PRECURSOR DESCRIPTION AND DATA

NSIC Accession Number: 150882

Date: June 6, 1979

Title: Both Diesel Generators Trip During Testing at Crystal River 3

The failure sequence was:

1. During performance of Engineered Safeguards Time Response Test, both diesel generators tripped when loaded on the emergency buses due to an imbalance in reactive load.

Corrective action:

1. A procedure revision was implemented to eliminate the high MVAR and reduce the reactive load imbalance.
2. The diesel generators were surveilled daily from June 9 — June 15 and performed satisfactorily.

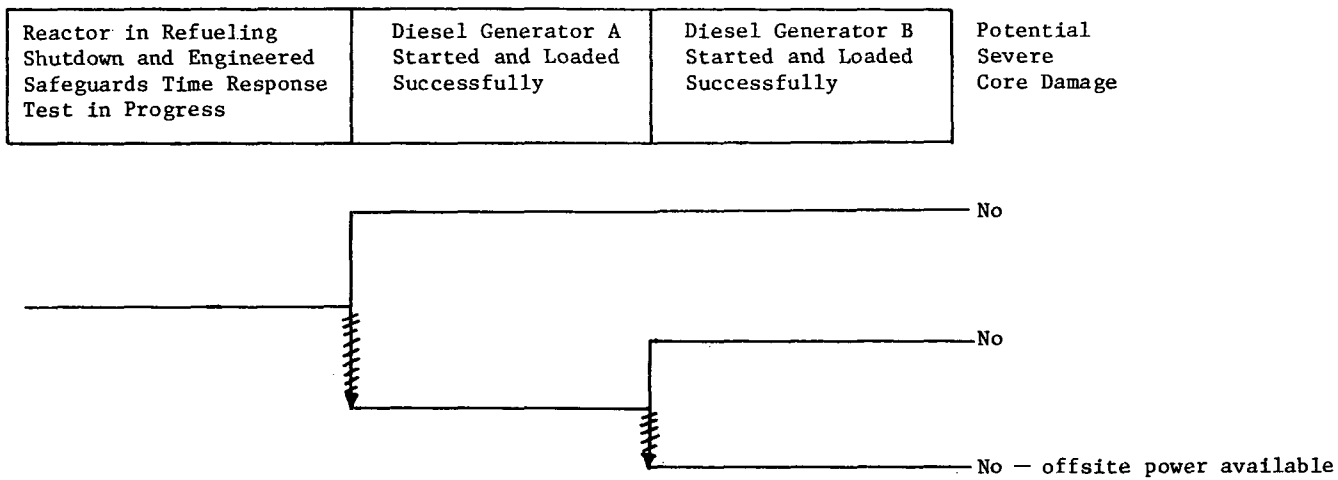
Design purpose of failed system or component:

1. The emergency diesel-generators provide power to safety-related equipment in the event of loss of offsite power.

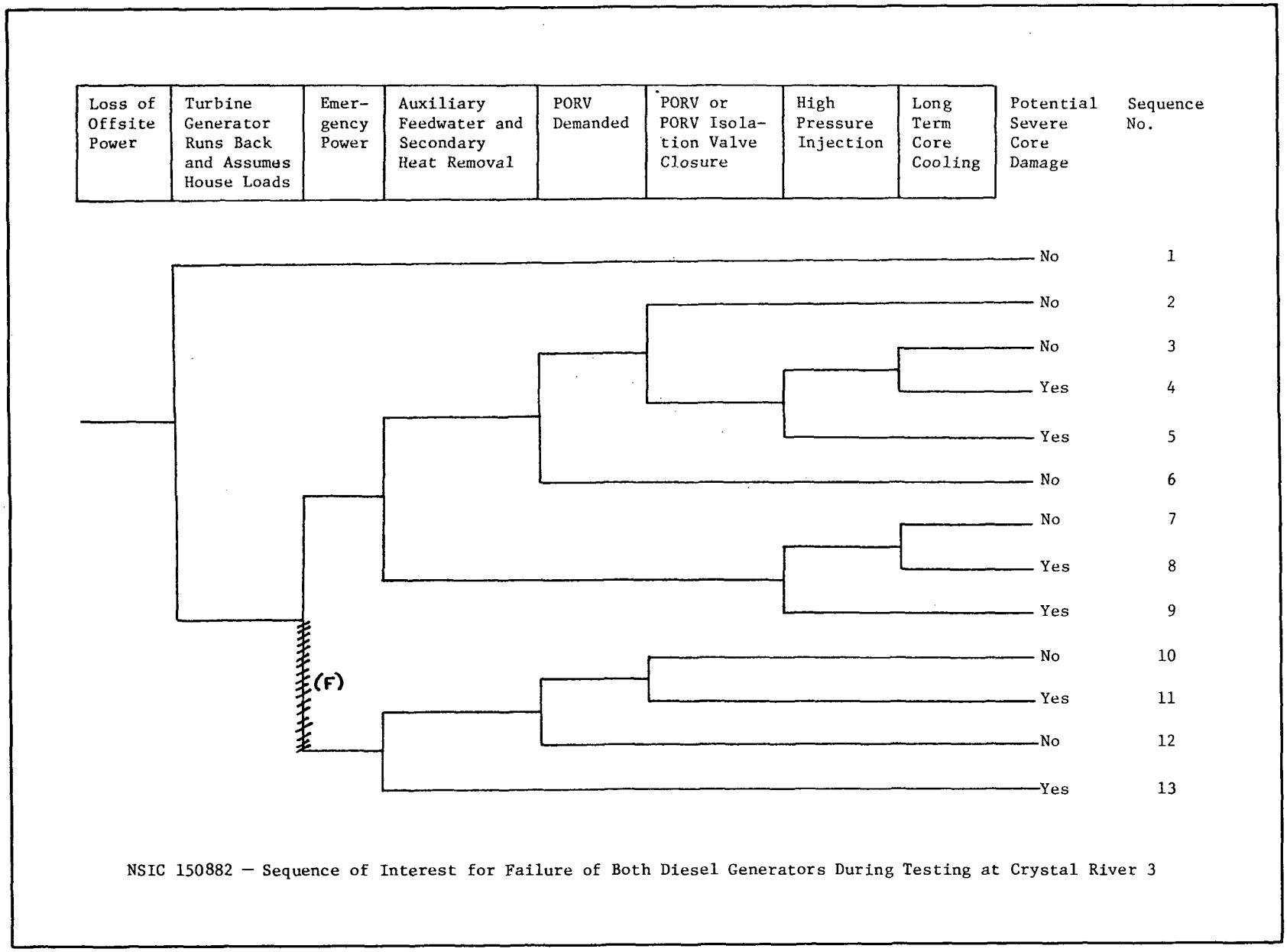
Unavailability of system per WASH 1400:* emergency power systems: $1 \times 10^{-2}/D$

Unavailability of component per WASH 1400:* each diesel generator: $3 \times 10^{-2}/D$

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



NSIC 150882 — Actual Occurrence for Failure of Both Diesel Generators During Testing at Crystal River 3



NSIC 150882 — Sequence of Interest for Failure of Both Diesel Generators During Testing at Crystal River 3

CATEGORIZATION OF ACCIDENT SEQUENCE PRECURSORS

NSIC ACCESSION NUMBER: 150882

DATE OF LER: June 27, 1979

DATE OF EVENT: June 6, 1979

SYSTEM INVOLVED: Emergency Electric Power

COMPONENT INVOLVED: 2 Diesel Generators

CAUSE: Imbalance in reactive load, both DGs tripped, (human error)

SEQUENCE OF INTEREST: Loss of off-site power

ACTUAL OCCURRENCE: Both DGs tripped during test

REACTOR NAME: Crystal River 3

DOCKET NUMBER: 50-302

REACTOR TYPE: PWR

DESIGN ELECTRICAL RATING: 825 MWe

REACTOR AGE: 2.4 yr

VENDOR: B&W

ARCHITECT-ENGINEERS: Gilbert Associates

OPERATORS: Florida Power Corp.

LOCATION: 7 miles NW of Crystal River, Fla.

DURATION: 360(a) hours

PLANT OPERATING CONDITION: 0% power

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

DISCOVERY METHOD: Testing

COMMENT: —