TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
500A Chestnut Street Tower II

October 15, 1981

Mr. James P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-327 - FACILITY OPERATING LICENSE DPR-77 - 10 CFR 21 REPORT

A liquid penetrant examination on fabrication welding of an orifice flange for auxiliary feedwater piping revealed unacceptable indications on the flange. If the flange had been installed and had failed, the auxiliary feedwater system potentially could not have been capable of delivering design flow. This problem which is reportable under 10 CFR 21 was reported to me on October 14, 1981.

The enclosed Part 21 report contains additional information about this matter.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

H. G. Parris

H. G. Parris
Manager of Power

Enclosure

IE19
S1/1

Attachment 1

PART 21 REPORT

Plant: Sequoyah Nuclear Plant - Unit 1 References: Procurement Contract No. 81PK6-18286

Component or System Identification: Orifice Flange - 4 inch - 600 lb., weld neck, raised face, ASME SA-105, bored to match schedule 80 pipe, ½ inch tapped openings.

Supplier of Component: Hub, Inc., P. O. Box 125, Tucker, Georgia 30084

Nature of Defect or Noncompliance: During fabrication of a replacement orifice flange to a pipe for the auxiliary feedwater system, liquid penetrant examinatio of the pipe to orifice flange weld revealed unacceptable rounded and linear indications in the flange. Three other flanges from the same contract which were not yet in the fabrication stage were then liquid penetrant examined. Of these three, two were found to be unacceptable and one was acceptable. Upon receipt at TVA, the four (4) orifice flanges were acceptable to contract requirements based on visual examination and review of vendor certifications.

Extent of Safety Hazard: If component had been installed and failed, the auxiliary feedwater system would not have been capable of delivering design flow which is required to mitigate several accidents analyzed in the FSAR.

Date Which Defect or Noncompliance Was Discovered: 09/28/81.

Number of Identical Components in Use: No deficient components have ever been installed for use.

Location of Components: Auxiliary Feedwater System. The components were tested prior to installation and found unacceptable.

Corrective Action Taken or To Be Taken: The acceptable orifice flange was installed in the system. The three unacceptable orifice flanges were nonconformed and scrapped locally.

Length of Time Required to Complete Action: Not applicable.

Has defect or noncompliance been reported previously? Yes ____ No X

If yes, by what means? Not applicable.

Eileen B. Kirk — Prepared By — 10-14-81 — Date

James McGriff — Approved — 10/14/81 — Date

Attachment 2

EVALUATION LOGIC FOR PART 21

	Yes	No
I. Deficiency of a plant security system?	[ ]	[X]
1. Could defect create a substantial safety hazard?	[ ]	[X]
If yes, report as part 21.		
II. Is the component necessary to ensure:		
1. The integrity of the reactor coolant boundary?	[ ]	[X]
2. The capability to shut down reactor and maintain it in a safe shutdown condition?	[X]	[ ]
3. The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposure comparable to those referred to in 10 CFR 100.11?	[ ]	[X]
III. Is defect in a basic component one that has been accepted for ownership?	[X]	[ ]
Installed for use or operation?	[ ]	[X]
If a yes in II and III above, could defect create a substantial safety hazard?	[X]	[ ]
If yes, report as part 21.		
IV. Is defect in a basic component:		
A condition that could contribute to exceeding of safety limit?	[X]	[ ]

If yes to one of II and IV above, report as part 21.

Glenn B Kirk — Prepared By — 10-14-81 — Date

James McGuff — Approved — 10/14/81 — Date