

Licensee/Facility:

Notification:

Florida Power & Light Co.  
Saint Lucie 1  
Ft. Pierce, Florida

MR Number: 2-93-0065  
Date: 06/07/93

Dockets: 50-335  
PWR/CE

Subject: SHUTDOWN IN EXCESS OF THREE DAYS - UPDATE

Reportable Event Number: 25589

Discussion:

As reported in Event Number 25589 of May 30, 1993, and Preliminary Notification PNO-II-93-024 of June 1, 1993, St. Lucie Unit 1 had conducted a Technical Specification required shutdown due to indications of a control rod being unlatched from its extension shaft so that it could not be raised from the bottom of the core. The licensee had discovered this condition during low power physics testing following reactor startup on May 28 from a refueling outage. The licensee placed Unit 1 in Mode 6, removed the reactor vessel head, and confirmed that one of the two control rods of Control Element Assembly (CEA) 7 was unlatched from the extension shaft. The licensee determined the most likely cause to be partial engagement of the extension shaft gripper plunger into the control rod hub during the post-refueling rod latching. Extension shaft latching spring force would have been sufficient to successfully lift the rod during the two lift weight tests that had been conducted. A visual inspection of the rod latched indicator pin on the extension shaft was

also done, but must have mistaken a 75% (approximate) engagement position for 100% engagement. This visual inspection had been done using binoculars from a distance above the reactor vessel to view the indicator pin, which was submerged in borated water.

The licensee latched both CEA 7 rods, installed the reactor vessel head, and is preparing for reactor coolant system heatup and reactor restart. The licensee's recommended corrective actions to preclude recurrence include: better lighting for viewing the rod latched indicator pin, independent verification of that visual pin position inspection, CEA extension shaft elevation measurements to verify post-latched position, recording latching tool indicator position for CEAs with two rods as additional confirmation, and insuring that sufficient slack exists in the latching tool cables while withdrawing the gripper plungers (to latch the rods) to prevent restraining a drop of the extension shaft assembly. The vendor, Combustion Engineering, has informed the only other licensee with the same rod latching arrangement, Calvert Cliffs.

Regional Action:

The Resident Inspector is following this issue.

Contact: R. SCHIN

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