

NUREG-1431 Markup Inserts
ITS SECTION 2.0 - Safety Limits

INSERT: 2.0-1-01:

5, and in MODE 6 when the reactor vessel head is on,

PA.1

NUREG-1431 Markup Inserts
ITS SECTION 2.0 - Safety Limits

INSERT: B 2.0-5-01:

3. WCAP-10705, Safety Evaluation for Indian Point Unit 3 with Asymmetric Tube Plugging Among Steam Generators, October 1984.

DISCUSSION OF CHANGES

ITS SECTION 3.8.3 Diesel Fuel Oil and Starting Air

In conjunction with the new requirements in ITS SR 3.8.3.3 and 3.8.3.4, ITS 3.8.3, Conditions D, E and F, add Required Actions and Completion Times if ITS SR 3.8.3.3 or SR 3.8.3.4 are not met. The new Required Actions allow time to restore fuel oil properties to within required limits before the associated DG must be declared inoperable. Because CTS 3.7.A.5 implies DG operability could be affected by unspecified fuel oil properties and requires that an affected DG be declared inoperable immediately if these unspecified properties are not met, the addition of an ITS allowance permitting time to restore DG fuel oil properties before a DG is declared inoperable is a less restrictive change. Specifically, Condition D requires that the affected DG be declared inoperable if particulate in an DG fuel oil storage tank are not restored to within limits within 7 days; Condition E requires that the restoration of fuel oil properties in an DG fuel oil storage tank within 30 days if new fuel is added to an DG fuel oil storage tank and the new fuel is subsequently determined not within limits; and, Condition F requires that DG fuel oil reserve storage tank(s) not within specified limits must be restored within 30 days.

These changes are acceptable because each of the fuel oil parameters, while supporting DG Operability, contains substantial margin before reaching a condition that would affect DG starting capability or endurance. Generally, fuel oil properties are intended to measure long term oil stability and are not indicative of conditions that would prevent DG operation in the short run. Therefore, during the allowed restoration period for these parameters, the DG is capable of performing its safety function. As a result, the limited levels of degradation justify the limited amount of time for restoration permitted by ITS. Finally, DG Operability is demonstrated every 31 days and changes in fuel oil properties are not expected to be significant enough to affect Operability during this period. The Completion Times for restoration of DG fuel oil properties for the DG fuel oil storage tanks are consistent with NUREG-1431.

- L.3 CTS 3.7 and CTS 4.6 do not establish any requirements for DG air start receiver pressure; however, DGs would be declared inoperable immediately if air start receiver pressure is less than the pressure required to complete four start attempts as specified in FSAR 8.2. ITS LCO 3.8.3, Condition G, allows 48 hours to restore pressure if the starting air

Typical

B 3.8 ELECTRICAL POWER SYSTEMS

B 3.8.3 Diesel Fuel Oil, ~~Lube Oil~~, and Starting Air

BASES

BACKGROUND

Insert:
B 3.8-41-01

Each diesel generator (DG) is provided with a storage tank having a fuel oil capacity sufficient to operate that diesel for a period of 7 days while the DG is supplying maximum post loss of coolant accident load demand discussed in the FSAR, Section [9.5.4.2] (Ref. 1). The maximum load demand is calculated using the assumption that a minimum of any two DGs is available. This onsite fuel oil capacity is sufficient to operate the DGs for longer than the time to replenish the onsite supply from outside sources.

Fuel oil is transferred from storage tank to day tank by either of two transfer pumps associated with each storage tank. Redundancy of pumps and piping precludes the failure of one pump, or the rupture of any pipe, valve or tank to result in the loss of more than one DG. All outside tanks, pumps, and piping are located underground.

Insert:
B 3.8-41-02

For proper operation of the standby DGs, it is necessary to ensure the proper quality of the fuel oil. Regulatory Guide 1.137 (Ref. 2) addresses the recommended fuel oil practices as supplemented by ANSI N195 (Ref. 3). The fuel oil properties governed by these SRs are the water and sediment content, the kinematic viscosity, specific gravity (or API gravity), and impurity level.

The DG lubrication system is designed to provide sufficient lubrication to permit proper operation of its associated DG under all loading conditions. The system is required to circulate the lube oil to the diesel engine working surfaces and to remove excess heat generated by friction during operation. Each engine oil sump contains an inventory capable of supporting a minimum of [7] days of operation [The onsite storage in addition to the engine oil sump is sufficient to ensure 7 days of continuous operation.] This supply is sufficient to allow the operator to replenish lube oil from outside sources.

(11.1)

four

Insert: B 3.8-41-03

Each DG has an air start system with adequate capacity for five successive start attempts on the DG without recharging the air start receiver(s).

(continued)

4.0 DESIGN FEATURES

4.3 Fuel Storage (continued)

<Doc A.8>

9.075 ~~c.~~ A nominal ~~9.15~~ inch center to center distance between fuel assemblies placed in ~~the~~ high density fuel storage racks; ~~x~~ ~~(Region II)~~

<Doc A.8>

10.76 ~~d.~~ A nominal ~~10.95~~ inch center to center distance between fuel assemblies placed in ~~low~~ density fuel storage racks; ~~x~~ ~~(Region I)~~

~~[e. New or partially spent fuel assemblies with a discharge burnup in the "acceptable range" of Figure [3.7.17-1] may be allowed unrestricted storage in [either] fuel storage rack(s); and~~
~~[f. New or partially spent fuel assemblies with a discharge burnup in the "unacceptable range" of Figure [3.7.17-1] will be stored in compliance with the NRC approved [specific document containing the analytical methods, title, date, or specific configuration or figure].]~~

4.3.1.2 The new fuel storage racks are designed and shall be maintained with:

<5.4.4>
<5.4.2>

a. Fuel assemblies having a maximum U-235 enrichment of ~~4.5~~ weight percent; ~~5.0~~

Insert: 4.0-2-01 ~~b. $k_{eff} \leq 0.95$ if fully flooded with unborated water which includes an allowance for uncertainties as described in [Section 9.1 of the FSAR];~~

~~$k_{eff} \leq 0.98$ if moderated by aqueous foam, which includes an allowance for uncertainties as described in [Section 9.1 of the FSAR]; and~~

20.5 ~~c.~~ A nominal ~~10.95~~ inch center to center distance between fuel assemblies placed in the storage racks.

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<Doc A.8>

4.3.2 Drainage

The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation ~~(23 ft)~~.

a nominal

28 ft
(continued)

NUREG-1431 Markup Inserts
ITS SECTION 4.0 - Design Features

INSERT: 4.0-2-01:

under all possible moderation conditions. Credit may
be taken for burnable integral neutron absorbers.

NUREG-1431 Markup Inserts
ITS SECTION 5.5.11 - EXPLOSIVE GAS AND STORAGE TANK
RADIOACTIVITY MONITORING PROGRAM

INSERT: 5.0-15-01

each gas storage tank shall be limited to less than or equal to 50,000 curies noble gases (considered as DOSE EQUIVALENT Xe-133).

INSERT: 5.0-15-02

less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases.

DISCUSSION OF CHANGES
ITS SECTION 5.5.15 - CONTAINMENT LEAKAGE RATE TESTING PROGRAM

ADMINISTRATIVE

- A.1 In the conversion of the Indian Point Unit 3 Current Technical Specifications (CTS) to the plant specific Improved Technical Specifications (ITS) certain wording preferences or conventions are adopted which do not result in technical changes (either actual or interpretational). Additionally, editorial changes, reformatting, and revised numbering are adopted to make ITS consistent with the conventions in NUREG-1431, Standard Technical Specifications, Westinghouse Plants, Rev. 1, i.e., the improved Standard Technical Specifications.
- A.2 CTS 6.14, Containment Leakage Rate Testing Program, is incorporated into the ITS as ITS 5.5.15. This is an administrative change with no impact on safety.
- A.3 CTS 6.14, Containment Leakage Rate Testing Program, specifies that CTS Definition 1.12 (i.e., a 25% extension) is not applicable to containment leakage rate testing. ITS 5.5.15 maintains this allowance with the statement that SR 3.0.2 is not applicable because testing frequencies are established by 10 CFR 50, Appendix J.. This is an administrative change with no adverse impact on safety.
- A.4 CTS 6.14, Containment Leakage Rate Testing Program, specifies that CTS 4.1 is applicable to containment leakage rate testing (i.e. for allowable out of service times of less than 24 hours, a 24 hour delay period is permitted before entering the condition; for AOTs greater than 24 hours, no delay period is permitted). ITS 5.5.15 maintains a similar allowance by stating that ITS 3.0.3 is applicable. ITS SR 3.0.3 allows a delay of the lessor of 24 hours or the specified SR frequency to perform a missed surveillance. The existing requirement in CTS 4.1 allows no delay in entering actions when an SR is missed for a component with an allowable out of service time greater than 24 hours. The less restrictive change permitted by the application of ITS SR 3.0.3 to containment leakage rate testing is justified in Discussion of Change for ITS 3.0 (see ITS 3.0, DOC L.2).

DISCUSSION OF CHANGES
ITS SECTION 5.5.15 - CONTAINMENT LEAKAGE RATE TESTING PROGRAM

MORE RESTRICTIVE

None

LESS RESTRICTIVE

None

REMOVED DETAIL

None