PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-I-97-037

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 Region I staff in King of Prussia, Pennsylvania on this date.

Facility
Gpu Nuclear Corp.
Three Mile Island 1
Middletown, Pennsylvania
Dockets: 50-289

Licensee Emergency Classification
Notification of Unusual Event
Alert
Site Area Emergency
General Emergency
X Not Applicable

Subject: THREE MILE ISLAND REACTOR TRIP

At 12:14 p.m., on June 21, 1997, the Three Mile Island Unit 1 reactor tripped from full power following 616 days of operation due to an energetic failure of one of the unit generator output breakers under ground fault conditions. Coincident to the breaker failure, the plant also lost all offsite power. All control rods fully inserted, both emergency diesel generators started and powered the emergency busses and the emergency feed water system actuated as expected. The licensee declared an Unusual Event at 12:26 p.m. and notified the NRC Operations Center at 12:53 p.m.

The loss of electrical power to the non-emergency busses resulted in the loss of the plant's four reactor coolant pumps. Reactor cooling was established via natural circulation with heat removed from the steam generators through the atmospheric steam dumps. The licensee dispatched field radiation monitoring personnel during the event. Field sampling was performed and results did not indicate any radiation levels above normal background. This result was consistent with the low levels of reactor coolant activity and primary-to-secondary leakage rate existing prior to the event.

NRC headquarter's and Region I personnel monitored the TMI response to this event from their respective incident response centers and the NRC resident inspector reported to the site to observe plant and licensee activities. Offsite power was restored to the plant at 1:44 p.m. The licensee restored main condenser vacuum shortly after 8 p.m. and transferred steam flow from the atmospheric steam dumps to the main turbine bypass valves at 8:25 p.m.. With all four reactor coolant pumps returned to operation, the licensee terminated the Unusual Event at 9:24 p.m.

The licensee issued three press releases, including one that announced termination of the Unusual Event. The licensee is performing an evaluation of the cause of the unit generator output breaker failure in response to the reported ground fault condition. The plant is in hot shutdown while the licensee pursues restoration of the unit generator output breakers and inspection of other switchyard equipment. A restart of the unit is not planned prior to June 27, 1997.

The contents of this Preliminary Notification have been communicated to

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9706250239 970623 PDR I&E PNO-I-97-037 PDR the Commonwealth of Pennsylvania. NRC Region I also informed the Commonwealth of TMI plant status during the Unusual Event and of the termination on this event.

The resident inspector is continuing to closely follow onsite activities.

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