PRECURSOR DESCRIPTION AND DATA

NSIC Accession Number: 153333

Date: November 15, 1979

Title: Flowpath from AFW Pump to Two Steam Generators Made Inoperable at Cook 1

The failure sequence was:

With the reactor at 100% power and the turbine driven AFW pump out of service for repair, the motor control center which provides power for valves which direct flow from one motor-driven AFW pump to two of the four steam generators was removed from service for inspection.

Corrective action:

The motor control center was returned to service.

Design purpose of failed system or component:

The motor control center provides power to the two motor operated valves associated with the AFW flow path from the motor-driven AFW pumps to two of the four steam generators.

Unavailability of system per WASH 1400:* AFW (loss of net + 8 hrs): 2.5 × 10⁻⁴

Unavailability of component per WASH 1400:* -

* Unavailabilities are in units of per demand D^{-1} . Failure rates are in units of per hour HR^{-1} .





CATEGORIZATION OF ACCIDENT SEQUENCE PRECURSORS NSIC ACCESSION NUMBER: 153333 DATE OF LER: November 29, 1979 DATE OF EVENT: November 15, 1979 SYSTEM INVOLVED: Auxiliary Feedwater COMPONENT INVOLVED: Motor Operated Valves CAUSE: Motor Control Center removed from service for inspection while the turbinedriven AFW pump was out of service for repair, human error SEQUENCE OF INTEREST: loss of of feedwater ACTUAL OCCURRENCE: unavailability of two AFW system valves plus the turbine driven AFW pump REACTOR NAME: Cook 1 DOCKET NUMBER: 50-315 REACTOR TYPE: PWR DESIGN ELECTRICAL RATING: 1054 MWe 4.8 yr REACTOR AGE: VENDOR: Westinghouse ARCHITECT-ENGINEERS: American Electric Power Corp. OPERATORS: Indiana and Michigan Electric Co. LOCATION: 11 miles south of Benton Harbor, Michigan DURATION: 4 hours PLANT OPERATING CONDITION: 100% power SAFETY FEATURE TYPE OF FAILURE: (a) inadequate performance; (b) failed to start; (c))made inoperable; (d) DISCOVERY METHOD: operator observation COMMENT: The Cook 1 FSAR states the LOFW analysis for Cook 1 assumes flow to all four steam generators. The failure reported herein resulted in flow to only two steam generators.

B-700