

PRECURSOR DESCRIPTION AND DATA

NSIC Accession Number: 112310

Date: March 15, 1976

Title: Gas Turbine Fails to Achieve Rated Speed at Millstone 1

The failure sequence was:

1. The gas turbine was being tested daily since the isolation condensor (IC) was inoperable. The feedwater coolant injection system, which is redundant to the IC, requires that the gas turbine be operable given a loss of offsite power.
2. During the surveillance test the gas turbine initiated that failed to reach rated speed. Electronic components in the governor were malfunctioning.
3. The unit was placed in cold shutdown.

Corrective action:

The defective electronic components were replaced.

Design purpose of failed system or component:

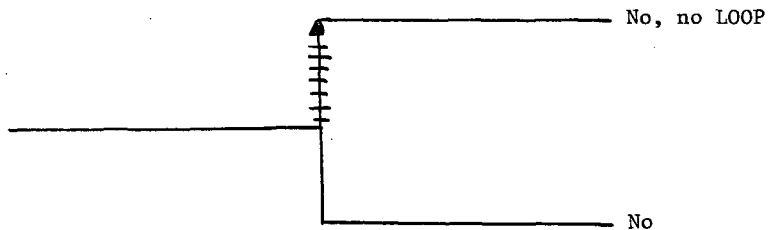
1. The IC is a natural circulation heat sink used when the reactor is isolated.
2. The feedwater coolant injection system provides a high pressure source of water given a small LOCA.

Unavailability of system per WASH 1400: * IC: N.A.
FWCI: N.A.

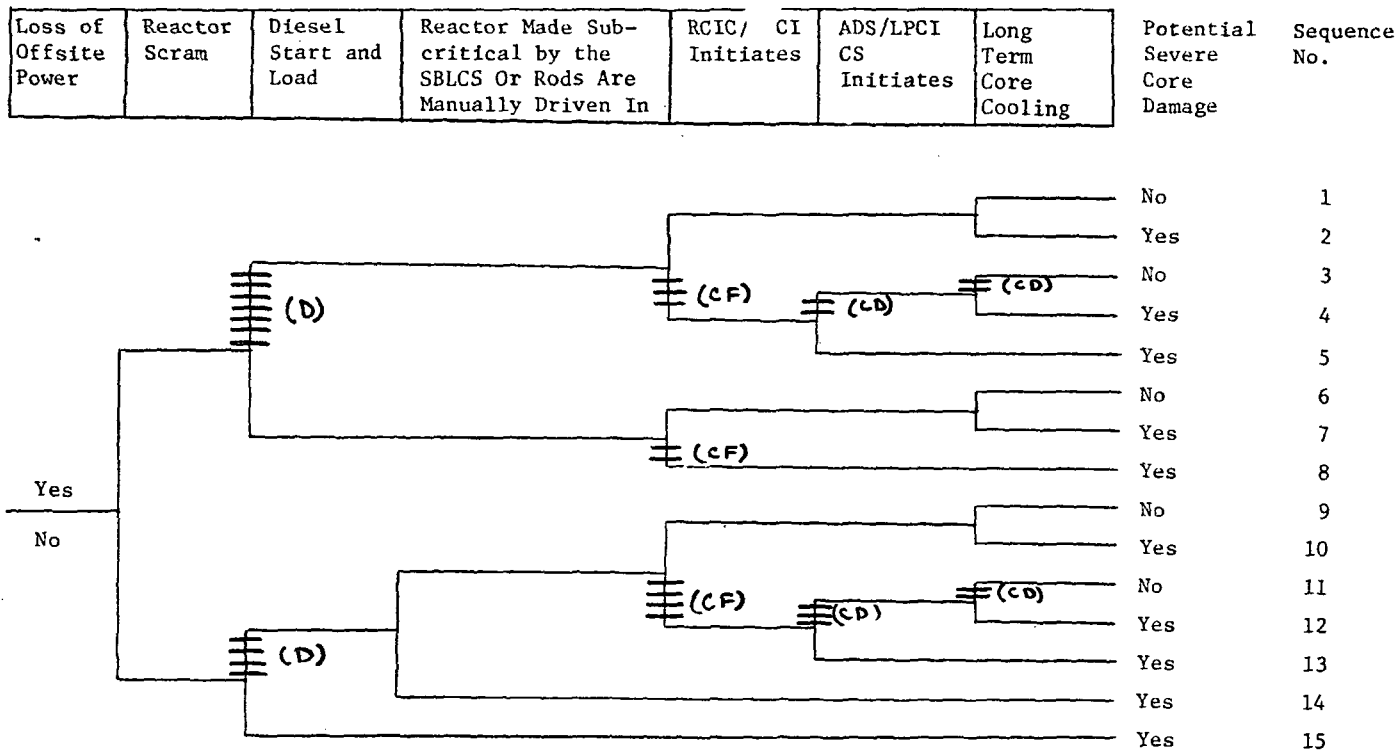
Unavailability of component per WASH 1400: * Gas Turbine: N.A.
Electronic components (solid state devices, low power application):
 $3.10^{-6}/\text{HR}$

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

Daily Surveillance Of The Gas Turbine Due To IC Inoperability	Gas Turbine Fails To Reach Rated Speed	Potential Severe Core Damage
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NSIC 112310 — Actual Occurrence of Gas Turbine Fails to Achieve
Rated Speed at Millstone 1



CATEGORIZATION OF ACCIDENT SEQUENCE PRECURSORS

NSIC ACCESSION NUMBER: 112310

DATE OF LER: March 29, 1976

DATE OF EVENT: March 15, 1976

SYSTEM INVOLVED: I.C., FWCI, Emergency Power.

COMPONENT INVOLVED: Gas turbine

CAUSE: Failure of an electronic component

SEQUENCE OF INTEREST: Loss of offsite power.

ACTUAL OCCURRENCE: Gas Turbine Fails to Achieve Rated Speed.

REACTOR NAME: Millstone - 1

DOCKET NUMBER: 245

REACTOR TYPE: BWR

DESIGN ELECTRICAL RATING: 660 MWe

REACTOR AGE: 5.4 yr

VENDOR: General Electric

ARCHITECT-ENGINEERS: Ebasco.

OPERATORS: Northeastern Nuclear Energy Company

LOCATION: Five miles SW of New London

DURATION: 12 (a) hours

PLANT OPERATING CONDITION: At Power.

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

DISCOVERY METHOD: Surveillance testing.

COMMENT: