

DONALD C. COOK NUCLEAR PLANT UNIT NOS. 1 AND 2
ATTACHMENT NO. 2 TO AEP:NRG:00500C

8106030207

CONTAINMENT SYSTEMS

HYDROGEN CONTROL INTERIM DISTRIBUTED IGNITION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.4.3. Two trains of the Distributed Ignition System (DIS) shall be operable.

APPLICABILITY: Modes 1 and 2

ACTION

With the DIS inoperable, restore the system to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.3 The DIS shall be demonstrated OPERABLE:

- a. At least once per refueling outage by energizing the supply breakers and verifying that no more than one igniter per group is not energized. Igniter groups are shown in Table 3.6 - 1A
- b. Verifying by visual inspection that there is no loose debris in the vicinity of the igniters.
- c. Energizing each igniter and verifying a surface temperature of 1500°F or greater by visual observation.

Table 3.6-1A

Distributed Ignition System

<u>Location</u>	<u>No. of Igniters Per Train Per Group</u>
1. <u>Upper Volume Igniter Groups</u>	
a. Phase 1	6
b. Phase 2	7
c. Phase 3	5
2. <u>Lower Volume Igniter Groups</u>	
a. Phase 1	6
b. Phase 2	5
c. Phase 3	5

Suggested Addition to Bases Section 3/4.6.4

The Distributed Ignition System (DIS) is designed to provide additional hydrogen control capability in the unlikely event of a degraded core cooling event involving the generation of amounts of hydrogen in excess of that specified in 10 CFR 50.44. The operability of the specified number of igniters will maintain an effective coverage throughout the containment and will ensure combustion of lean hydrogen-air-steam mixtures in a controlled manner as the hydrogen is released; thereby precluding the potential accumulation of hydrogen and ignition at high concentration by a random ignition source.