



Source : <https://www.sortirdunucleaire.org/Etats-Unis-Grand-Gulf-arret-manuel-d-urgence-du>

Réseau Sortir du nucléaire > Informez

vous > Des accidents nucléaires partout > **Etats-Unis : Grand Gulf : arrêt manuel d'urgence du réacteur suite à une forte oscillation de la charge de la turbine principale**

30 janvier 2018

Etats-Unis : Grand Gulf : arrêt manuel d'urgence du réacteur suite à une forte oscillation de la charge de la turbine principale

L'amplitude des oscillations était de 30 000 000 watts électriques. Les vannes de contournement de la turbine ont été utilisées et la chaleur résiduelle évacuée par le condenseur principal. Les systèmes de protection du réacteur ont été activés et auraient fonctionné correctement, pourtant, le circuit d'isolation du refroidissement du cœur du réacteur était en cours de maintenance et, de fait... **HORS SERVICE ! Des réacteurs tournent donc aux Etats-Unis, à quasi pleine puissance, avec des circuits de sécurité fondamentaux qui ne sont pas utilisables.**



Type : BWR Mark 3 - Puissance : 3 898 MWth - Première divergence : 08 / 1982 -

Available in english only

Event Number : 53188

Facility : GRAND GULF - State : MS

Unit : [1] - RX Type : [1] GE-6

Event Date : 01/30/2018 - Event Time : 18:22 [CST]

Emergency Class : NON EMERGENCY 10 CFR Section : 50.72(b)(2)(iv)(B) - RPS ACTUATION - CRITICAL
50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION

Initial PWR : 90 % Current PWR : 0 %

MANUAL REACTOR SCRAM DUE TO MAIN TURBINE LOAD OSCILLATIONS

"On 1/30/2018 at 1750 [CST], the Reactor Pressure Control Malfunctions ONEP [Off Normal Event Procedure] was entered due to main turbine load oscillations of approximately 30 MWe peak to peak. At 1822 [CST], a manual reactor scram was inserted by placing the Reactor Mode Switch in Shutdown due to continued main turbine load oscillations.

"Reactor SCRAM ONEP, Turbine Trip ONEP, and EP-2 were entered. Reactor water level was stabilized at 36 inches narrow range on startup level and reactor pressure stabilized at 933 psig using main turbine bypass valves.

"Reactor Water Level 3 (11.4 inches) was reached which is the setpoint for Group 2 (RHR to Radwaste Isolation) and Group 3 (Shutdown Cooling Isolation). No valve isolated in these systems due to all isolation valves in these groups being in their normally closed position. The lowest Reactor Water level reached was -36 inches wide range.

"No other safety system actuations occurred and all systems performed as designed.

"That event is being reported under 10CFR 50.72(b)(2)(iv)(B) as any event or condition that results in actuation of the Reactor Protection System (RPS), when the reactor is critical and also reported under 10CFR 50.72(b)(3)(iv)(A), as any event or condition that results in actuation of RPS."

The MSIVs are open with decay heat being removed via steam to the main condenser using the bypass valves. Off site power is stable, and the plant is in a normal shutdown electrical lineup. RCIC (Reactor Core Isolation Cooling) was out of service for maintenance, and the reactor water level did not reach the system activation level. The cause of the main turbine load oscillations being investigated.

The licensee notified the NRC Resident Inspector.

<https://www.nrc.gov/reading-rm/doc-collections/event-status/event/2018/20180131en.html>