

Gray
1-7/31/84

PHILADELPHIA ELECTRIC COMPANY
LIMERICK GENERATING STATION
SURVEILLANCE TEST

ST-1-047-700-1 SCRAM DISCHARGE VOLUME CONTAMINATION PIPING INSPECTION

Test Freq.: 18 Months -OR- Initiating Events: 1. Reason INITIAL RUN
Tech. Spec.: 6.8.4.a 2. MRF No. _____
FSAR: 6.2.8.1
FSAR: 6.2.8.3

TEST RESULTS:

A. All Asterisked(*) Steps Completed SATISFACTORILY.

Performed By: (Sign/Date) *A. Mankello* 9/25/84
Performed By: (Sign/Date) _____
Informed Test Complete:(ACO or CO) (Sign/Date) *John Koelle* 9-25-84
(Time) 4:00 P
Reviewed By:(SSVN or STA) (Sign/Date) *W. Gilley* 9/25/84

B. One or More Asterisked(*) Steps Test Results UNSATISFACTORY.

Performed By: (Sign/Date) _____
Informed of Test Results: (CO or ACO) (Sign/Date) _____
(Time) _____
Shift Supervision: (Sign/Date) _____
Corrective Action: MRF No.: _____
Initiated By: (Sign/Date) _____
IMMEDIATELY NOTIFY SENIOR PLANT STAFF MEMBER
Person Notified: (Name) _____
Date/Time Notified: (Date/Time) _____
Notified By: (Sign) _____

ADDITIONAL ACTION/TEST COMMENTS:

If any entry is made in Additional Action/Test Comments Section,
person making initial entry sign here

(Sign/Date) *Robert J. Hawthorne* 9-25-84

1.0 PURPOSE

To inspect, measure, and record any leakage from components associated with the CRD Scram Discharge Volume System while the system is ~~pressurized~~. *filled and vented.*

#1
RSD
9-18-84

EVG 9/24/84

2.0 REFERENCES

2.1 8031-M-47, Control Rod Drive Hydraulic - Part B

2.2 NUREG-0737

3.0 TEST EQUIPMENT

3.1 Graduated cylinder(s)

3.2 Liter bottle(s)

3.3 Funnels

3.4 Stopwatch

3.5 Inspection mirror with handle

4.0 PRECAUTIONS & LIMITATIONS

- 4.1 If a procedural step cannot be completed, make a comment in the Additional Action/Test Comments section of the Data Sheet.
- 4.2 Signoff steps marked "SO" in the left-hand margin of the body of the procedure require a signoff on the Data Sheet or Procedure Cover Sheet.
- 4.3 Leakage rates of greater than 5 drops per min (.25 cc/min) shall be quantified. Put "<.25 cc/min" in the space provided on the Data Sheet Attachment A for components with leak rates of 5 drops per min.
- 4.4 Data Sheet steps marked (*) are specific Tech. Spec. requirements which will fail the test if not completed satisfactorily.

- 4.5 Any component exhibiting excessive amounts of leakage shall be documented in the Additional Actions/Test Comments section on the Cover Sheet and the SSVN shall be informed.

5.0 PREREQUISITES

5.1 Request RWP and HP assistance when needed.

#2 5.2 Coordinate with the operator running GP-10 so that the test duration can be extended to allow proper inspection of SDV system components.
N/A

5.3 Inspector is familiar with the SDV system layout and location.

#3 5.4 Obtain copy of the previous inspection Data Sheet Attachment A.
N/A

5.5 The SDV System Piping is at pressure preferably during operational hydrostatic test GP-10.

6.0 PROCEDURE

IT IS THE RESPONSIBILITY OF THE PERSON OR PERSONS PERFORMING THIS TEST TO ENSURE ALL BLANKS AND DATA SHEETS ARE CORRECTLY AND COMPLETELY FILLED IN.

6.1 Preparation

SO 6.1.1 Verify all prerequisites are satisfied.

6.1.2 Record appropriate information for each piece of measurement and test equipment used with a PECO number and verify the equipment is within it's calibration period.

6.2 Shift Permission to Test

SO 6.2.1 Obtain Shift Supervision's (SSVN's) permission to start test.

SO 6.2.2 Obtain Control Room Operator's permission to start test.

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LAM/RSE:mjl

6.3 SDV System Contaminated Piping Inspection

ACTUAL LEAK RATE MEASUREMENT METHODS WILL BE LEFT TO THE DISCRETION OF THE INSPECTOR(S) INVOLVED. THE ONLY GUIDELINE BEING THAT ALL DATA WILL BE A MEASURED QUANTITY OF FLUID OVER TIME USING A STOPWATCH. DROPS PER MINUTE CAN BE USED AS A MEASUREMENT 20 DROPS = 1CC. ALL RECORDED DATA SHALL BE IN CUBIC CENTIMETERS PER MIN. (CC/MIN)

6.3.1 Record on Data Sheet Attachment A all components, within the boundaries of Attachment B, exhibiting leakage, their leak rate and a description of the location of the leak. Pay particular attention to system components identified as having measurable leakage in the last test.

6.3.2 From the leak rate data on Attachment A, calculate the total system leak rate and document the results on the Data Sheet Section 6.3.

6.4 Test Results Evaluation

SO 6.4.1 Compare the leakage limit in 8.1 to the total system leakage rate. If the limit is exceeded prepare a MRF to reduce the system leakage rate so that it is within the limit.

6.4.2 If any component's leakage rate has increased significantly since the last inspection prepare a MRF to repair the component.

6.4.3 If any component's leakage is a major portion of the overall system leakage limit prepare a MRF to its repair.

7.0 RETURN TO NORMAL

SO 7.1 Inform SSVN and ACO the test is complete.

8.0 ACCEPTANCE CRITERIA

8.1 The SDV system shall not exhibit a total leak rate of greater than (later).

AT TEST COMPLETION, ENSURE COVER SHEET IS CORRECTLY AND COMPLETELY FILLED IN.

SCRAM DISCHARGE VOLUME
CONTAMINATED PIPING INSPECTION

DATA SHEET (1 of 2)

INITIALS

ACTION REQUIRED

6.0 PROCEDURE

6.1 Preparation

6.1.1 All prerequisites satisfied

6.1.2 Test Equipment

[Handwritten signature]
[Handwritten signature]

<u>INSTRUMENT</u>	<u>MFR./MODEL</u>	<u>SER. NO.</u>	<u>CAL. DUE DATE</u>
<u>STOPWATCH</u>	_____	<u>53-0030</u>	<u>8-3-85</u>
<u>STOPWATCH</u>	_____	<u>93-0200</u>	<u>8-7-85</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

6.2 Shift Permission to Test

6.2.1 SSVN permission obtained

6.2.2 ACO permission to test

EDC 9/25/84
[Signature]
ACO

9/25/84 13:13
Date Time

6.3 Scram Discharge Volume Contaminated Piping Inspection

6.3.4 SDV system total leak rate:

$$\frac{0.0}{39} \text{ CC/MIN}$$

$$\frac{0.0}{0.0103} \text{ GAL/MIN}$$
 (1 cc/min = .000264 gal/min)

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SCRAM DISCHARGE VOLUME
CONTAMINATED PIPING INSPECTION

DATA SHEET (2 of 2)

ACTION REQUIREDINITIALS

6.4 Test Results Evaluation

- 6.4.1 The total SDV system leakage rate is within Acceptable Limits

N/A (*)

7.0 RETURN TO NORMAL

- 7.1 SSVN and ACO informed of test completion.

[Signature]

IF ANY ENTRY IS MADE IN THIS SECTION, SIGN COVER SHEET IN APPROPRIATE SPACE.

ADDITIONAL ACTION/TEST COMMENTS

TEST CHANGE #1 & #2 ARE REQUIRED SINCE THIS TEST IS BEING PERFORMED
EDC 9/22/84 PRIOR TO FUEL LOAD, AND IS NOT COUPLED WITH GP-10

TEST CHANGE #3 THIS IS THE INITIAL RUN OF THIS TEST ~~AND~~ ~~AND~~ SUCH
EDC 9/24/84 THAT NO PREVIOUS DATA EXISTS.

ACCEPTABLE LIMITS WILL BE SET BASED ON THE INITIAL "PRESSURIZED"
RUN OF THIS TEST. FOR THIS REASON STEP 6.4.1 IS MARKED
N/A.

PRESSURE = 33 psig AT ELEV 245'
P-549 3.4-85

UPON EVALUATION OF THIS TEST THE ORIGINAL LEAKAGE NOTED IN 6.3.4 WAS FOUND TO BE FROM VALVES LOCATED OUTSIDE OF THE INSPECTION ZONE. THOSE VALVES WERE INSERT VALVES WHICH WOULD CONTAIN DEMINERALIZED WATER.

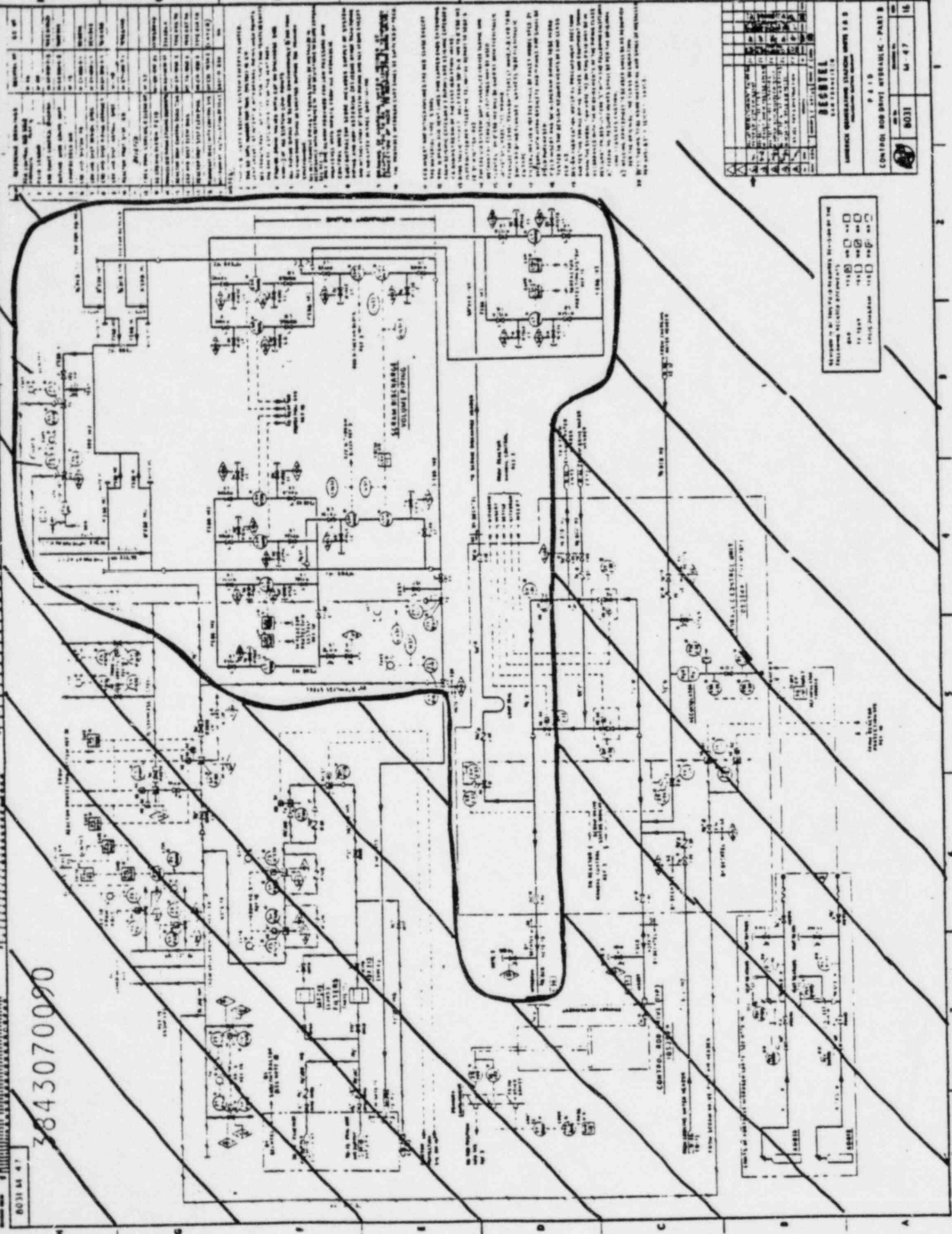
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Inspector: MATT LYRE, JOE STOTT
System Mode: SCRAM, SEARCH DEPRESS Date: 9/25/74

Component No.	Component Description	Comp. Mode (on/off) (open/shut)	drops per minute Leak Rate	Corrective Action Date	Remarks

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8031 M-47



NO.	DESCRIPTION	QTY	UNIT
1	RESISTOR 100 OHMS	1	RES
2	RESISTOR 100 OHMS	1	RES
3	RESISTOR 100 OHMS	1	RES
4	RESISTOR 100 OHMS	1	RES
5	RESISTOR 100 OHMS	1	RES
6	RESISTOR 100 OHMS	1	RES
7	RESISTOR 100 OHMS	1	RES
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99	RESISTOR 100 OHMS	1	RES
100	RESISTOR 100 OHMS	1	RES

REVISIONS TO THIS DRAWING SHALL BE MADE BY THE
 PERSONNEL LISTED BELOW:

NO.	DATE	BY	REVISION
1	11-15-57	...	...
2	11-15-57	...	...
3	11-15-57	...	...
4	11-15-57	...	...
5	11-15-57	...	...

SECRET	
UNCLASSIFIED CONTROL ROOM STATION W/100 100 100	
CONTROL ROOM STATION - PART B	
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