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8005150009 TIL  
ACRS SM-0179  
PDR 4/22/80

March 14, 1980

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SUBJECT: CAUSE OF CRYSTAL RIVER 3 TRANSIENT

The cause of the Crystal River 3 Transient has been determined by the Licensee to be a mismatch set of connector pins found on a printed circuit board. The circuit board was installed only about a month ago and is used as part of the circuit for the subcooling meters.

The generic aspects of this type of installation fault are under review by the NRC Staff.

The preliminary notification of this event is attached.

E. Igne  
Staff Engineer

Attachment:  
As stated


PRELIMINARY NOTIFICATION

March  
February 6, 1980  
EI  
D-4  
8003250060

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-80-37

This preliminary notification constitutes EARLY notice of an event of POSSIBLE safety or public interest significance. The information presented is as initially received without verification or evaluation and is basically all that is known by NRC staff as of this date

**FACILITY:** Florida Power Corporation  
Crystal River 3  
Docket No. 50-302  
Crystal River, Florida

**SUBJECT:** CAUSE OF CRYSTAL RIVER TRANSIENT DETERMINED

RECEIVED  
P 3:52  
OFFICE OF THE SECRETARY  
NUCLEAR REGULATORY COMMISSION  
U.S. DEPARTMENT OF ENERGY

The licensee, during investigation into the cause of the February 26 transient on the Crystal River 3 facility has established the source of the power failure in the Non Nuclear Instrumentation (NNI) system. A mismatched set of connector pins were found on a printed circuit board. This board acts as an extension between the contacts mounted in the electrical cabinet and solid state electronic subsystems (buffers) used in control and indicator circuits. The particular buffer involved was one installed approximately one month ago, and used as part of one of the subcooling meters at the plant. The investigation indicates the mismatching occurred at the time of original installation. The particular subcooling meter involved has performed erratically since that installation. Repeated attempts to reenergize the power supplies during the transient are presumed to have melted the conducting ribbon on the board and cleared the fault. Further investigation has found a similar mismatched connector pin set on another buffer, but this mismatching had not resulted in a short.

The generic aspects of this type installation fault are under active review by the NRC staff. The investigation by the licensee into the mechanism which led to the short circuit at a time after installation is continuing.

The licensee plans to issue a press release. The NRC does not plan to issue a press release. The State of Florida has been informed.

Region II (Atlanta) received notification of this occurrence by telephone from NRC onsite personnel at 12:00 p.m. on March 6, 1980.

Contact: R. Martin, RII 242-5534; D. Quick, RII 242-5553

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PRELIMINARY NOTIFICATION

CR-3