



SCHUTTE & KOERTING DIVISION • 2233 STATE ROAD, CORNWELLS HEIGHTS, PA 19020

TELEPHONE: (215) 639-0900
TELEX: 84-5283
CABLE: SCHUTTE

November 3, 1982

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. Richard De Young,
Director of Inspection and Enforcement

Subject: Carolina Power and Light Co.
H. B. Robinson Steam Electric Plant
Licensee Event Report 82-005
Main Steam Check Valves

50-261

Gentlemen:

Pursuant to the subject event we wish to report to you under the provisions of 10 CFR 21.

Judging from the Carolina Power and Light Co. report the valves had been modified. As a result of that modification the setscrews holding the rockshaft locked to the tail link loosened and, on one valve, backed out sufficiently to free the rockshaft which moved axially causing one end to disengage from its bushing.

The original configuration supplied for Robinson Station and similar valves supplied for other stations are so dimensioned that, should the setscrews loosen and back out, the shaft could not disengage from its bushings. However in many cases the amount of engagement would be materially reduced.

We have identified all of the installations which might be affected. A list of them is attached.

We are in the process of cautioning each of the listed owners about this situation and will provide each with procedural instructions covering the spotting of the setscrews into the shaft and staking to prevent the setscrews from backing out. We have enclosed a copy of each instruction and the form cover letter used to transmit them.

If you require more information relating to the matter please contact the writer.

Sincerely,

AMETEK/Schutte & Koerting Division

R. G. Moore
R. G. Moore, Project Engineer

IE-19

8211120470 821103
PDR ADOCK 05000261
S PDR

RGM/ckb

Enclosures: a. Form Cover Letter.
b. Instructions Sheets 82G-0131V, 82G-0132V, 82G-0133V & 82G-0134V
c. Installation List



SCHUTTE & KOERTING DIVISION • 2233 STATE ROAD, CORNWELLS HEIGHTS, PA 19020

TELEPHONE: (215) 639-0900
TELEX: 84-5283
CABLE: SCHUTTE

Attention: Plant Superintendant

SUBJECT: _____

AMETEK/S&K DIV. S.O. _____

CUSTOMER & ORDER NO. _____

Gentlemen:

During an outage at Carolina Power and Light H. B. Robinson Station it was discovered that setscrews which lock the tail link to the rockshaft on the main steam check valves had loosened. On one valve the rockshaft had shifted axially causing one end to disengage from its bushing. A modification to those valves resulted in a dimensional configuration (which was not as originally supplied) which allowed the shaft to drop out of the bushing. Should the setscrews loosen in an unmodified valve the shaft would remain engaged however the amount of engagement would be materially reduced.

If your valves have been or will be modified or repaired in this area the setscrews must be spotted into the shaft and staked to prevent their loosening. Procedures _____ for accomplishing this are attached. Please insert them in your maintenance manuals and apply them when performing maintenance on the subject equipment.

Note that the instructions indicate in the application list with an 'X' which of your valves are affected.

In addition to the above precautions you may wish to replace the valve shaft with one sufficiently long to prevent its becoming disengaged from the bushings. Setscrews will still be required with this shaft. Should you wish to pursue this option, please contact AMETEK/Schutte & Koerting Division.

Sincerely,

AMETEK/Schutte & Koerting Division

R. G. Moore, Project Engineer

RGM/ckb
Enclosures

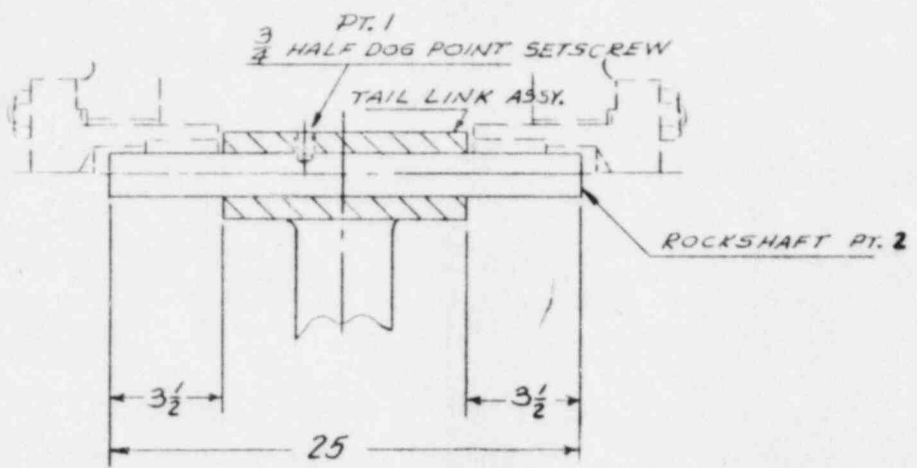
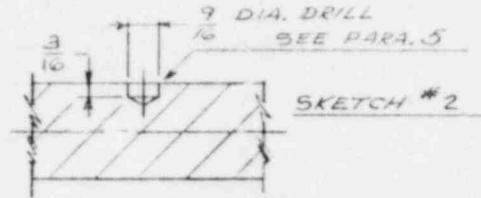
INSTALLATION LIST
 MAIN STEAM ISOLATION VALVES
 AND
 MAIN STEAM CHECK VALVES

UTILITY	STATION	LOCATION
Northeast Utilities	Connecticut Yankee	Haddam Neck, Connecticut
Carolina Power & Light Company	H. B. Robinson	Hartsville, South Carolina
Florida Power & Light Company	Turkey Point	Dade County, Florida
Omaha Public Power District	Fort Calhoun	Omaha, Nebraska
Duquesne Light Co.	Beaver Valley	Shippingport, Pennsylvania
Wisconsin Public Service Corp.	Kewaunee	Kewaunee, Wisconsin
Northern States Power Co.	Prairie Island	Welch, Minnesota
Florida Power & Light Company	St. Lucie	Hutchinson Island, Florida
WEDCO	Indian Point	Buchanan, New York
Pacific Gas & Electric Co.	Diablo Canyon	Avila, California

PGM/ckb
 11-3-82

COMPARE	
SIZE	DRAWING

REVISIONS			
FILMED	LTR	DESCRIPTION	DATE




ROCKSHAFT REPLACEMENT

1. REMOVE HALF DOG POINT SETSCREW (OR SETSCREWS) PART 1.
2. ATTACH SLING TO "LINK AND DISC ASSEMBLY" THEN REMOVE ROCKSHAFT, PART 2. DISC AND LINK ASSEMBLY IS THEN REMOVED FROM BODY.
3. INSERT NEW SHAFT AND POSITION IT AS SHOWN IN SKETCH #1.
4. WITH A SMALL DRILL OR CENTER PUNCH MARK THE SHAFT WHERE THE SETSCREW OR SETSCREWS WILL BE LOCATED.
5. REMOVE THE SHAFT AND DRILL THE SPOT OR SPOTS PER SKETCH #2.
6. PUT "TAIL LINK AND DISC ASSEMBLY" IN THE VALVE AND INSERT SHAFT INTO LINK. LINE UP COUNTER-DRILLED HOLE IN SHAFT WITH SETSCREW HOLE IN LINK. PUT THE HALF DOG POINT SETSCREW IN AND TIGHTEN IT. STAKE THE TOP THREAD ABOVE THE SETSCREW (2 PLACES) TO KEEP THE SETSCREW FROM BACKING OUT.
7. IF A SHAFT IS REMOVED FOR INSPECTION AND FOUND TO BE SATISFACTORY FOLLOW THE ABOVE PROCEDURES AT REASSEMBLY. PARAGRAPH 6 IS MANDATORY FOR ORIGINAL OR NEW SHAFTS.

CONN. YANKEE	X	NA
INSTALLATION	153L VALVE	CHECK V.
APPLICATION LIST		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
STANDARD MACHINING TOLERANCES		
DIMENSION	FRACTIONAL	DECIMAL
0 TO 5	± 1/64	015
OVER 5 TO 24	± 1/32	031
OVER 24	± 1/16	062
ANGLES	± 1/2°	
FIG NO.		
S.O.		
B.M.		
MADE FROM		
FILMED		

DR <i>2/28/82</i>	DATE <i>11-2-82</i>
CHKD	DATE
APP'D	DATE
APP'D	DATE



AMETEK
SCIENTIFIC & MEASURING DIVISION
CORNWELLS HEIGHTS, PENNSYLVANIA

INSTRUCTIONS TO INSTALL ROCKSHAFT ON MAIN STEAM ISOLATION VALVE, AND OR CHECK VALVE

SIZE	CODE IDENT NO.	DRAWING NO.	REV
		826-0131 V	

SCALE *N7S* WT SHEET *1* OF *1*

REVISIONS

DESCRIPTION

DATE

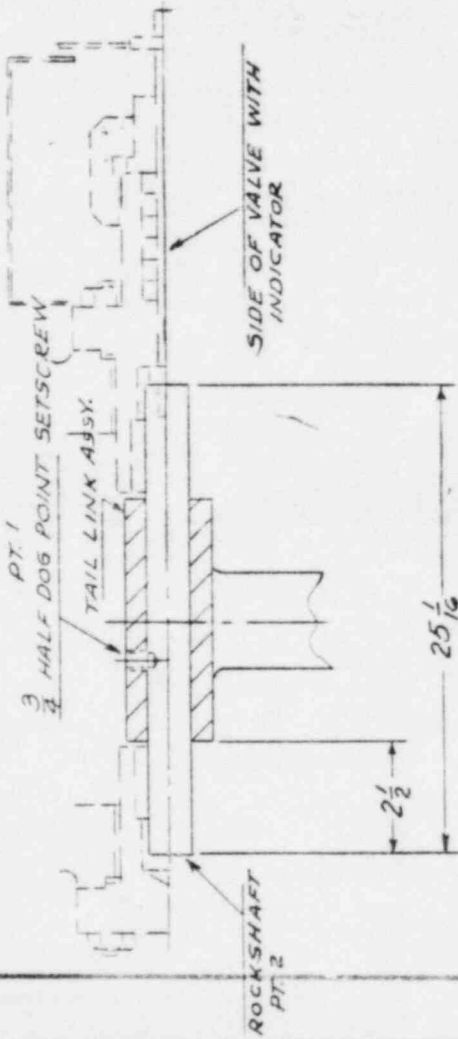
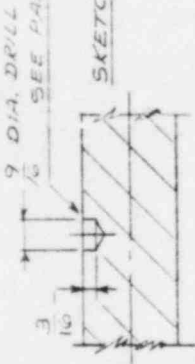
APPROVED

FILMED

1 TR

COMPARE
DRAWING

SIZE



ROCKSHAFT REPLACEMENT

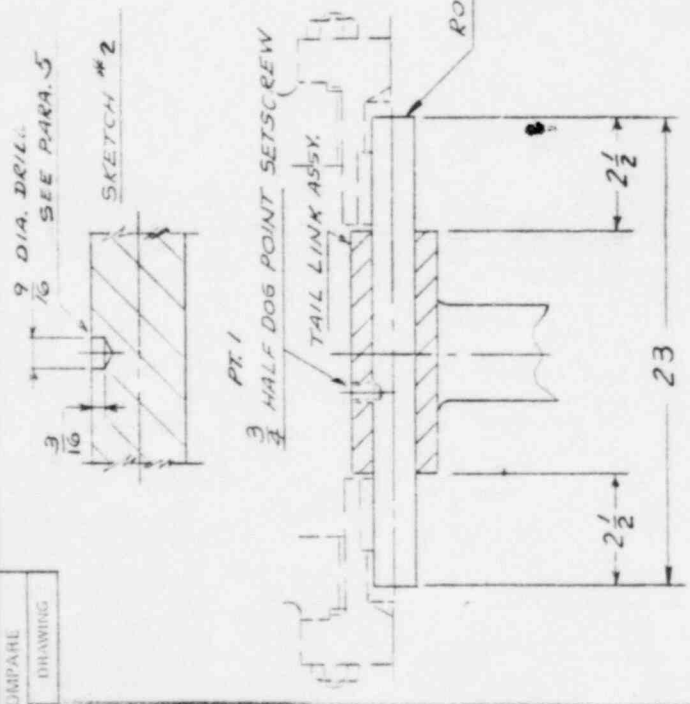
1. REMOVE HALF DOG POINT SETSCREW (OR SETSCREWS) PART 1.
2. ATTACH SLING TO "LINK AND DISC ASSEMBLY" THEN REMOVE ROCKSHAFT, PART 2. DISC AND LINK ASSEMBLY IS THEN REMOVED FROM BODY.
3. INSERT NEW SHAFT AND POSITION IT AS SHOWN IN SKETCH #1.
4. WITH A SMALL DRILL OR CENTER PUNCH MARK THE SHAFT WHERE THE SETSCREW OR SETSCREWS WILL BE LOCATED.
5. REMOVE THE SHAFT AND DRILL THE SPOT OR SPOTS PER SKETCH #2.
6. PUT "TAIL LINK AND DISC ASSEMBLY" IN THE VALVE AND INSERT SHAFT INTO LINK. LINE UP COUNTER-DRILLED HOLE IN SHAFT WITH SETSCREW HOLE IN LINK. PUT THE HALF DOG POINT SETSCREW IN AND TIGHTEN IT. STAKE THE TOP THREAD ABOVE THE SETSCREW (2 PLACES) TO KEEP THE SETSCREW FROM BACKING OUT.
7. IF A SHAFT IS REMOVED FOR INSPECTION AND FOUND TO BE SATISFACTORY FOLLOW THE ABOVE PROCEDURES AT REASSEMBLY. PARAGRAPH 6 IS MANDATORY FOR ORIGINAL OR NEW SHAFTS.

<p>AMETEK SCIENTIFIC & COMMERCIAL DIVISION CORNWALLS HEIGHTS BUCKS COUNTY, PENNSA.</p>		<p>INSTRUCTIONS TO INSTALL ROCKSHAFT ON MAIN STEAM ISOLATION VALVE AND OR CHECK VALVE</p>	
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES STANDARD MACHINING TOLERANCES DIMENSION FRACTIONAL DECIMAL 0 TO 15 .015 OVER 15 TO 24 .012 OVER 24 .010 ANGLES 1/2</p>	<p>DR <i>W. J. G.</i> DATE 11-2-82 CHKD _____ DATE _____ APP'D _____ DATE _____ APP'D _____ DATE _____</p>	<p>SIZE CODE IDENT NO. DRAWING NO. 82G-0132 V</p>	<p>REV SCALE N75 WT SHEET 1</p>
<p>S. O. B. M. MADE FROM FILMED</p>	<p>FIG NO.</p>	<p>APPLICATION LIST</p>	<p>APPLICATION LIST</p>

82G-0133V

REVISED	DATE	DESCRIPTION	APPROVED

COMPARE	
SIZE	
DRAWING	



ROCKSHAFT REPLACEMENT

1. REMOVE HALF DOG POINT SETSCREW (OR SETSCREWS) PART 1.
2. ATTACH SLING TO "LINK AND DISC ASSEMBLY" THEN REMOVE ROCKSHAFT, PART 2. DISC AND LINK ASSEMBLY IS THEN REMOVED FROM BODY.
3. INSERT NEW SHAFT AND POSITION IT AS SHOWN IN SKETCH #1.
4. WITH A SMALL DRILL OR CENTER PUNCH MARK THE SHAFT WHERE THE SETSCREW OR SETSCREWS WILL BE LOCATED.
5. REMOVE THE SHAFT AND DRILL THE SPOT OR SPOTS PER SKETCH #2.
6. PUT "TAIL LINK AND DISC ASSEMBLY" IN THE VALVE AND INSERT SHAFT INTO LINK. LINE UP COUNTER-DRILLED HOLE IN SHAFT WITH SETSCREW HOLE IN LINK. PUT THE HALF DOG POINT SETSCREW IN AND TIGHTEN IT. STAKE THE TOP THREAD ABOVE THE SETSCREW (2 PLACES) TO KEEP THE SETSCREW FROM BACKING OUT.

1. IF A SHAFT IS REMOVED FOR INSPECTION AND FOUND TO BE SATISFACTORY FOLLOW THE ABOVE PROCEDURES AT REASSEMBLY. PARAGRAPH 6 IS MANDATORY FOR ORIGINAL OR NEW SHAFTS.

SKETCH #1

H. B. ROBINSON	X	X	X
TURKEY POINT	X	X	X
FORT CALHOUN	NA	NA	X
BEAVER VALLEY	NA	NA	X
DIABLO CANYON	NA	NA	X
KEWAUNEE	NA	NA	X
INSTALLATION	ISOL. VALVE	CHECK V.	
APPLICATION LIST			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

STANDARD MACHINING TOLERANCES	
DIMENSION	FRACTIONAL DECIMAL
0 TO 5	± 1/64 015
OVER 5 TO 24	± 1/32 031
OVER 24	± 1/16 062
ANGLES	± 1/2°

FIG. NO. _____

S. O. _____

B. M. _____

MADE FROM _____

FILMED _____

OR *By* _____ DATE _____

CHKD _____ DATE _____

APP'D _____ DATE _____

APP'D _____ DATE _____

DATE 11-2-82

AMETEK
SCHUTTER HONING-C DIVISION
BUCKS COUNTY, PENNA.
CORNWALL HEIGHTS

INSTRUCTIONS TO INSTALL ROCKSHAFT ON MAIN STEAM ISOLATION VALVE AND OR CHECK VALVE

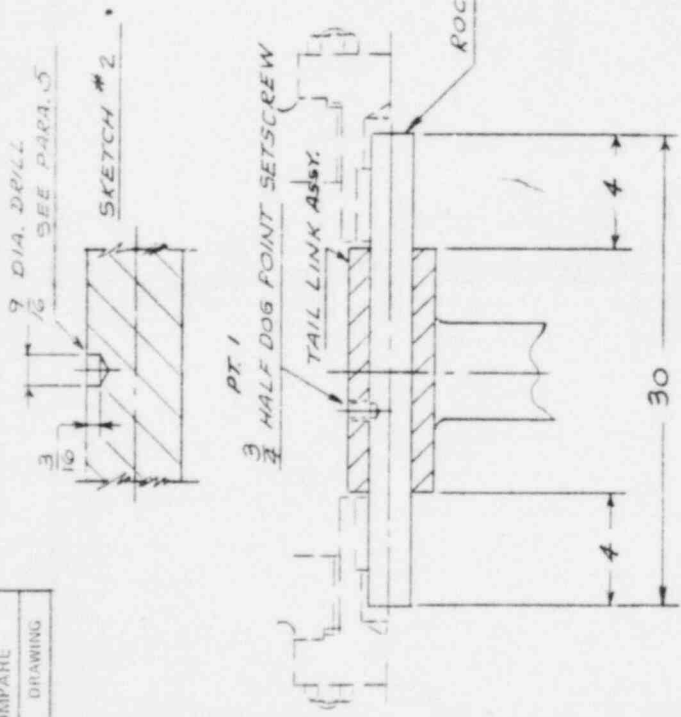
SIZE CODE IDENT NO. DRAWING NO. **82G-0133V**

SCALE **N75** WE **1** SHEET **1** OF **1**

COMPARE
DRAWING

REVISIONS
DESCRIPTION

DATE APPROVED



ROCKSHAFT REPLACEMENT

1. REMOVE HALF DOG POINT SETSCREW (OR SETSCREWS) PART 1.
2. ATTACH SLING TO "LINK AND DISC ASSEMBLY" THEN REMOVE ROCKSHAFT, PART 2.
3. DISC AND LINK ASSEMBLY IS THEN REMOVED FROM BODY.
4. INSERT NEW SHAFT AND POSITION IT AS SHOWN IN SKETCH #1.
5. WITH A SMALL DRILL OR CENTER PUNCH MARK THE SHAFT WHERE THE SETSCREW OR SETSCREWS WILL BE LOCATED.
6. REMOVE THE SHAFT AND DRILL THE SPOT OR SPOTS PER SKETCH #2.
7. PUT "TAIL LINK AND DISC ASSEMBLY" IN THE VALVE AND INSERT SHAFT INTO LINK. LINE UP COUNTER-DRILLED LOLE IN SHAFT WITH SETSCREW HOLE IN LINK.
8. PUT THE HALF DOG POINT SETSCREW IN AND TIGHTEN IT. STAKE THE TOP THREAD ABOVE THE SETSCREW (2 PLACES) TO KEEP THE SETSCREW FROM BACKING OUT.
9. IF A SHAFT IS REMOVED FOR INSPECTION AND FOUND TO BE SATISFACTORY FOLLOW THE ABOVE PROCEDURES AT REASSEMBLY.
10. PARAGRAPH 6 IS MANDATORY FOR ORIGINAL OR NEW SHAFTS.

SKETCH #1

APPLICATION LIST	
ST. LUCIE	X
INSTALLATION ISOL. VALVE	X
CHECK V.	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES STANDARD TOLERANCES DIMENSION FRACTIONAL DECIMAL 0 TO .125 ± 1/64 .015 OVER .125 TO .24 ± 1/32 .031 OVER .24 ± 1/16 .062 ANGLES ± 1/2°		DR <i>Spade</i> DATE 11-2-82	
FIG. NO.		CHKD	DATE
S. D.		APPD	DATE
B. M.		APPD	DATE
MADE FROM		SIZE CODE IDENT NO. DRAWING NO.	
FINISH		SCALE	N75 WT
		SHEET	
		REV	
		82G-0134 V	
		AMETEK MINUTE & HOURING DIVISION BUCKS COUNTY, PENNA.	
INSTRUCTIONS TO INSTALL ROCKSHAFT ON MAIN STEAM ISOLATION VALVE AND OR CHECK VALVE			