

TOLEDO EDISON COMPANY
DAVIS-BESSE UNIT ONE NUCLEAR POWER STATION
SUPPLEMENTAL INFORMATION FOR LER NP-33-77-14

DATE OF EVENT: June 22, 1977

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE:

Loss of Safety Features Actuation System Channel 1 due to loss of Y1

Conditions Prior to Occurrence:

The plant was in Mode 5, with power MWT = 0, MWE = 0.

Description of Occurrence:

On June 22, 1977 at 0640, an Instrument and Control Technician shorted to ground a slide link which supplied AC voltage to the Decay Heat Essential Flow Instrumentation Cabinet. This caused a loss of Essential Instrumentation Distribution Panel Y1, resulting in the tripping of Safety Features Actuation System (SFAS) Channel 1 and Reactor Protection System (RPS) Channel 1. The Essential Instrumentation Distribution Panel Y1 was supplied by its alternate source YAR, and RPS Channel 1 and SFAS Channel 1 were re-energized at 0720 hours.

Designation of Apparent Cause of Occurrence:

The shorting of the slide link supplying the Decay Heat Essential Flow Instrumentation Cabinet was due to a personnel error on the part of the Instrument and Control Technician. The loss of Essential Instrumentation Panel Y1, and subsequent trip of SFAS Channel 1 and RPS Channel 1, however, can be attributed to a design problem in the Inverter YV1.

Analysis of Occurrence:

Since three of four SFAS channels were still operable, and SFAS Channel 1 was tripped, the SFAS would operate if required. The health and safety of the public and station personnel were not endangered.

Corrective Action:

Panel Y1 was supplied by its alternate source, YAR, and SFAS and RPS Channels 1 were re-energized within an hour after tripping occurred. This removed the station from the Action Statement of Technical Specification 3.3.2.1. The manufacturer has been previously notified as to the defective inverter design, and is working to modify it.

Failure Data:

Shorting of slide link has not previously occurred, but defective inverter design was partial cause in another event: NP-33-77-6