ABB

July 21, 1994
LD-94-054

Docket No. 52-002

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Revision 2 Errata to System 80+ CDM

Dear Sirs:

In response to two editorial and word processing errors pointed out to us today, ABB-CE is submitting the attached errata to the System 80+ Certified Design Material.

Enclosed are 37 copies of the System 80+ Certified Design Material and the affidavit as required by 10 CFR 50.4(b) and 10 CFR 50.30(b).

Very truly yours,

COMBUSTION ENGINEERING, INC.

C. B. Brinkman
Director
Nuclear Systems Licensing

Attachment

cc: Peter Lang (DOE)
John Trotter (EPRI)
Thomas Wambach (NRC)

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ABB Combustion Engineering Nuclear Power

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Docket No. 52-002

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:	)
	)
Combustion Engineering, Inc.	)
	)
Standard Plant Design	)

APPLICATION FOR REVIEW OF
"COMBUSTION ENGINEERING STANDARD
SAFETY ANALYSIS REPORT -
DESIGN CERTIFICATION"

James D. Crawford, being duly sworn, states that he is the Vice President and Chief Engineer, ABB Combustion Engineering Nuclear Systems, of Combustion Engineering, Inc.; that he is authorized on the part of said corporation to sign and file with the Nuclear Regulatory Commission this document; and that all statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

COMBUSTION ENGINEERING, NC.

By: James D. Crawford
James D. Crawford
Vice President & Chief Engineer
ABB Combustion Engineering
Nuclear Systems

Subscribed and sworn to
before me this 21 day
of July, 1994.

Joan C. Hastings
JOAN C. HASTINGS
NOTARY PUBLIC
MY COMMISSION EXPIRES SEP. 30, 1997
Notary Public

My Commission Expires:

2.4.7 IN-CONTAINMENT WATER STORAGE SYSTEM

Design Description

The In-containment Water Storage System (IWSS) includes the in-containment refueling water storage tank (IRWST) which is an integral part of the Nuclear Island (NI) structures, the holdup volume tank (HVT) which is an integral part of the NI structures, and the cavity flooding system (CFS).

The IRWST provides borated water for the safety injection system (SIS) and the containment spray system (CSS). It is the primary heat sink for discharges from the reactor coolant system (RCS) pressurizer safety valves and the safety depressurization system (SDS) rapid depressurization subsystem. It is the source of water for the CFS. It is the source of water to fill the refueling pool via the SIS and CSS. The IRWST and IRWST instrumentation are safety-related except as noted in Figure 2.4.7-1.

The HVT collects water released in Containment during design basis events and returns water to the IRWST through spillways. It also collects component leakage not routed to other drain systems inside Containment and receives water discharged from the IRWST by the CFS.

The CFS is used to provide water to flood the reactor cavity in response to beyond design basis events.

CFS valves located in the holdup volume are designed such that they may be actuated while submerged.

The IWSS is located in the Containment.

The Basic Configuration of the IWSS is as shown on Figure 2.4.7-1 and locations of IRWST and HVT are shown on Figure 2.1.1-1 in Section 2.1.1, Nuclear Island Structures.

The IRWST has a volume above the SIS/CSS pump suction line penetrations to permit proper SIS and CSS operation following design basis events. The IRWST has a total volume that permits dilution of radionuclides from core and RCS release following design basis loss-of-coolant accidents (LOCAs). The IRWST can be vented to allow communication between the IRWST and the containment atmosphere.

Stainless steel baskets containing trisodium phosphate are located in the HVT.

The ASME Code Section III Class for the IWSS pressure retaining components is as shown on Figure 2.4.7-1.

Each Class 1E battery is provided with a battery charger supplied alternating current (AC) from a MCC in the same Class 1E Division as the battery.

Each Class 1E battery is sized to supply its Design Basis Accident (DBA) loads, at the end-of-installed-life, for a minimum of 2 hours without recharging.

Each Class 1E battery charger is sized to supply its respective Class 1E Division/Channel steady-state loads while charging its respective Class 1E battery.

Manual interlocked transfer capability exists within a Division between Class 1E DC distribution centers.

The Class 1E batteries, battery chargers and respective MCCs, DC distribution panels, disconnect switches, circuit breakers, and fuses are sized to supply their load requirements. The Class 1E batteries, battery chargers and respective MCCs, DC distribution panels, and disconnect switches are rated to withstand fault currents for the time required to clear the fault from its power source.

Class 1E DC Power System circuit breakers and fuses are rated to interrupt fault currents.

Class 1E DC Power System electrical distribution system circuit interrupting devices (circuit breakers and fuses) are coordinated so that the circuit interrupter closest to the fault is designed to open before other devices.

Class 1E DC Power System electrical distribution system cables are sized to supply their load requirements and are rated to withstand fault currents for the time required to clear the fault from its power source.

The Class 1E DC Power System electrical distribution system supplies an operating voltage at the terminals of the Class 1E equipment which is within the equipment's voltage tolerance limits.

Each Class 1E battery is located in a Seismic Category I structure and in its respective Division/Channel battery room.

Class 1E DC Power System distribution panels and MCCs are identified according to their Class 1E Division/Channel.

Class 1E DC Power System cables are identified according to their Class 1E Division/Channel. Class 1E cables are routed in Seismic Category I structures and in their respective Division/Channel raceways.

Independence is provided between Class 1E Divisions. Independence is provided between Class 1E Channels. Independence is provided between Class 1E Divisions/Channels and non-Class 1E equipment.

The Class 1E DC Power System has the following alarms and displays in the main control room (MCR):

1) Alarms for battery ground detection.

2) Parameter displays for battery voltage and amperes.

3) Status indication for battery circuit breaker/disconnect position.

Inspections, Tests, Analyses, and Acceptance Criteria

Table 2.6.3-1 specifies the inspections, tests, analyses, and associated acceptance criteria for the AC Instrumentation and Control Power System and DC Power System.