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FILE

FROM: Duke Power Company Charlotte, N.C. 28201 A.C. Thies	DATE OF DOC: 11-20-72	DATE REC'D 11-22-72	LTR X	MEMO	RPT	OTHER
TO: Mr. A. Giambusso	ORIG 1 signed	CC	OTHER	SENT AEC PDR ✓ SENT LOCAL PDR ✓		
CLASS: (U) PROP INFO	INPUT	NO CYS REC'D 1		DOCKET NO: 50-270 50-287		

DESCRIPTION: Ltr re our 10-31-72 ltr..... furnishing addl info to the FSAR & trans:

ENCLOSURES: (1) Design Basis & Description of Auxiliary Service Water System....
(2) Figure entitled "Auxiliary Service Water System".....

(3 cys encl rec'd)

DO NOT REMOVE

ACKNOWLEDGED

PLANT NAMES: Oconee Units 2 & 3

FOR ACTION/INFORMATION DL 11-24-72

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Regulatory File Cy.

DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28201

A. C. THIES
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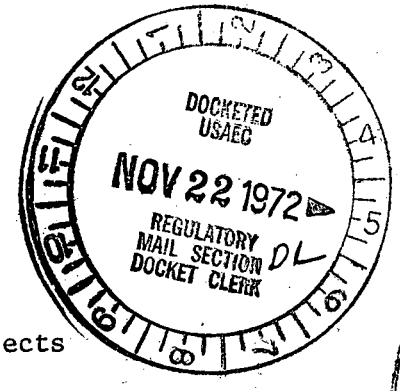


November 20, 1972

Mr. Angelo Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Attention: Mr. A. Schwencer

Re: Oconee Units 2 and 3
Dockets 50-270 and 50-287

Dear Mr. Giambusso:

In response to your letter of October 31, 1972 requesting further information on the auxiliary service water system, attached please find:

(1) "Design Basis and Description of Auxiliary Service Water System"

(2) Figure titled, "Auxiliary Service Water System"

This information should answer your questions 6.4.1 and 6.4.2 and will be incorporated into the Final Safety Analysis Report in the next amendment.

Please contact us if there are any questions regarding the enclosures.

Sincerely,

A. C. Thies

A. C. Thies

ACT:vr

Attachments

6423

DESIGN BASIS AND DESCRIPTION OF AUXILIARY SERVICE WATER SYSTEM

6.4.1 DESCRIPTION:

The auxiliary service water system utilizes the plant CCW intake and discharge conduits as a source of raw cooling water for decay removal. These conduits are interconnected by crossovers and unwatering lines. An auxiliary service water pump located in the auxiliary building at Elev. 771 takes its suction from the Unit 2 intake conduit and discharges into the steam generators of each unit via separate lines into the auxiliary feedwater headers. The raw water is vaporized in the steam generator removing residual heat and dumped to the atmosphere.

The auxiliary service water pump is an end suction centrifugal pump with a rated capacity of 3000 gpm at a total head of 176 feet.

It has been submitted to the following tests:

1. A non-witness ASME hydro test
2. Witnessed performance test
3. Sonic testing of shaft
4. Mill test certificates for casing, impeller, and shaft
5. Certified caliper measurements

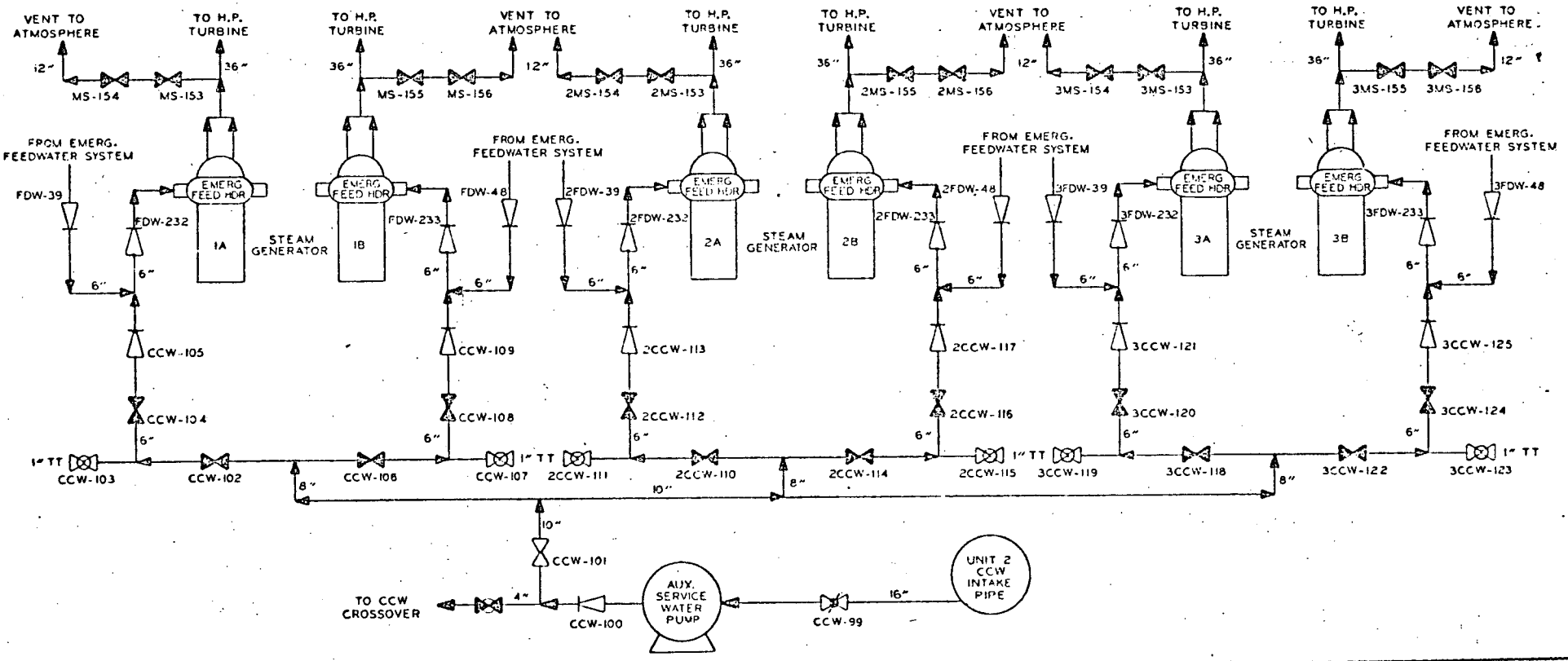
The pump power supply is taken from the 4160 volt standby Bus No. 1.

All valves required for operation of the auxiliary service water system are either check valves or manually operated. The pump suction is equipped with a normally open butterfly valve and the discharge with a check valve and normally open gate valve. The pump bypass is equipped with a globe valve. The individual lines to each steam generator auxiliary feedwater header are equipped with a check valve and two normally closed gate valves which are used to control flow.

Atmospheric steam dumps on each main steam lead are equipped with two normally closed gate valves which must be opened to reduce steam generator shell side pressure before placing the auxiliary service water system into operation. All non-embedded piping is Class F.

6.4.2 DESIGN BASIS:

The auxiliary service water system is designed for decay heat removal following a concurrent loss of the main feedwater system, auxiliary feedwater system, and decay heat removal system. The system will maintain decay heat removal for a minimum of 37 days.



DUKE POWER CO.					
OCONEE NUCLEAR STATION					
AUXILIARY SERVICE WATER SYSTEM					
DRN.	M. DANIEL	11-16-72	CHKD.	RE H	11/16/72
INSP.			A. R.		
SCALE		NO.			