineralized water occurred during the event, but the spill was contained. OPG has confirmed the spill is not reportable to the Ministry of Environment, Conservation and Parks. There was no radiological release and no harm to the environment.	
Other Implications:	
Licensee Actions	
Taken or in Progress: Unit 4 is currently shutdown (0% of Full Power) and has transitioned into a Guaranteed Shutdown State (GSS) with Reactor Shutdown Guarantee #1 (over poisoned moderator). The heat sink currently being used is Shutdown Cooling (SDC). Planned: The failed circuit breaker will be repaired prior to Unit 4 being returned to service. All system responses and operator actions were as expected given the partial loss of Class IV power.	
CNSC Actions	
Taken or in Progress: CNSC staff have met with OPG's Director of Engineering and Director of Maintenance to: <ul style="list-style-type: none"> • Gather information and facts about the event • Ensure the Pickering A Unit 4 reactor is returned to service in a safe manner. CNSC staff has also reviewed the Station Condition Record pertaining to this event (P-2018-17027)	

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EIR: Pickering Nuclear Generating Station Unit 4 Unplanned Outage due to Condenser Cooling backpressure

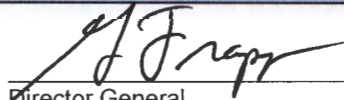
Planned: CNSC staff will continue to monitor the progress of Unit 4 as it returns to service.

Additional reporting to the Commission Members anticipated:

Yes

No

This issue will be discussed during the next Commission Meeting through the NPP Status Report.

Name and Title	Signature
Gerry Frappier, Director General, Directorate of Power Reactor Regulation	 _____ Director General Aug 13 / 15 Date