

TENNESSEE VALLEY AUTHORITY

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5N 157B Lookout Place

FEB 26 1988

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

Gentlemen:

In the Matter of ) Docket Nos. 50-327  
Tennessee Valley Authority ) 50-328

SEQUOYAH NUCLEAR PLANT (SQN) - ADDITIONAL INFORMATION FOR SQN UNIT 2  
HYDROGEN ANALYZER SAMPLING VALVE RELIEF REQUEST

During a January 27, 1988 telephone conference call between NRC and SQN Licensing Staff, NRC requested additional information with regard to a relief request for six solenoid-activated hydrogen analyzer sampling valves contained in SQN's In-Service Test (IST) Program. In lieu of a visual observation requirement, SQN, in a January 21, 1988 submittal, requested relief to perform an alternate pressure test to verify proper valve operation. To support NRC review and concurrence with this relief request, SQN is providing the requested information that details the proposed alternate pressure test methods in attachment A to enclosure 1. The commitment for incorporating the alternate pressure test method into SQN's Surveillance Instruction (SI) 166.4 is listed in enclosure 2.

TVA's January 1988 submittal contained relief request PV-15 that included two hydrogen analyzer sampling valves, FSV-43-200A and FSV-43-210A. By design, these two valves will not be provided with lights for remote indication and are therefore being removed from the previously submitted PV-15 relief request. Attachment B to enclosure 1 contains the newly revised PV-15 along with the newly revised Appendix C to SQN's valve program (reference SQN's Final Safety Analysis Report, section 6.8).

Because NRC approval of this relief request is required for unit 2 restart (before mode 2), TVA requests that this additional information be expediently reviewed and a Safety Evaluation Report (SER) be issued to address the subject relief request. If an SER cannot be completed to support plant restart, a written response documenting NRC review and concurrence with SQN's relief request would be beneficial. Upon receipt of either an SER or NRC concurrence, SQN will change its valve program to be consistent with NRC's approved position.

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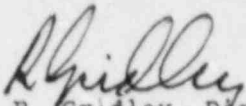
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If you have any questions concerning this issue, please telephone  
M. R. Harding at (615) 870-6422.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
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ENCLOSURE 1

Attachment A

ALTERNATE TESTING FOR UNIT 2 HYDROGEN ANALYZER SAMPLING VALVES  
FSV-43-201, -202, -207, -208

In lieu of a visual observation requirement, SQN requested relief to perform an alternate pressure test to verify proper operation. The following steps provide a simplified description of SQN's alternate test methods. This alternate test method will be incorporated into SQN's Surveillance Instruction (SI) 166.4 for testing the subject valves during unit 2 restart (before mode 2).

(Refer to the Hydrogen Analyzer System Schematic)

TRAIN B VALVES

1. FSV-43-208

- a. Attach test rig with air supply to point A.
- b. Close manual valve #3.
- c. Open Test Connection (TC) #5.
- d. Pressurize test rig to 13 PSIG.
- e. Open FSV-43-208 and verify a pressure drop.
- f. Close FSV-43-208 and verify test rig pressure returns to 13 PSIG.
- g. Verify test rig pressure remains steady at 13 PSIG.
- h. Remove test rig and return valves to normal position.

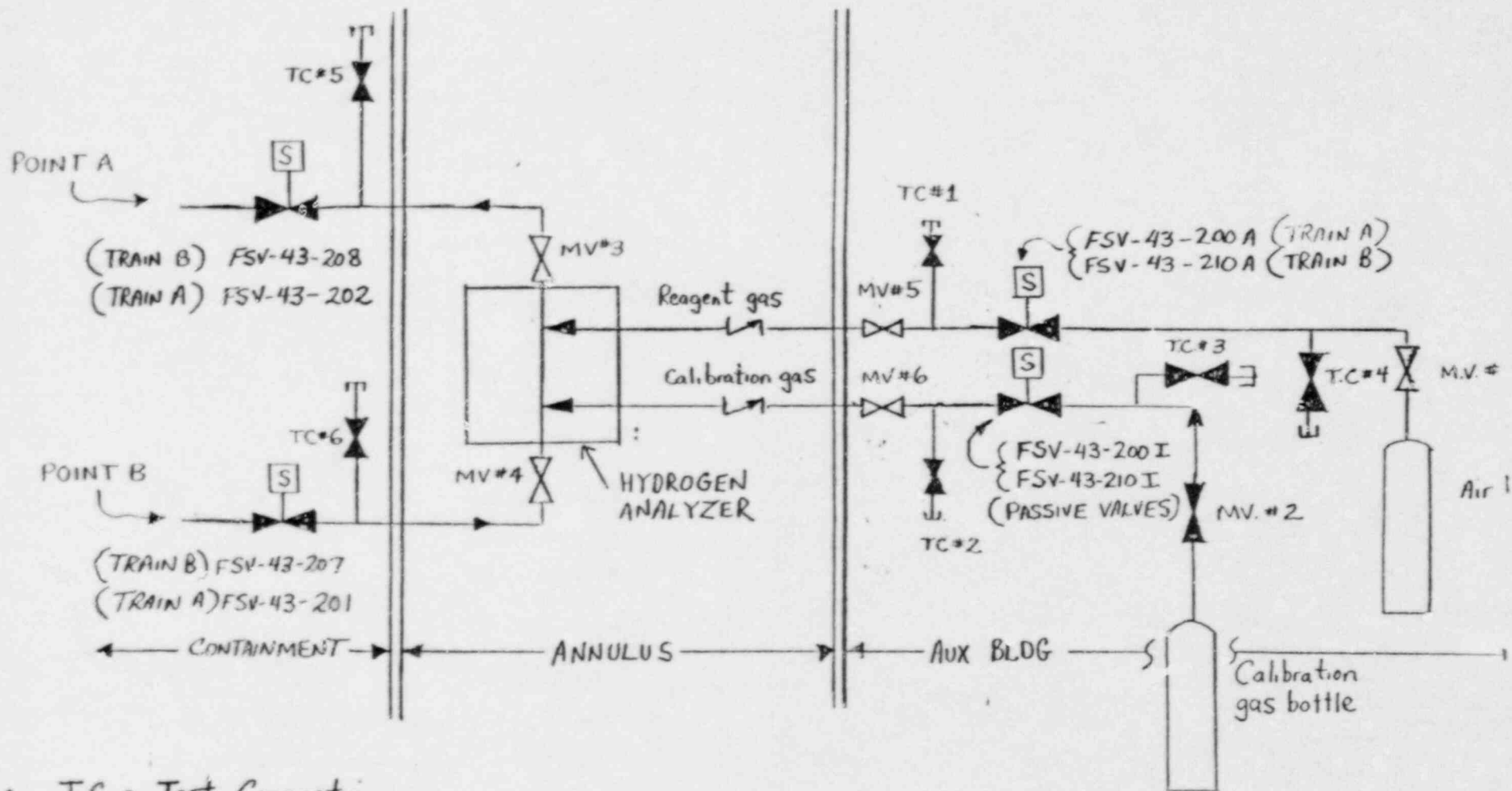
2. FSV-43-207

- a. Attach test rig with air supply to point B.
- b. Close manual valve #4.
- c. Open TC #6.
- d. Pressurize test rig to 13 PSIG.
- e. Open FSV-43-207 and verify a pressure drop.
- f. Close FSV-43-207 and verify test rig pressure returns to 13 PSIG.
- g. Verify test rig pressure remains steady at 13 PSIG.
- h. Remove test rig and return valves to normal position.

The train A valves will be tested in a similar fashion as the train B valves.

# Unit 2

## HYDROGEN ANALYZER SYSTEM SCHEMATIC



T.C. = Test Connection  
M.V. = Manual Valve

ENCLOSURE 1

Attachment B

Revised Relief Request PV-15 with Revised  
Appendix C to SQN's In-Service Valve Test  
Program (SQN Final Safety Analysis  
Report, Section 6.8

PV-15

System: ~~Postaccident~~ Sampling

Valve: FSV-43-250, FSV-43-251, FSV-43-287, FSV-43-288,  
FSV-43-307, FSV-43-309, FSV-43-310, FSV-43-317,  
FSV-43-318, FSV-43-319, FSV-43-325, FSV-43-341  
FSV-43-201, FSV-43-202, FSV-43-207, FSV-43-208

Class: 2

Category: A - Active *and containment atmosphere*

Function: To permit reactor coolant system sampling in a  
postaccident condition.

Impractical  
Requirement: Observe valve movement every two years to verify  
remote valve indicators accurately reflect valve  
operation.

Basis for  
Relief: These solenoid actuated valves are totally enclosed,  
and valve position cannot be determined visually.

Alternate  
Testing: Pressure indicators will be used to independently verify  
valve operation.

Frequency  
for Alt  
Testing: Every 2 years.

3

Added by Amendment J

This is a new change  
to SQN's FSAR and  
will be designated 6.8C-18A

## Sequoyah Nuclear Plant Inservice Valve Testing Program

DRAWING NO: 471V(25-20)(R4)

SYSTEM: (43) SAMPLING

VALVE TAG NUMBER	NO. OF TAGS	DRAWING COORDINATES	VALVE CATEGORY	SIZE	VALVE TYPE	ACTUATOR TYPE	NOMINAL POSITION	TESTING REQUIRED	RELIEF REQUEST	ALTERNATIVE TESTING	REMARKS
FSV-43-200A	2		A-A1	3/8	GA	SO	C	QT-1, SLT			
FSV-43-200I	2		A-105	3/8	GA	SO	C	SLT			
FSV-43-210A	2		A-A1	3/8	GA	SO	C	QT-1, SLT			
FSV-43-210I	2		A-105	3/8	GA	SO	C	SLT			

ENCLOSURE 2

Commitment

1. SQN's alternate pressure test method, as outlined in enclosure 1, will be incorporated into SQN's SI-166.4, "Remote Valve Position Indication Verification." This action will be completed before unit 2 restart (mode 2).