

NSIC Accession Number: 82198

Date: July 13, 1973

Title: Failure to Transfer Auxiliary Power to Startup Transformer at Turkey Point 3

The failure sequence was:

1. With the reactor at 87% power, calibration of steam line pressure transmitters was in progress.
2. Inadvertant safety-injection resulted from coincident trips of two channels of No. 3C steam line high differential pressure. (One channel was in test and another channel received a transient signal to trip.)
3. Following initiation, the reactor tripped and all safety features operated satisfactorily.
4. Automatic transfer from the auxiliary transformer to the startup transformer did not occur due to an unconnected wire in the automatic transfer circuitry.
5. The operator manually closed the startup transformer breakers to the safety-related buses.

Corrective action:

1. The unconnected wire in the automatic transfer circuitry was properly connected and the completed circuit was tested.

Design purpose of failed system or component:

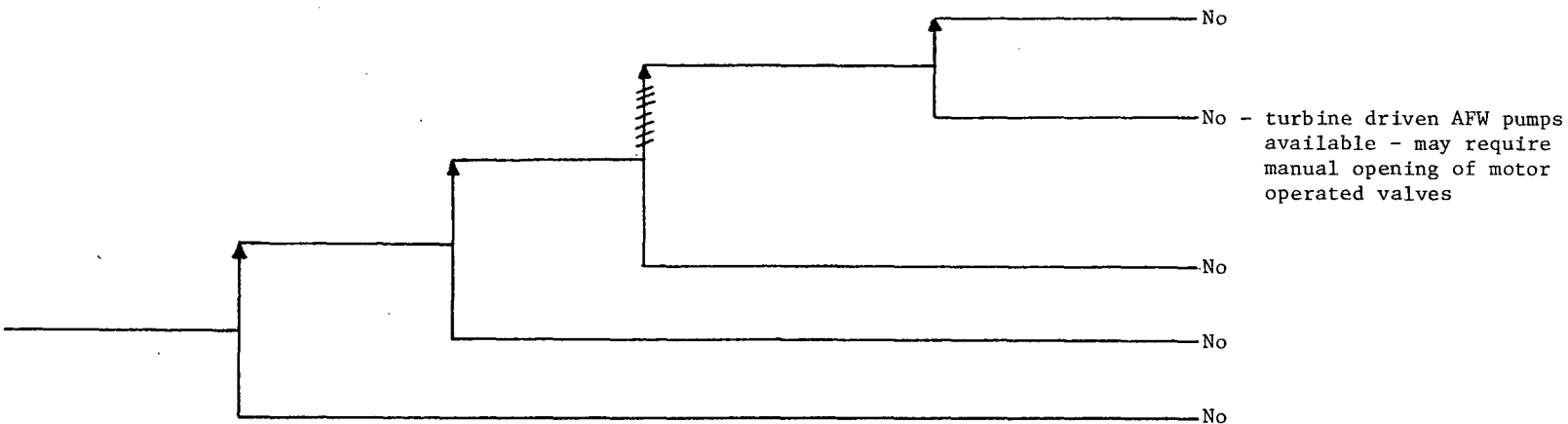
The failed circuit provided for automatic transfer of the safety-related buses to the offsite power source in the event of a loss of power from the unit generator.

Unavailability of system per WASH 1400:* offsite power: $10^{-3}/D$ following trip

Unavailability of component per WASH 1400:* --

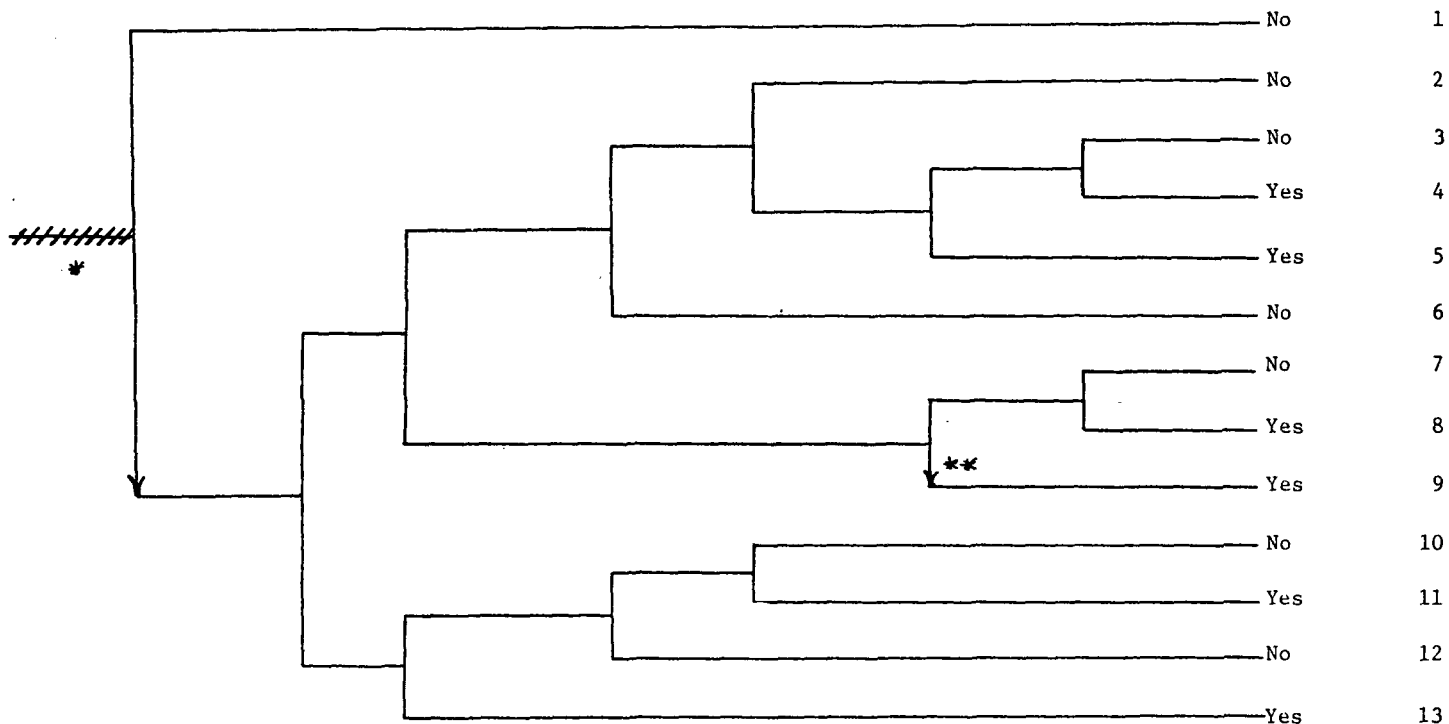
* Unavailabilities are in units of per demand D^{-1} . Failure rates are in units of per hour HR^{-1} .

Reactor at 87% power and calibration of steam line pressure transmitters in progress	Inadvertent safeguards initiation during testing	Reactor trip, turbine trip	Failure to transfer safety-related loads from auxiliary transformer to startup transformer	Diesel generators start and assume safety-related loads	Potential Severe Core Damage
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NSIC 82198 - Actual Occurrence for Failure to Transfer Auxiliary Power to Startup Transformers at Turkey Point 3

Loss of Offsite Power	Turbine Generator Runs Back and Assumes House Loads	Emergency Power	Auxiliary Feedwater and Secondary Heat Removal	PORV Demanded	PORV or PORV Isolation Valve Closure	High Pressure Injection	Long Term Core Cooling	Potential Severe Core Damage	Sequence No.
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NSIC 82198 - Sequence of Interest for Failure to Transfer Auxiliary Power to Startup Transformers at Turkey Point 3 (effective loss of offsite power)

*Success requires manual transfer to the startup transformer.

**Not included in mitigation procedures.

CATEGORIZATION OF ACCIDENT SEQUENCE PRECURSORS

NSIC ACCESSION NUMBER: 82198

DATE OF LER: July 13, 1973

DATE OF EVENT: July 4, 1973

SYSTEM INVOLVED: plant electrical system

COMPONENT INVOLVED: auxiliary to startup transformer transfer circuitry

CAUSE: unconnected wire

SEQUENCE OF INTEREST: loss of offsite power

ACTUAL OCCURRENCE: inadvertant reactor and turbine trip and safeguards initiation
during testing

REACTOR NAME: Turkey Point 3

DOCKET NUMBER: 50-250

REACTOR TYPE: PWR

DESIGN ELECTRICAL RATING: 693 MWe

REACTOR AGE: .7 yr

VENDOR: Westinghouse

ARCHITECT-ENGINEERS: Bechtel

OPERATORS: Florida Power and Light Company

LOCATION: 25 mi. south of Miami, Florida

DURATION: N/A

PLANT OPERATING CONDITION: 87% power

SAFETY FEATURE TYPE OF FAILURE: (a) inadequate performance; (b) failed to start;
(c) made inoperable; (d) failed to transfer

DISCOVERY METHOD: operational event

COMMENT: --