

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region III staff on this date.

Facility: Commonwealth Edison Co. Licensee Emergency Classification  
 Dresden Unit 2 General Emergency Site Area Emergency  
 Morris, Illinois Alert Unusual Event N/A X

Docket No. 50-249

Subject: SHUTDOWN TO INSPECT REACTOR INTERNALS

On March 24, 1991, the reactor was shut down to inspect the reactor internals to determine the cause of an unexpected anomaly in electrical output as cooling water flow through the reactor core was increased. The plant was at about 90 percent power when the anomaly was observed by a reactor operator on March 22, 1991.

After a review by the licensee's nuclear engineering staff and the reactor vendor, the licensee reported that the steam separator may have lifted from the seat on the core shroud in the reactor. Lifting of the steam separator would allow a portion of the steam-water mixture to flow into the annulus region of the vessel instead of through the steam separator and into the main steam lines.

As coolant flow through the reactor core increased from 72 to 75 million pounds per hour, the plant's electrical output increased by 2 megawatts instead of the anticipated 30 megawatt increase. The licensee also reported the reactor coolant temperature in the annulus region increased by about 2 degrees Fahrenheit at the same time the core flow/electrical output anomaly occurred.

After its analysis, the licensee initiated the reactor shutdown for an inspection of the reactor internals. The licensee expects the outage to last at least two weeks.

The resident inspectors will monitor the licensee's inspection.

The State of Illinois will be notified. The information in this Preliminary Notification has been reviewed with licensee management.

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The licensee reported the core flow/electrical output anomaly and planned shutdown to the NRC Operations Center at 4:05 p.m. (CST) on March 23, 1991. This information is current as of 11 a.m. on March 25, 1991.

CONTACT:

*B. Burgess*  
B. Burgess  
388-5575

*W.D. Shafer*  
W. Shafer  
388-5656