NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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TOLEDO EDISON COMPANY
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE
SUPPLEMENTAL INFORMATION FOR LER NP-33-80-65

DATE OF EVENT: June 27, 1980

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Source Range Nuclear Instrumentation Channel 2 (NI-1) Failure

Conditions Prior to Occurrence: The unit was in Mode 6 with Power (MWT) = 0 and Load (Gross MWE) = 0.

Description of Occurrence: On June 27, 1980 at about 1007 hours, the output of NI-1 failed to zero. At the time a fuel assembly was in the process of being moved and was approximately 3/4 of the way out of the core. This placed the unit in the action statement of Technical Specification 3.9.2 which requires all core alterations to be suspended until both source range channels are operable. Since the fuel assembly being moved was almost entirely removed from the core, the Shift Supervisor determined it would be safer to complete the fuel assembly removal. Removing the assembly removes positive reactivity from the core. To have reinserted the assembly would have added positive reactivity to the core. The assembly was removed and placed in a support rack in the refueling canal. All further core alterations were stopped.

Designation of Apparent Cause of Occurrence: The exact cause of this occurrence is unknown, but has the characteristics of being an intermittent grounding problem, or intermittent failure of an unknown component. Station instrument ground problems are currently being investigated under Facility Change Request (FCR) 79-429.

Analysis of Occurrence: There was no danger to the health and safety of the public or to station personnel. Redundant indication was continuously available from NI-2.

Corrective Action: Maintenance Work Order (MWO) IC-479-80 was issued to trouble-shoot and repair NI-1. The channel was put in test and found to operate normally. The power supply was then de-energized, and the cables checked for shorts and opens. The preamplifier was opened and inspected for moisture or heat related problems. All inspection results were negative, and the channel re-energized. When power was restored, the channel was found to be operating normally. ST 5091.01, Source Range Functional Check, was performed and the channel declared operable at 1505 hours, thus removing the unit from the action statement of Technical Specification 3.9.2.

Data currently being taken under FCR 79-429 concerning station grounding problems will be evaluated. If the problem re-occurs, portions of the FCR test involving source range channel 2 will again be performed in an attempt to isolate the intermittent problem.

Failure Data: There have been several previous similar failures of NI-1. See Licensee Event Reports NP-33-77-79, NP-33-77-88, NP-33-77-100, NP-33-78-110, NP-33-79-87, and NP-33-79-107.

LER #80-054