

JANAURY 3, 1996

See Rpt.

Florida Power and Light Company
ATTN: Mr. J. H. Goldberg
President - Nuclear Division
P. O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: SUMMARY OF PUBLIC WORKSHOPS TO DISCUSS GENERIC LETTER 95-07,
"PRESSURE LOCKING AND THERMAL BINDING OF SAFETY-RELATED
POWER-OPERATED GATE VALVES"

Gentlemen:

In October and November 1995, the NRC staff conducted one-day public workshops in each Region to discuss Generic Letter (GL) 95-07, "Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves." The workshops were attended by representatives of nuclear power plant licensees in the applicable Regions. Enclosure 1 is a list of meeting participants.

The Mechanical Engineering Branch of NRR, NRR Projects, the Office for the Analysis and Evaluation of Operational Data, the Mechanical Engineering Branch of the Office of Nuclear Regulatory Research, and Regional management and staff participated in the workshops. During each workshop, Regional and NRR management provided their perspectives on the issue of pressure locking and thermal binding, and expectations for licensee action in response to GL 95-07. NRC staff discussed past experience with pressure locking and thermal binding, and the recommendations in GL 95-07. Enclosure 2 includes the handouts from the staff presentations.

Personnel from several nuclear power utilities made presentations on their activities in response to the pressure locking and thermal binding issue. Enclosure 3 includes the handouts from the industry presentations.

At the conclusion of each meeting, the staff responded to questions from licensees regarding pressure locking and thermal binding. The most significant discussion topics are summarized below:

Actions, Schedules and Submittals

1. The 90-day requested screening action in GL 95-07 was intended for the licensee to identify any critical deficiencies in the past evaluations of potential pressure locking and thermal binding that may have been conducted in response to industry, vendor or NRC communications. The licensee should use best available information and assure that the subject valves are operable. The staff considered that more detailed review and evaluation, and corrective actions, would be included as part of the 180-day requested action.

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2. The staff does not plan to extend the proposed schedule for completing the 180-day requested action of GL 95-07. If a licensee establishes corrective action plans as part of its 180-day response that are later determined to be unnecessary or inadequate based on ongoing industry testing and analyses, the licensee would be expected to notify the staff of the change to those plans and the basis for the change. As stated in GL 95-07, a licensee may consider risk significance and outage schedules in developing corrective action schedules. If an immediate operability concern does not exist and risk considerations are appropriate, a licensee might consider corrective action for one train at the next available outage and the other train at the following outage.
3. NRR staff will be conducting the principal review of licensee responses to GL 95-07 and detailed inspections at all facilities are not planned. The staff stated that information provided in response to the 180-day requested action would be most helpful if it briefly summarized the depth of the licensee's review, the susceptible valves by function and identification number, the corrective action completed and planned, and valves acceptable as installed and currently set. Detailed supporting data and calculations are not desired in the submittal but should be retained in plant records.

Identifying Susceptible Valves

4. As yet, licensees have not presented an analytical method for predicting the thrust required to overcome pressure locking or thermal binding as part of a long-term resolution of the susceptibility of a valve to these phenomena. Based on the preliminary test verification efforts to date, the staff has not objected to licensees using one of the several industry analytical methods for predicting thrust requirements as part of an operability decision until a long-term solution can be achieved. However, if a licensee intends to rely on these analytical methods as a long-term solution, test verification will need to be completed.
5. GL 95-07 does not include a specific recommendation for the minimum temperature differential that could be assumed in predicting the occurrence of thermal binding of a gate valve. The staff considers the susceptibility of a gate valve to thermal binding to be a function of several valve-specific parameters, including gate valve type (i.e., solid or flexible wedge), differential temperature, temperature gradient across the valve and disk, the rate of change of temperatures, the valve size and rating, valve and disk material, and manufacturing tolerances. The staff does not believe that the presence of the same material for both the valve and disk would eliminate the need to consider the potential for thermal binding. The staff suggested that licensees contact their valve manufacturers for more-detailed information.
6. The staff believes that slow ambient temperature changes that normally occur in a nuclear power plant would not be a principal concern for pressure locking or thermal binding, provided the valve has not experienced such problems under these conditions and there are no potential significant heating or cooling sources near the valve.

7. The staff recognizes that conflicting industry test information exists regarding the potential increase in valve bonnet pressure as the temperature of the fluid in the bonnet increases. The industry and staff are both conducting additional tests in this area. The staff believes that, until the pressure versus temperature relationship can be resolved, the pressure rise can be assumed to be significant if the valve bonnet is water solid. However, if a licensee can demonstrate that a small amount of air is present in the valve bonnet, the pressure rise will be minimal except in the case of large temperature changes. A licensee might establish a program to monitor air in the valve bonnet as part of a long-term resolution plan.
8. One or more check valves might not prevent pressure increase in piping between the check valve and the gate valve being evaluated for potential pressure locking. A significant length of piping might mitigate the pressure increase over the time interval between gate valve stroking as part of IST or plant operations. Gate and globe valves with continuous seating force will minimize the potential for significant pressure increase in the piping between these valves and the valve being evaluated for pressure locking, provided inservice test results and methods (e.g., instrumentation) to reveal the pressure increase are considered.
9. The staff recognizes that leakage from the valve bonnet around the valve disk or packing can reduce pressure over time. The staff believes that licensees may be able to justify reliance on such leakage for valves that are first called upon to operate following a significant time interval after the event that might have caused a pressure locking situation to develop.

Responding to Susceptible Valves

10. The staff believes that valve-specific information could be useful in addressing whether any immediate concern exists regarding a valve found to be susceptible to pressure locking or thermal binding, provided the valve is normally operated under conditions that might cause these phenomena. The staff noted that the licensee would need to address capability of the actuator under degraded voltage conditions, if applicable, and structural and electrical capability from accelerated wear or fatigue, over the long term.
11. If a licensee declares a valve inoperable when conducting surveillance testing and follows its plant technical specifications, the provisions of GL 95-07 to address pressure locking and thermal binding during surveillance testing would not apply. If the valve is to remain operable during surveillance testing, the licensee should address the possibility of pressure locking or thermal binding during the conduct of the surveillance. The staff believes that licensees may be able to more readily address the susceptibility of the valve to pressure locking and thermal binding during surveillance testing (e.g., low likelihood of thermally induced pressure locking or thermal binding during the surveillance test).

Regarding surveillance testing and operability of safety-related valves, the staff pointed out that if a system (train) is to be considered operable during the conduct of a surveillance test, then safety-related valves in the system (train) must be capable of repositioning as necessary in response to an engineered safeguards signal. If the licensee cannot assure the valve is capable of repositioning during surveillance, they should declare the system (train) inoperable during surveillance and apply the technical specification LCO. [In a safety evaluation dated October 16, 1995, addressing the scope of the GL 89-10 program at the Hatch nuclear plant, the staff stated that a motor-operated valve placed in a position that prevents the safety-related system (or train) from performing its safety function must be capable of returning to its safety position, or the system (or train) must be declared inoperable.]

12. The staff noted that licensees should address potential adverse effects of proposed corrective action to respond to the susceptibility of a gate valve to pressure locking or thermal binding. The staff discussed an example from one plant where a hole drilled in a valve disk had to be filled because check valve leakage resulted in a flow path from the refueling water storage tank to the reactor building sump.
13. The staff referred licensees to GL 91-18 regarding inappropriate reliance on risk assessments in determining the operability of a safety-related valve.
14. The staff referred licensees to GL 91-18 for the use of manual action to ensure the capability of equipment. The staff noted difficulties in implementing manual action with respect to operating valves that might be pressure locked or thermally bound. For example, high pressure fluid and adverse environments could cause manual action to be unsafe to maintenance personnel and to be difficult to implement.

Miscellaneous

15. The staff is conducting research on various aspects of the pressure locking and thermal binding phenomena. Results of the staff's research will be made available to the industry via generic communication or industry symposia.
16. The staff discussed a recent AEOD report alerting licensees to the potential for damaging valves under surveillance test conditions that exceed design-basis conditions. The AEOD report is included as Enclosure 4 to this meeting summary. The staff also noted that preparation for maintenance or surveillance testing could initiate a pressure locking or thermal binding situation.

Comments from workshop participants indicated that the workshops were highly beneficial in increasing licensee understanding of staff expectations regarding GL 95-07 and in promoting the exchange of technical information on the pressure locking and thermal binding issue.

Sincerely,
ORIGINAL SIGNED BY
DAVID VERRELLI FOR:

Paul E. Fredrickson, Chief
Special Inspection Branch
Division of Reactor Safety

Docket Nos. 50-335, 50-389
50-250, and 50-251

License Nos. DPR-67, NPF-16
DPR-31, and DPR-41

Enclosures: As Stated

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GENERIC LETTER 95-07 PUBLIC WORKSHOP PARTICIPANTS

NAME

ORGANIZATION

All 4 Workshops

T. Scarbrough	NRC/NRR
H. Rathbun	NRC/NRR
E. Brown	NRC/AEOD

Region I Workshop

J. Wiggins	NRC/Region I
E. Kelly	NRC/Region I
F. Bower	NRC/Region I
D. Dempsey	NRC/Region I
R. Reyes	NRC/Region I
T. Chan	NRC/NRR
L. Dudes	NRC/NRR
R. Eaton	NRC/NRR
C. Poslusny	NRC/NRR
A. Wang	NRC/NRR
G. Weidenhamer	NRC/RES
T. Kenny	NRC/Region I
K. Kolaczyk	NRC/Region I
D. Moy	NRC/Region I
J. Osborne	BGE
K. Robinson	BGE
J. Szivos	BGE
J. Jerz	Boston Edison
J. Tucker	Boston Edison
J. Doyle	Boston Edison
W. Kline	Boston Edison
L. Cona	ConEd
J. Lomar	ConEd
N. Mah	ConEd
D. Shah	ConEd
S. Loehlein	Duquesne Light Company
P. Slifkin	Duquesne Light Company
E. Coholich	Duquesne Light Company
R. McGoe	GPU Nuclear
J. Correa	GPU Nuclear
J. Tabone	GPU Nuclear
J. Abramovici	GPU Nuclear
B. Knight	GPU Nuclear
T. Carroll	GPU Nuclear
J. Bashista	GPU Nuclear
S. Parsons	GPU Nuclear
B. Lord	MYAPC
S. Nichols	MYAPC
D. Whittier	MYAPC
F. Martsen	NYPA
P. Swinburne	NYPA

ENCLOSURE 1

K. Eslinger
R. Plasse
G. Bruce
D. Cruz
M. McGinley
T. Pucko
P. Brown
R. Faix
B. Harris
S. Bobbyock
B. Carsky
J. Daise
J. Mitman
G. Stathes
S. Singh
S. Mangi
G. Miller
M. Mjaatvedt
M. Rose
C. Coddington
R. Lewis
S. Gallogly
M. Hoskins
D. LaMastra
J. Nichols
G. Overbeck
K. Muller
B. Buteau
J. Callaghan
T. Miller
J. Duffy
S. McConarty

Region II Workshop

J. Jaudon
M. Shymlock
E. Girard
T. Chan
M. Worth
M. Verrilli
W. McGoun
W. Wilton
G. Thearling
F. Setzer
K. Beasley
D. King
S. Hart
V. Haramis
O. Hanek
W. Bryan
K. Ledzian
S. Powell
B. Naumria

NYPA
NYPA
NMPC
NMPC
NMPC
North Atlantic Energy Service Corp.
North Atlantic Energy Service Corp.
North Atlantic Energy Service Corp.
NU
PECO Energy
PECO Energy
PECO Energy
PECO Energy
PECO Energy
State of New Jersey
State of Pennsylvania
PP&L
PP&L
PP&L
PP&L
PSE&G
PSE&G
PSE&G
PSE&G
PSE&G
PSE&G
RG&E
VY Nuclear Power
VY Nuclear Power
VY Nuclear Power
Yankee Atomic Nuclear Power
Yankee Atomic Nuclear Power

NRC/Region II
NRC/Region II
NRC/Region II
NRC/NRR
CP&L
CP&L
CP&L
CP&L
CP&L
Duke Power
Duke Power
Duke Power
Duke Power
Duke Power
FP&L
FP&L
Florida Power Corp.
Florida Power Corp.
Georgia Power

P. Grissom
J. Dailey
G. Williams
R. Justice
J. Pease
D. Ray
G. Talton
S. Gates
J. Daniels
O. Vidal
R. Golub
J. Elmerick
R. Poole
T. Chan
H. Benninghoff
B. DeMars
E. May
A. Szczepaniec
M. Kalsi

Georgia Power
Georgia Power
SC&G
SC&G
SC&G
Southern Company
Southern Nuclear
Southern Nuclear
Southern Nuclear
Southern Nuclear
TVA
TVA
TVA
TVA
TVA
Virginia Power
Virginia Power
INPO
Kalsi Engineering

Region III Workshop

R. Wessman
J. Jacobson
S. Burgess
J. Guzman
M. Shuaibi
A. Setlur
A. Widmer
S. Benesh
C. Bedford
B. Burte
M. Dowd
I. Garza
B. Jelke
R. Mika
M. Melnicoff
J. O'Neill
B. Westphal
B. Smith
P. Yost
E. Evans
P. Flenner
R. Gambrill
R. Scudder
R. Swanson
J. Toskey
M. Jaworsky
A. Nayakwadi
L. Schuerman
L. Georgopoulos
Y. Patel
W. Miller
D. Wiley

NRC/NRR
NRC/Region III (DRS)
NRC/Region III
NRC/Region III
NRC/NRR
AES Corp.
CEI
ComEd - Zion
ComEd - Braidwood
ComEd - Corp.
ComEd - LaSalle
ComEd - Corp.
ComEd - Zion
ComEd - Zion
ComEd - NES (PRA)
ComEd - Dresden
ComEd - LaSalle
ComEd - Byron
ComEd
CPCO
CPCO
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CPCO
CPCO
CPCO
CPCO
DECO
DECO
DECO
EMS, Inc.
EMS, Inc.
IES - Duane Arnold
IES - Duane Arnold

M. Holbrook
A. Gort
N. Howey
J. Puzauskas
K. Peterson
R. Wirkkala
J. Vitellas
A. Meligi
D. Blakely
B. Gallatin
N. Peterson
P. Young
J. Roberts
T. Ruiz
B. Heida
E. Leinheiser

INEL
I&M Power
IONS
IPCO
NSP - Monticello
NSP - Prairie Island
PUCO
S&L
TECO
TECO - Davis Besse
TECO - Davis Besse
Vectra Tech.
WEPCO - Point Beach
WEPCO - Point Beach
WPSCO - Kewaunee
WPSCO - Kewaunee

Region IV Workshop

T. Gwynn
K. Brockman
C. VanDenburgh
M. Runyan
C. Myers
R. Wessman
S. Bauer
M. Hooshmand
M. Renfroe
B. Matthew
K. Fitzsimmons
J. Burton
R. Jackson
D. Smith
K. Taplett
A. Aldridge
R. Thacker
J. Geschwender
R. Cahn
T. Raidy
E. David
T. Hoyle
J. Barker
B. Black
R. Cockrel
O. Bhatt
D. Dillinger
D. Weninger
E. Simbles
C. Sellers
D. Phillips
R. Stoddard
I. Ezekoye

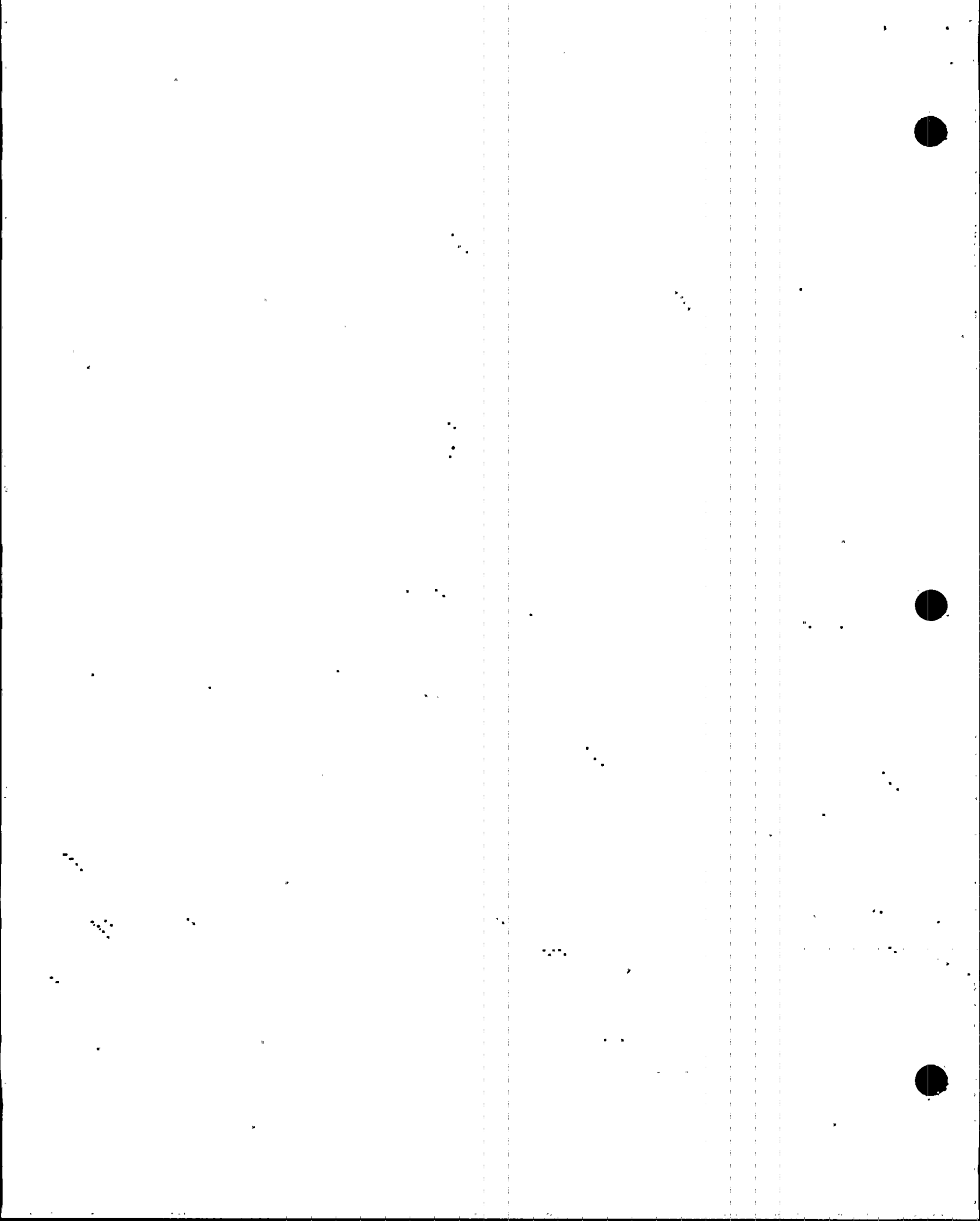
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NRC/NRR
Arizona Public Service
Arizona Public Service
Arizona Public Service
Entergy Operations
Entergy Operations
Entergy - Grand Gulf
Entergy - Grand Gulf
Entergy - Grand Gulf
HP&L
HP&L
NPPD
OPPD
PG&E
Southern Cal. Edison
Southern Cal. Edison
Supply System
Texas Utilities
Texas Utilities
Texas Utilities
Texas Utilities
Texas Utilities
Wolf Creek
ERIN Engineering
ERIN Engineering
ERIN Engineering
Lincoln Electric Systems
Westinghouse Corp.

**PUBLIC WORKSHOP ON
GENERIC LETTER 95-07,
"PRESSURE LOCKING AND THERMAL BINDING
OF SAFETY-RELATED POWER-OPERATED
GATE VALVES"**

**REGION I November 2, 1995
REGION II October 24, 1995
REGION III November 7, 1995
REGION IV November 9, 1995**

ENCLOSURE 2

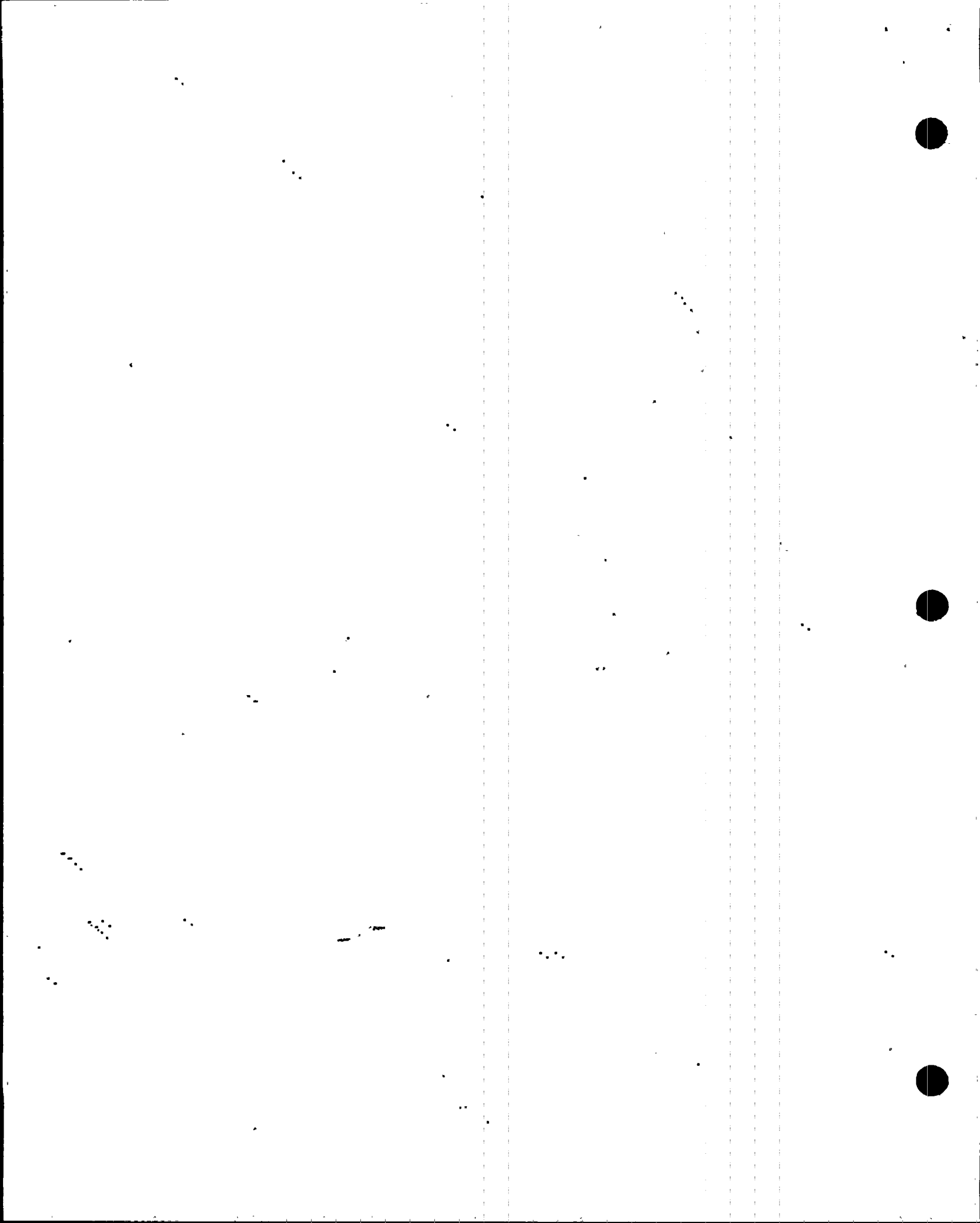
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**NRR MANAGEMENT PERSPECTIVE ON
PRESSURE LOCKING AND THERMAL BINDING**

**Richard H. Wessman/
Terence L. Chan**

**Mechanical Engineering Branch
Division of Engineering
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission**



NRR MANAGEMENT PERSPECTIVE

SAFETY SIGNIFICANCE

NRC CONSIDERS PRESSURE LOCKING AND THERMAL BINDING TO BE A SAFETY SIGNIFICANT ISSUE SINCE IT REPRESENTS A POTENTIAL COMMON FAILURE MODE OF A SYSTEM OR SYSTEMS

- **VERMONT YANKEE [CORE SPRAY INJECTION VALVES]**
- **MILLSTONE 2 [CONTAINMENT SUMP RECIRCULATION VALVES]; IN 95-14 ISSUED**
- **HADDAM NECK [SAFETY INJECTION VALVES]; IN 95-18 ISSUED**

NRR MANAGEMENT PERSPECTIVE

HISTORY

- **NRC COMMUNICATIONS**

- **IE CIRCULAR 77-05 (MARCH 29, 1977)**
- **IN 81-31 (OCTOBER 8, 1981)**
- **IN 92-26 (APRIL 2, 1992)**
- **NUREG-1275, VOL. 9 (MARCH 1993)**
- **GENERIC LETTER 89-10 (JUNE 26, 1989)**
- **GL 89-10, SUPPLEMENT 6 (MARCH 8, 1994)**

- **INDUSTRY COMMUNICATIONS**

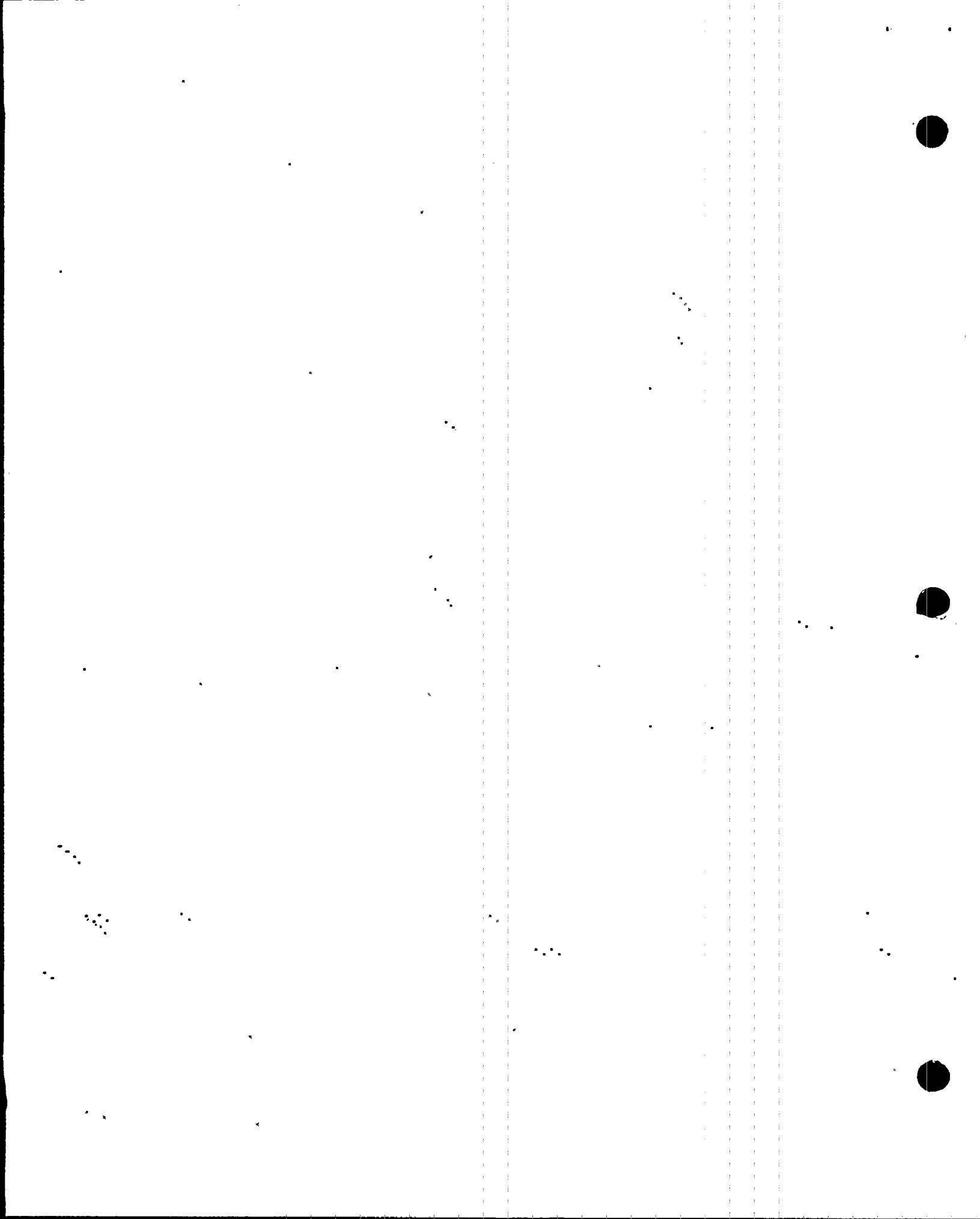
- **GE SIL-368 (DECEMBER 1981)**
- **INPO SOER 84-7 (DECEMBER 14, 1984)**

- **ACTIONS PERFORMED IN RESPONSE TO GL 89-10**

NRR MANAGEMENT PERSPECTIVE

RESOLUTION

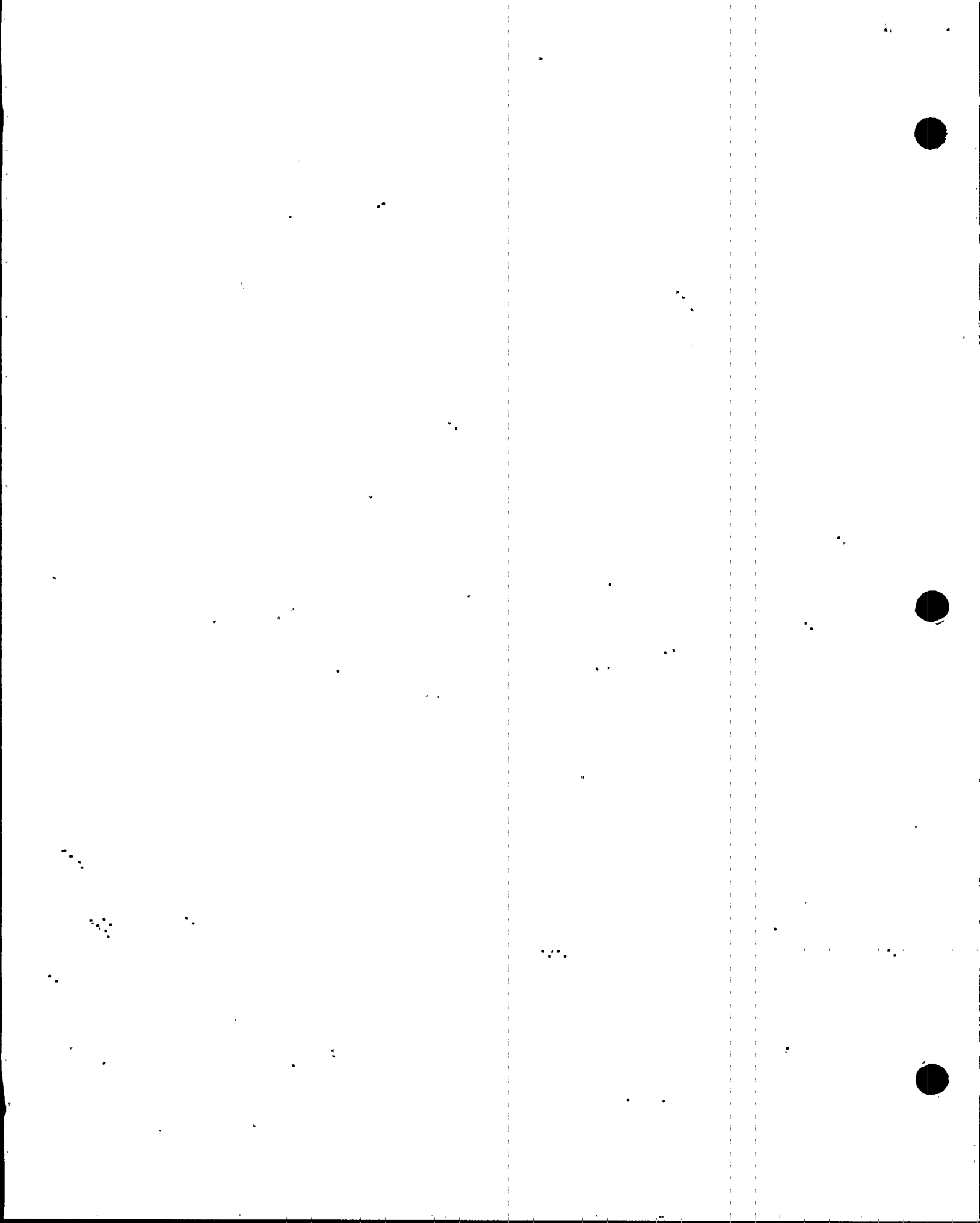
- **GL 95-07 SCHEDULE IS REASONABLE**
 - **INITIAL SCREENING - 90 DAYS**
 - **SUMMARY OF ACTIONS AND ANALYSES - 180 DAYS**
 - **ALLOWS FOR CONSIDERATION OF PLANT OUTAGE AND OPERATION SCHEDULES IN DEVELOPING CORRECTIVE ACTION SCHEDULES**



RECENT
PRESSURE LOCKING AND THERMAL BINDING
EXPERIENCE AND ANALYSES

Thomas G. Scarbrough

Mechanical Engineering Branch
Division of Engineering
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

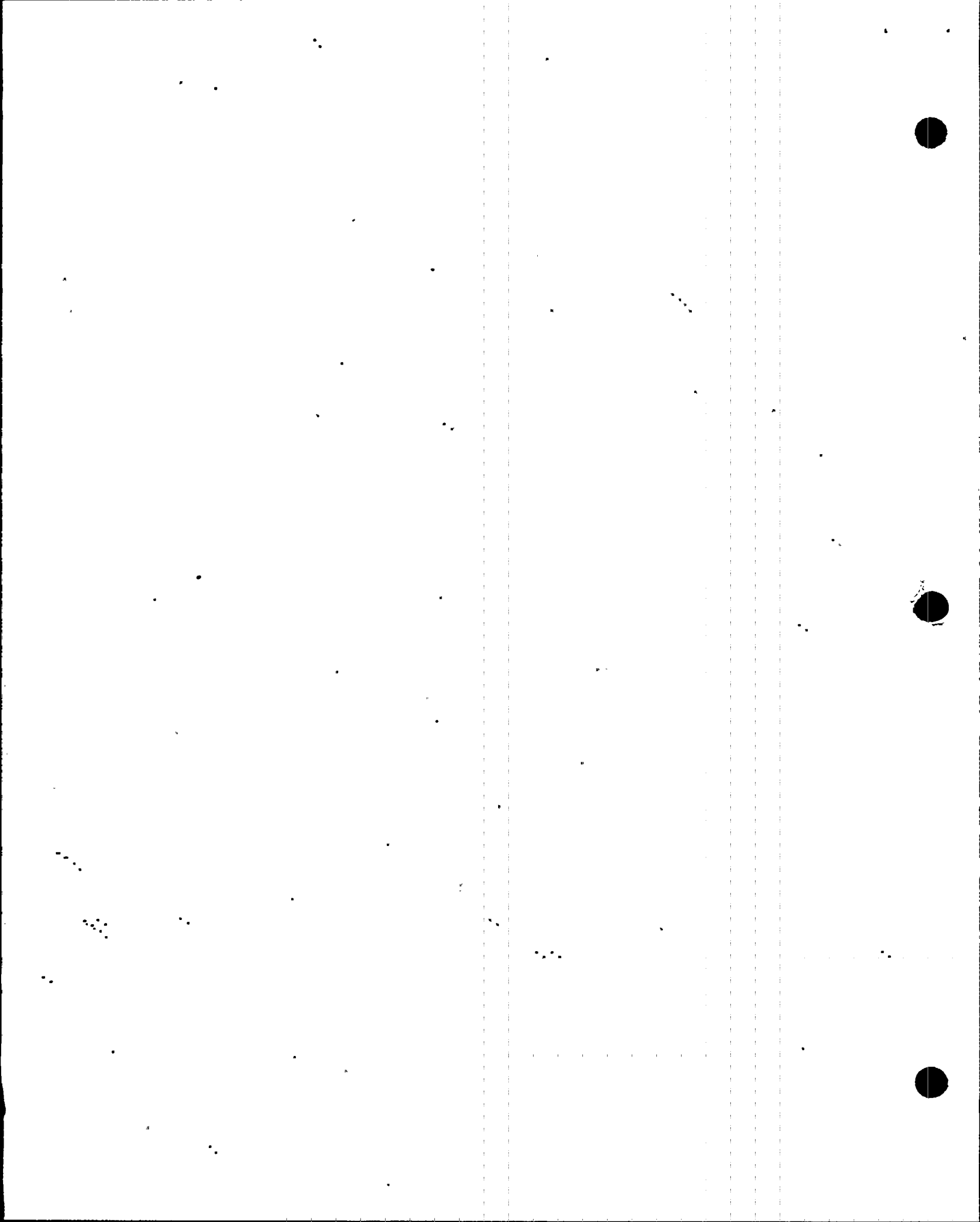


PRESSURE LOCKING AND THERMAL BINDING PHENOMENA

PRESSURE LOCKING OF FLEXIBLE WEDGE OR PARALLEL DISK GATE VALVES OCCURS WHEN FLUID IS PRESSURIZED WITHIN VALVE BONNET, AND ACTUATOR IS INCAPABLE OF OVERCOMING ADDITIONAL THRUST REQUIREMENT FROM DIFFERENTIAL PRESSURE ACROSS BOTH VALVE DISKS.

THERMAL BINDING RESULTS FROM MECHANICAL INTERFERENCE THAT OCCURS DUE TO DIFFERENT EXPANSION AND CONTRACTION CHARACTERISTICS OF VALVE BODY AND DISK MATERIALS. REOPENING OF A CLOSED VALVE MIGHT BE PREVENTED UNTIL VALVE AND DISK ARE RETURNED TO THEIR ORIGINAL TEMPERATURES.

PRESSURE LOCKING AND THERMAL BINDING REPRESENT POTENTIAL COMMON-CAUSE FAILURE MODES THAT CAN RENDER REDUNDANT TRAINS OF SAFETY-RELATED SYSTEMS OR MULTIPLE SAFETY SYSTEMS INCAPABLE OF PERFORMING THEIR SAFETY FUNCTIONS.



RELATED NRC DOCUMENTS

**IE CIRCULAR 77-05, "FLUID ENTRAPMENT IN VALVE BONNETS,"
MARCH 29, 1977**

**IN 81-31, "FAILURE OF SAFETY INJECTION VALVES TO OPERATE
AGAINST DIFFERENTIAL PRESSURE," OCTOBER 8, 1981**

**IN 92-26, "PRESSURE LOCKING OF MOTOR-OPERATED FLEXIBLE
WEDGE GATE VALVES," APRIL 2, 1992**

**NUREG-1275, VOL. 9, "OPERATING EXPERIENCE FEEDBACK REPORT -
PRESSURE LOCKING AND THERMAL BINDING OF GATE VALVES,"
MARCH 1993**

**GENERIC LETTER 89-10, "SAFETY-RELATED MOTOR-OPERATED
VALVE TESTING AND SURVEILLANCE," JUNE 28, 1989**

**GL 89-10, SUPPLEMENT 6, "INFORMATION ON SCHEDULE AND
GROUPING, AND STAFF RESPONSES TO ADDITIONAL PUBLIC
QUESTIONS," MARCH 8, 1994**

**NUREG/CP-0146, "WORKSHOP (FEBRUARY 1994) ON GATE VALVE
PRESSURE LOCKING AND THERMAL BINDING," ISSUED JULY 1995**

**NUREG/CP-0137, VOLUME 2, "PROCEEDINGS OF THIRD NRC/ASME
SYMPOSIUM ON VALVE AND PUMP TESTING," JULY 1994**

**IN 95-14, "SUSCEPTIBILITY OF CONT. SUMP RECIRCULATION GATE
VALVES TO PRESSURE LOCKING," FEBRUARY 28, 1995**

**IN 95-18, "POTENTIAL PRESSURE-LOCKING OF SAFETY-RELATED
POWER-OPERATED GATE VALVES," MARCH 15, 1995**

**IN 95-18, SUPP. 1, "POTENTIAL PRESSURE-LOCKING OF SAFETY-
RELATED POWER-OPERATED GATE VALVES," MARCH 31, 1995**

**IN 95-30, "SUSCEPTIBILITY OF LOW-PRESSURE COOLANT INJECTION
AND CORE SPRAY INJECTION VALVES TO PRESSURE LOCKING,"
AUGUST 3, 1995**

RELATED INDUSTRY DOCUMENTS

**GE SIL 368, "RECIRCULATION DISCHARGE ISOLATION VALVE
LOCKING," DECEMBER 1981**

**GE SIL 368, SUPPLEMENT 1, "GATE VALVE LOCKUP,"
AUGUST 14, 1989**

**INPO SOER 84-7, "PRESSURE LOCKING AND THERMAL BINDING OF
GATE VALVES," DECEMBER 14, 1984**

**INPO SER 8-88, "PRESSURE LOCKING OF RESIDUAL HEAT REMOVAL
GATE VALVES," MARCH 25, 1988**

ASME SECTION III, DIVISION 1 - SUBSECTION NB-3511 - 1980

ANSI B31.1 - 1973

ANSI B16.5 - 1973

**POWER ENGINEERING, "BONNET OVERPRESSURIZATION PROTECTION
FOR DOUBLE-SEATED VALVES," JANUARY 1985**

RECENT PRESSURE LOCKING AND THERMAL BINDING EXPERIENCE AND ANALYSES

LPCI SYSTEM INJECTION VALVE AT FITZPATRICK

IN JULY 1991, A LPCI SYSTEM INJECTION VALVE AT FITZPATRICK FAILED WHEN ATTEMPTED TO OPEN ABOUT 9 HOURS AFTER A HYDROSTATIC TEST OF THE PIPING.

CAUSE ATTRIBUTED TO HIGH PRESSURE IN THE VALVE BONNET RESULTING IN THRUST GREATER THAN MOTOR CAPABILITY.

LICENSEE INSTALLED VENT LINES ON 4 LPCI AND LPCS VALVES.

INFO NOTICE 92-26 DISCUSSES PRESSURE LOCKING EVENT.

RHR SUPPRESSION POOL SUCTION VALVE AT GRAND GULF

IN JANUARY 1992, RHR SUPPRESSION POOL SUCTION VALVE AT GRAND GULF FAILED TO OPEN DURING PLANT STARTUP.

CAUSE ATTRIBUTED TO HIGH REACTOR COOLANT TEMPERATURE EXPANDING WATER IN VALVE BONNET RESULTING IN THRUST GREATER THAN MOTOR CAPABILITY.

LICENSEE INSTALLED VENT LINES IN BOTH SUCTION VALVES.

RCIC STEAM LINE ISOLATION VALVE AT LASALLE

IN FEBRUARY 1993, A RCIC STEAM LINE ISOLATION VALVE AT LASALLE FAILED TO OPEN DURING TESTING.

FAILURE COULD HAVE BEEN CAUSED BY COLLECTION OF CONDENSATE IN THE VALVE BONNET WITH SUBSEQUENT EXPANSION RESULTING IN HIGH THRUST REQUIREMENTS.

LICENSEE DRILLED HOLE IN DISK TO PREVENT LOCKING.

**RECENT
PRESSURE LOCKING AND THERMAL BINDING
EXPERIENCE AND ANALYSES
(continued)**

PWR CONTAINMENT SUMP RECIRCULATION VALVES

IN JANUARY 1995, MILLSTONE UNIT 2 NOTIFIED NRC THAT BOTH CONTAINMENT SUMP RECIRCULATION VALVES MIGHT FAIL TO OPEN BECAUSE OF PRESSURE LOCKING DURING LOCA.

LICENSEE INITIALLY DRILLED SMALL HOLE IN CONTAINMENT-SIDE DISKS OF BOTH VALVES. BECAUSE CHECK VALVE LEAKAGE CAUSED INCREASING SUMP LEVEL, LICENSEE REFILLED HOLES AND JUSTIFIED MOV CAPABILITY FOR SHORT TERM UNTIL LONG-TERM SOLUTION CAN BE DEVELOPED.

IN 95-14 ISSUED ON POTENTIAL PRESSURE LOCKING OF PWR CONTAINMENT SUMP RECIRCULATION VALVES.

TI 2515/129 ADDRESSED SUMP VALVES ON A PRIORITY BASIS.

FOR SHORT TERM, APPLICABLE PWR LICENSEES VERIFIED CONTAINMENT SUMP RECIRCULATION VALVES NOT SUSCEPTIBLE TO PRESSURE LOCKING THROUGH MODIFICATION, WATER BARRIER IN SUMP, OR ANALYSIS BASED ON AIR IN VALVE BONNET.

SAFETY INJECTION VALVES AT HADDAM NECK

IN MARCH 1995, HADDAM NECK FOUND SEVERAL MOVs IN SAFETY INJECTION SYSTEMS WITH QUESTIONABLE OPERABILITY BECAUSE OF POTENTIAL FOR PRESSURE LOCKING.

IN 95-18 ISSUED.

LICENSEE INSTALLED BONNET VENTS TO RCS ON 4 MOVs AND DRILLED HOLE IN DISK OF 2 MOVs.

**RECENT
PRESSURE LOCKING AND THERMAL BINDING
EXPERIENCE AND ANALYSES
(continued)**

CORE SPRAY VALVE AT VERMONT YANKEE

IN MARCH 1995, NRC STAFF RAISED QUESTIONS REGARDING THE CAPABILITY OF 2 CORE SPRAY INJECTION MOVs TO OPEN BECAUSE OF SUSCEPTIBILITY TO PRESSURE LOCKING.

LEAKING CHECK VALVE INCREASED PRESSURE LOCKING POTENTIAL.

SIMULATED PRESSURE-LOCKING CONDITION REVEALED LESS PRESSURE-LOCKING THRUST THAN PREDICTED, BUT GREATER TOTAL THRUST REQUIREMENT AS A RESULT OF HIGHER-THAN-PREDICTED UNWEDGING LOAD.

LICENSEE DRILLED HOLE IN DISK OF BOTH MOVs.

HPSI MOVs AT MAINE YANKEE

IN MAY 1995 (LER 95-008), LICENSEE DETERMINED THAT TWO MOVs IN THE HPSI SYSTEM AT MAINE YANKEE WERE SUSCEPTIBLE TO PRESSURE LOCKING AS DESCRIBED IN INFO NOTICE 95-18.

FAILURE OF THESE MOVs TO OPEN UPON INITIATION OF RECIRCULATION COOLING COULD RESULT IN A LOSS OF HPSI CAPABILITY AND POSSIBLE PUMP DAMAGE DUE TO INSUFFICIENT NPSH.

FAILURE MIGHT BE CAUSED BY THERMALLY-INDUCED PRESSURE LOCKING OF VALVE BONNET DUE TO HIGH CONTAINMENT SPRAY BUILDING TEMPERATURE.

LICENSEE DRILLED HOLE IN DISK OF BOTH MOVs.

**RECENT
PRESSURE LOCKING AND THERMAL BINDING
EXPERIENCE AND ANALYSES
(continued)**

PORV BLOCK VALVES AT MILLSTONE

IN JUNE 1995, MILLSTONE UNIT 2 DETERMINED THAT THE PORV BLOCK VALVES ARE POTENTIALLY SUSCEPTIBLE TO THERMAL BINDING UNDER CERTAIN CIRCUMSTANCES.

IF THE PORV BLOCK VALVES WERE CLOSED AND A SUBSEQUENT COOLDOWN WERE PERFORMED, THE BLOCK VALVES MAY EXPERIENCE THERMAL BINDING.

LICENSEE INSTALLED LARGER ACTUATORS AND CYCLES VALVES PERIODICALLY DURING COOLDOWN.

LPCI AND CORE SPRAY INJECTION VALVES AT HATCH

ON JULY 21, HATCH DETERMINED THAT A LPCI VALVE IN UNIT 2 MIGHT NOT OPERATE UNDER PRESSURE-LOCKING CONDITIONS.

LICENSEE DECLARED LPCI VALVE INOPERABLE AND TOOK CORRECTIVE ACTION. ANOTHER LPCI VALVE BEING MODIFIED. OTHER LPCI AND CORE SPRAY INJECTION VALVES ALSO EVALUATED.

LICENSEE BELIEVES MANUFACTURER AND SURVEILLANCE TESTING SUPPORTED PAST MOV OPERABILITY.

LEAKING CHECK VALVE CAUSED SURVEILLANCE TEST OF LPCI VALVE TO BE MORE SEVERE THAN DESIGN-BASIS CONDITIONS.

LICENSEES SHOULD ENSURE THAT MOVs CAN ACCOMMODATE SURVEILLANCE TEST CONDITIONS OR MODIFY TEST INTERVALS AS ALLOWED BY OM-10 OR GL 89-04.

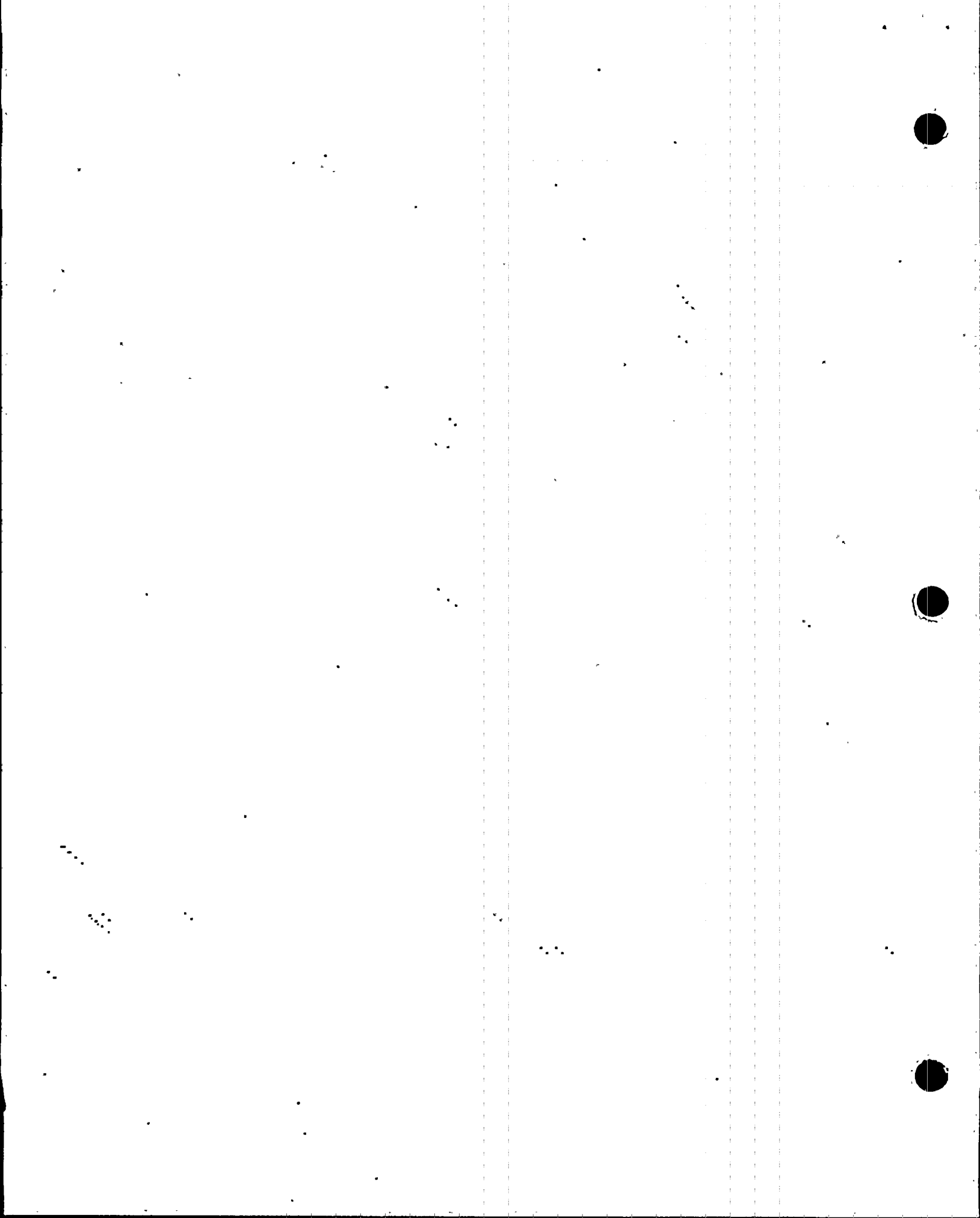
**RECENT
PRESSURE LOCKING AND THERMAL BINDING
EXPERIENCE AND ANALYSES
(continued)**

RECIRCULATION VALVE AT HOPE CREEK

**IN JULY 1995, A RECIRCULATION VALVE AT HOPE CREEK
EXPERIENCED THERMAL BINDING PREVENTING OPENING UNTIL
TEMPERATURE EQUALIZED BETWEEN VALVE BODY AND DISK.**

**VALVE DAMAGED WHEN OPENED BY ROTATION OF CONTACT BAR
IN TORQUE SWITCH THAT PREVENTED VALVE CLOSING CIRCUIT
FROM ENERGIZING.**

**RECIRCULATION VALVE POSITIONED PARTIALLY OPEN TO PREVENT
THERMAL BINDING RESULTED IN BYPASS OF COOLING WATER FROM
REACTOR CORE AND UNEXPECTED MODE CHANGE.**



EXAMPLES OF GENERIC LETTER 95-07
SUSCEPTIBILITY AND EVALUATION METHODS

Howard J. Rathbun

Mechanical Engineering Branch
Division of Engineering
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

GL 95-07 REQUESTED ACTIONS

WITHIN 90 DAYS

- 1. PERFORM SCREENING EVALUATION OF OPERATIONAL CONFIGURATIONS OF ALL SAFETY-RELATED POWER-OPERATED GATE VALVES TO IDENTIFY VALVES POTENTIALLY SUSCEPTIBLE TO PRESSURE LOCKING OR THERMAL BINDING; AND**
- 2. DOCUMENT BASIS FOR OPERABILITY OF POTENTIALLY SUSCEPTIBLE VALVES OR, WHERE OPERABILITY CANNOT BE SUPPORTED, TAKE ACTION IN ACCORDANCE WITH INDIVIDUAL PLANT TECH SPECS.**

SCREENING EVALUATION PROVIDES CONFIDENCE THAT NO SHORT-TERM SAFETY CONCERNS EXIST.

WHERE PREVIOUS EVALUATIONS PERFORMED, LICENSEE ENSURES THAT NO CRITICAL DEFICIENCIES EXIST IN PAST EVALUATIONS IN LIGHT OF NEW INFORMATION.

WITHIN 180 DAYS

- 1. EVALUATE OPERATIONAL CONFIGURATIONS OF SAFETY-RELATED POWER-OPERATED GATE VALVES TO IDENTIFY VALVES SUSCEPTIBLE TO PRESSURE LOCKING AND THERMAL BINDING;**
- 2. PERFORM FURTHER ANALYSES AS APPROPRIATE, AND TAKE NEEDED CORRECTIVE ACTIONS (OR JUSTIFY LONGER SCHEDULES), TO ENSURE THAT SUSCEPTIBLE VALVES ARE CAPABLE OF PERFORMING SAFETY FUNCTION(S) UNDER ALL MODES OF PLANT OPERATION, INCLUDING TEST CONFIGURATION.**

IF ALREADY PERFORMED ACTION IN RESPONSE TO SUPPLEMENT 6 TO GL 89-10, LICENSEE NEED NOT PERFORM ANY ADDITIONAL ACTION UNDER 1 AND 2 FOR MOVs.

90-DAY REQUESTED ACTION

AN EFFECTIVE SCREENING EVALUATION SHOULD CONSIDER (BASED ON CURRENT KNOWLEDGE) THE FOLLOWING ATTRIBUTES:

INCLUDE ALL SAFETY-RELATED POWER-OPERATED GATE VALVES

INITIAL ASSESSMENT OF SYSTEM OR PLANT CONFIGURATIONS THAT MAY RESULT IN PRESSURE LOCKING OR THERMAL BINDING

INITIAL ASSESSMENT OF VALVE'S CAPABILITY TO OVERCOME A PRESSURE LOCKING OR THERMAL BINDING SITUATION SHOULD THE VALVE BE SUSCEPTIBLE

DOCUMENT A BASIS FOR OPERABILITY OF THE VALVE

GL 95-07 REQUESTED INFORMATION

PROVIDE SUMMARY DESCRIPTION OF:

- 1. SUSCEPTIBILITY EVALUATION OF OPERATIONAL CONFIGURATIONS PERFORMED IN RESPONSE TO (OR CONSISTENT WITH) 180-DAY REQUESTED ACTION 1, AND FURTHER ANALYSES PERFORMED IN RESPONSE TO (OR CONSISTENT WITH) LONG-TERM REQUESTED ACTION 2, INCLUDING BASES OR CRITERIA FOR DETERMINING THAT VALVES ARE OR ARE NOT SUSCEPTIBLE TO PRESSURE LOCKING OR THERMAL BINDING;**
- 2. RESULTS OF SUSCEPTIBILITY EVALUATION AND FURTHER ANALYSES, INCLUDING LISTING OF SUSCEPTIBLE VALVES;**
- 3. CORRECTIVE ACTIONS, OR OTHER DISPOSITIONING, OF SUSCEPTIBLE VALVES, INCLUDING: (A) EQUIPMENT OR PROCEDURAL MODIFICATIONS COMPLETED AND PLANNED (WITH COMPLETION SCHEDULE FOR SUCH ACTIONS); AND (B) JUSTIFICATION FOR ANY DETERMINATION THAT PARTICULAR SUSCEPTIBLE VALVES ARE ACCEPTABLE AS IS.**

CORRECTIVE ACTION SCHEDULE MAY BE BASED ON RISK SIGNIFICANCE, INCLUDING CONSIDERATION OF COMMON CAUSE FAILURE OF MULTIPLE VALVES.

PLANT OPERATION AND OUTAGE SCHEDULES MAY BE CONSIDERED IN DEVELOPING CORRECTIVE ACTION SCHEDULES.

TIME SCHEDULES FOR COMPLETING CORRECTIVE ACTION DO NOT SUPERSEDE NRC REGULATIONS AND TECHNICAL SPECIFICATIONS.

SCHEDULE FOR COMPLETING CORRECTIVE ACTION INDEPENDENT OF GL 89-10.

GL 95-07 REQUIRED RESPONSE

ALL ADDRESSEES REQUIRED TO SUBMIT:

- 1. WITHIN 60 DAYS FROM DATE OF GL 95-07, A WRITTEN RESPONSE INDICATING WHETHER OR NOT ADDRESSEE WILL IMPLEMENT REQUESTED ACTIONS.**

IF ADDRESSEE INTENDS TO IMPLEMENT THE REQUESTED ACTIONS, PROVIDE A SCHEDULE FOR COMPLETION IMPLEMENTATION.

IF ADDRESSEE CHOOSES NOT TO TAKE REQUESTED ACTIONS, PROVIDE DESCRIPTION OF ANY PROPOSED ALTERNATIVE COURSE OF ACTION, SCHEDULE FOR COMPLETING ALTERNATIVE COURSE OF ACTION (IF APPLICABLE), AND SAFETY BASIS FOR DETERMINING ACCEPTABILITY OF PLANNED ALTERNATIVE COURSE OF ACTION;

- 2. WITHIN 180 DAYS FROM DATE OF GL 95-07, A WRITTEN RESPONSE TO THE INFORMATION REQUEST SPECIFIED ABOVE.**

PRESSURE LOCKING AND THERMAL BINDING SCOPE

GL 95-07

**ALL SAFETY-RELATED POWER-OPERATED GATE VALVES WITH A
SAFETY FUNCTION IN THE OPEN POSITION.**

INADVERTENT MISPOSITIONING EXCLUDED.

**ELIMINATE VALVES BASED ON DISK CONFIGURATION (SOLID WEDGE
NOT SUSCEPTIBLE TO PRESSURE LOCKING, PARALLEL DISK NOT
SUSCEPTIBLE TO THERMAL BINDING).**

GL 90-06

PORV BLOCK VALVES

EXAMPLES OF OTHER NRC REGULATIONS AND LICENSEE COMMITMENTS

APPENDIX R WITH REPOSITIONING BY SHORT CIRCUITING

ANTICIPATED TRANSIENT WITHOUT SCRAM

STATION BLACKOUT

EXAMPLE MATRIX FOR EVALUATING GL 95-07 SAFETY-RELATED POWER-OPERATED GATE VALVE SUSCEPTIBILITY

Valve Normal Position	Safety Position	Test or Surveillance Position	Evaluate Susceptibility Within Scope of GL 95-07
Normally Closed	Open	Closed	Yes
Normally Closed	Open	Open	Yes
Normally Closed	Closed	Closed	No *
Normally Closed	Closed	Open	No *
Normally Open	Open	Closed	Yes
Normally Open	Open	Open	No
Normally Open	Closed	Closed	No *
Normally Open	Closed	Open	No *

*** LICENSEES SHOULD BE AWARE OF THE POTENTIAL FOR THERMALLY-INDUCED PRESSURE TRANSIENTS RESULTING IN BONNET OVERPRESSURIZATION**

GATE VALVES CLOSED FOR SURVEILLANCE OR TESTING

NRC REGULATIONS AND LICENSEE SAFETY ANALYSES REQUIRE THAT SAFETY-RELATED SYSTEMS BE CAPABLE OF PERFORMING THEIR SAFETY FUNCTIONS.

IF CLOSING A SAFETY-RELATED POWER-OPERATED GATE VALVE FOR TEST OR SURVEILLANCE DEFEATS THE CAPABILITY OF THE SAFETY SYSTEM OR TRAIN, LICENSEE NEEDS TO PERFORM ONE OF THE FOLLOWING WITHIN THE SCOPE OF GL 95-07:

- 1. VERIFY THAT VALVE IS NOT SUSCEPTIBLE TO PRESSURE LOCKING OR THERMAL BINDING WHILE CLOSED,**
- 2. FOLLOW PLANT TECHNICAL SPECIFICATIONS FOR TRAIN/SYSTEM WHILE VALVE CLOSED,**
- 3. DEMONSTRATE THAT THE ACTUATOR HAS SUFFICIENT CAPACITY TO OVERCOME THESE PHENOMENA, OR**
- 4. MAKE APPROPRIATE HARDWARE AND/OR PROCEDURAL MODIFICATIONS TO PREVENT PRESSURE LOCKING AND THERMAL BINDING.**

THIS APPROACH IS ALSO APPROPRIATE FOR NON-SAFETY-RELATED VALVES IN SAFETY SYSTEMS.

OPERATIONAL CONFIGURATIONS IN SUSCEPTIBILITY EVALUATIONS

**ABSENCE OF HEAT SOURCE ELIMINATES VALVES FROM
THERMALLY-INDUCED PRESSURE LOCKING.**

**EXTERNAL CONDITIONS DURING NORMAL, SURVEILLANCE OR
OPERATING CONDITIONS SUCH AS:**

PRESENCE OF INSULATION (BENEFIT NEEDS TO BE JUSTIFIED)

**POTENTIAL HEAT SOURCES: PUMP MOTORS, STEAM DRIVEN
TURBINES, HIGH ENERGY PIPING, HIGH TEMPERATURE FLUID**

**SURVEILLANCE TESTING OR OTHER SPECIAL TEST CONDITIONS
SUCH AS HYDROSTATIC TESTING.**

**GENERIC STUDIES SUCH AS THERMAL EFFECTS AND DESIGN-BASIS
DEPRESSURIZATION.**

**EFFORTS TO IMPROVE LEAK-TIGHTNESS OF PRIMARY SYSTEM
VALVE PRESSURE BOUNDARIES.**

**POTENTIAL FOR WATER FILLING VALVE BONNET (FULL BONNET NOT
REQUIRED FOR FLUID-INDUCED PRESSURE LOCKING)**

INTERNAL SYSTEM OPERATING CONDITIONS.

**PRESSURE LOCKING AND THERMAL BINDING WHEN VALVE
REQUIRED TO OPEN.**

**VALVE CLOSED AT HIGH TEMPERATURE AND REQUIRED TO OPEN AT
LOWER TEMPERATURE**

**ADEQUATELY JUSTIFIED ASSERTIONS OF DIFFERENTIAL
TEMPERATURE FOR THERMAL BINDING**

INAPPROPRIATE REASONS FOR ELIMINATING VALVES FROM SUSCEPTIBILITY

LEAKAGE RATE

ENGINEERING JUDGEMENT WITHOUT JUSTIFICATION

LACK OF EVENT OCCURRENCE

EXAMPLES OF VALVES SUSCEPTIBLE TO PRESSURE LOCKING

**LOW-PRESSURE COOLANT INJECTION (LPCI) AND LOW-PRESSURE
CORE SPRAY (LPCS) SYSTEM INJECTION VALVES**

**RESIDUAL HEAT REMOVAL (RHR) SYSTEM HOT-LEG CROSSOVER
ISOLATION VALVES**

**RHR CONTAINMENT SUMP AND SUPPRESSION POOL SUCTION
VALVES**

**HIGH-PRESSURE COOLANT INJECTION (HPCI) STEAM ADMISSION
VALVES**

RHR HEAT EXCHANGER OUTLET VALVES

EMERGENCY FEEDWATER ISOLATION VALVES

RCIC STEAMLINE ISOLATION VALVE

EXAMPLES OF VALVES SUSCEPTIBLE TO THERMAL BINDING

REACTOR DEPRESSURIZATION SYSTEM ISOLATION VALVES

RHR INBOARD SUCTION ISOLATION VALVES

POWER-OPERATED RELIEF VALVE (PORV) BLOCK VALVES

REACTOR COOLANT SYSTEM LETDOWN ISOLATION VALVES

RHR SUPPRESSION POOL SUCTION VALVES

**CONTAINMENT ISOLATION VALVES (SAMPLE LINE, LETDOWN HEAT
EXCHANGER INLET HEADER).**

CONDENSATE DISCHARGE VALVES

REACTOR FEEDWATER PUMP DISCHARGE VALVES

SHORT-TERM ACTION FOR GATE VALVES FOUND SUSCEPTIBLE TO PRESSURE LOCKING OR THERMAL BINDING

**EVALUATE IMMEDIATE OPERABILITY USING BEST AVAILABLE
METHODS FOR PREDICTING REQUIRED AND AVAILABLE THRUST:**

**BEST AVAILABLE METHODS FOR PREDICTING THRUST
REQUIRED TO OVERCOME PRESSURE LOCKING INCLUDE
ENTERGY, ComEd AND HOPE CREEK METHODS AT THIS TIME.**

**METHOD FOR PREDICTING THRUST REQUIRED TO OVERCOME
THERMALLY INDUCED PRESSURE LOCKING SHOULD CONSIDER
HEAT TRANSFER, PRESSURE VERSUS TEMPERATURE
INCREASE, AND AIR VOLUME RELIABILITY.**

**BEST AVAILABLE METHOD FOR PREDICTING AVAILABLE
THRUST AND WEAK LINK CAPABILITY CONSISTENT WITH
GL 89-10 PROGRAM.**

**IF CANNOT DEMONSTRATE CAPABILITY TO OVERCOME PRESSURE
LOCKING AND THERMAL BINDING OF SUSCEPTIBLE VALVE AND
CANNOT ESTABLISH PROCEDURE CONTROLS TO PREVENT THE
PHENOMENA, TAKE ACTION IN ACCORDANCE WITH TECH SPECS.**

LONG-TERM OPTIONS FOR RESOLVING PRESSURE LOCKING AND THERMAL BINDING OF SUSCEPTIBLE VALVES

ANALYSIS ONLY

**CONSERVATIVE ACCOUNTING FOR UNCERTAINTIES IN
ANALYSIS**

TESTING ONLY

**ASSURANCE THAT TEST CONDITIONS BOUND ALL
OPERATIONAL CONDITIONS**

COMBINATION OF TESTING AND ANALYSIS

CORRELATION OF TEST RESULTS AND ANALYSIS

CONSERVATIVE APPLICATION OF TEST RESULTS

EQUIPMENT MODIFICATIONS

SEE FOLLOWING SLIDE.

PROCEDURE MODIFICATIONS

**MAY BE MOST APPROPRIATE RESOLUTION TO RESOLVE
THERMAL BINDING**

EXAMPLES OF VALVE MODIFICATIONS

PRESSURE LOCKING

DRILL HOLE IN HIGH PRESSURE SIDE OF THE DISK AND ACCOUNT FOR VALVE BEING UNIDIRECTIONAL.

**INSTALL PRESSURE RELIEF OR VENT PATH -
MODIFY OPERATING PROCEDURES IF OPERATOR ACTION IS
REQUIRED (SUCH AS REMOTELY OPERATED VALVE)**

**INSTALL EXTERNAL BYPASS LINE WITH MANUAL VALVE -
MODIFY OPERATING PROCEDURES**

**VALVE DISK TRAVEL PRIOR TO HARD SEAT CONTACT AND
ACCOUNT FOR LEAKAGE PAST VALVE**

THERMAL BINDING

**REPLACE FLEX-WEDGE OR SOLID WEDGE WITH A PARALLEL DISK -
(1) INVESTIGATE NEW POSSIBILITY FOR PRESSURE LOCKING
AND (2) APPROPRIATE TESTS BEFORE PLACING THE VALVE IN
SERVICE**

**PERIODICALLY STROKE VALVE -
(1) ADEQUATE JUSTIFICATION FOR THE TEMPERATURE
INTERVAL AND (2) CONSIDERATION FOR DIVERSION OF FLOW**

**STOP VALVE DISK TRAVEL PRIOR TO HARD SEAT CONTACT -
(1) ADEQUATE JUSTIFICATION FOR HIGH TEMPERATURE
GRADIENTS AND (2) VALVE DOES NOT PROVIDE COMPLETE
ISOLATION**

INSTALL A COMPENSATING SPRING PACK WITH TEST VERIFICATION

IMPORTANCE OF TRAINING TO RESOLVE PRESSURE LOCKING AND THERMAL BINDING

EXAMPLES:

DRILLING A HOLE IN THE HIGH PRESSURE SIDE

**TRAIN OPERATORS TO REPLACE DISK IN CORRECT
ORIENTATION**

PERIODICALLY STROKING THE VALVE

**TRAIN OPERATORS REGARDING POTENTIAL PLANT
TRANSIENTS**

STAFF PLANS FOR REVIEWING LICENSEE RESPONSES TO GL 95-07

REVIEW 60-DAY RESPONSE.

REVIEW 180-DAY SUBMITTALS

CLOSE STAFF REVIEW BY 1 OR MORE OF:

- 1. NRR REVIEW**
- 2. NRR AUDIT**
- 3. REGION INSPECTION**

**RESOLVE ANY CONCERNS WITH LICENSEE INVOLVING PRESSURE
LOCKING/THERMAL BINDING WITH ANY APPROPRIATE LICENSEE
ACTION**

NRC SPONSORED RESEARCH

THRUST REQUIREMENT VS. BONNET PRESSURE

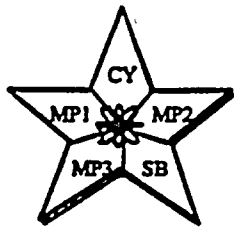
BONNET PRESSURE VS. TEMPERATURE INCREASE

INCLUDING THE EFFECTS OF AIR ENTRAPMENT

**UNCERTAINTY IN ABILITY TO CALCULATE LEAKAGE RATE AND
IMPACT ON PRESSURE LOCKING**

UNCERTAINTY IN ABILITY TO RELY ON ENTRAPPED AIR

THRUST REQUIREMENT VS. THERMAL BINDING



Pressure Locking and Thermal Binding (PL/TB):

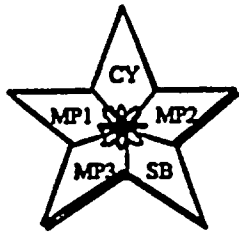
Experience at Northeast Utilities (NU)

November 2, 1995

Bob Harris

**Nuclear Engineering Services Division
Northeast Utilities
Rope Ferry Road
Waterford, CT 06385-0128**

NRC Region I Conference on GL 95-07, Wayne, PA



Purpose

- ➔ Share NU's Experience with Pressure Locking & Thermal Binding (PL/TB) of Gate Valves based primarily on our actions taken for MOVs as part of GL 89-10 Closure.
- ➔ Discuss preliminary results of GL 95-07 Screening of Power Operated Valves (POVs).



PL/TB Overview: Vulnerabilities & Corrective Actions

➔ Gate Valve Susceptibility

VALVE DESIGN	PL	TB
Solid-Wedge	No	Yes
Flex-Wedge	Yes	Yes<
Parallel/Double Disc	Yes	No

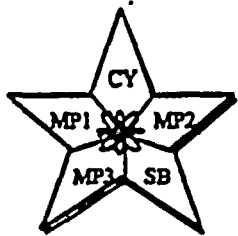
➔ Generic Corrective Actions

	HARDWARE* MODS	ADMIN MODS	ANALYSIS
PL	Many	Limited	Cautiously
TB	None*	Primary	N/A

* Replacement of valve with a different design may be feasible

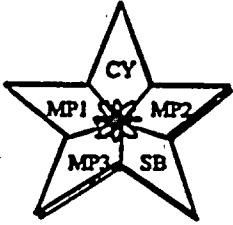
➔ NU has Developed a Detailed Evaluation Procedure (called PI-20)

- ↳ Part of GL 89-10 MOV Program
- ↳ Conservative
- ↳ Engineering Judgment
- ↳ Empirical Data



PL & TB are Real, but Rare Phenomenon

- ➔ The physical phenomena are real & easily understood once gate valve design is examined in this context.
- ➔ PL/TB occurrences pre-date commercial nuclear plants; are events for valves in fluid systems exposed to temperature and pressure.
- ➔ There have been numerous NRC communications dating back to 1977; INPO 84-7 provides a comprehensive summary.
- ➔ Significantly, Industry-accepted guidance on screening for PL/TB susceptibility has been missing.
- ➔ NRC NUREG-1275 reported **11** instances of PL and **14** of TB, in hundreds of reactor years.
- ➔ NU has experienced **~1/2 dozen** recognized TB events in **~80Ryr**; and no PL known events.
- ➔ Some PL/TB Events may not have been recognized.



Actual Occurrence of PL Should be Rare

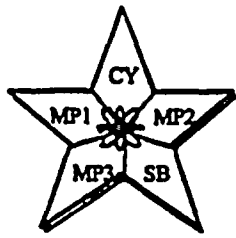
➔ Probability of Pressure Locking (P_{PL}):

$$P_{PL} = P_1 \times P_2 \times P_3 \times P_4 \times P_5 \times P_6 \times P_7$$

Causal/Mitigating Factors:

- ① System Condition/Upstream Leakage
- ② Seal Ring Condition/Packing Seal Leak Tight
- ③ Trapped Air in Bonnet
- ④ Process Fluid/External Heating
- ⑤ Insufficient Available Thrust
- ⑥ Temperature/Pressure Regime
- ⑦ Time Duration & Time History
- ⑧ The Unknowns, etc.

➔ Not Surprisingly *Actual* Occurrence of PL is Difficult to Predict



PL&TB are Situational & Complex: Two Examples

1 PL is highly Situational:

- Creare Inc. testing of MP2 Sump Recirculation Valves (see Fig. 1)
- Small Quantities of Air Mitigates PL
- Figure 1 shows Situational Nature

2 Unique Mechanisms can be Mistaken for PL or TB:

- Evaluation of MP1 Shutdown Cooling Valves
- Experienced multiple, recent "binding events"
- Very PRELIMINARY cause attributed to Pressure Induced Binding (Kalsi Study)

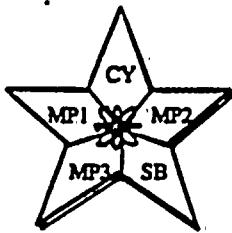
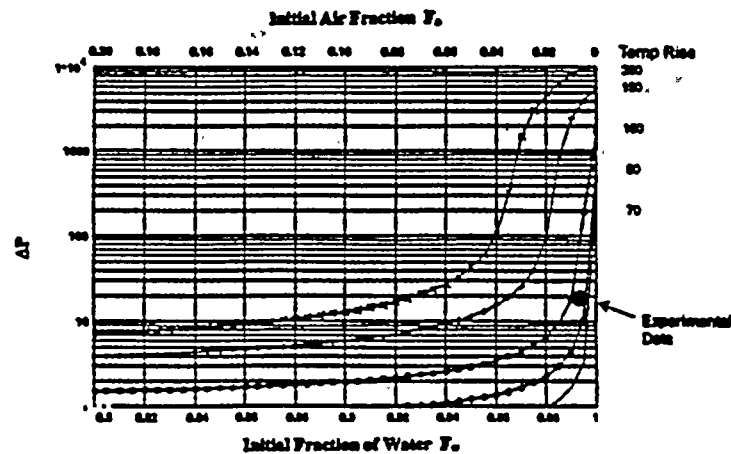
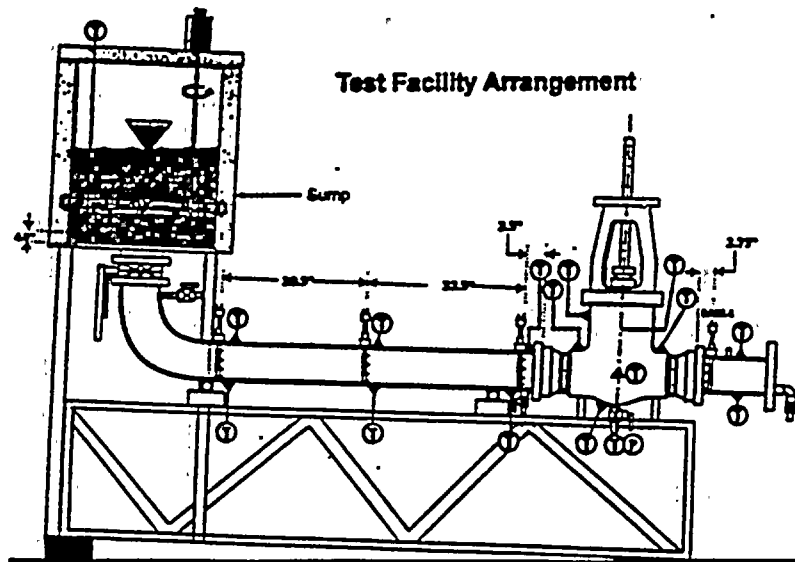
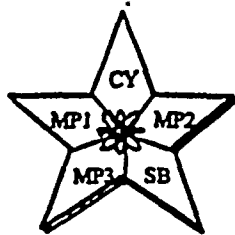


Fig. 1: Millstone 2
1/4 Scale Tests at Creare

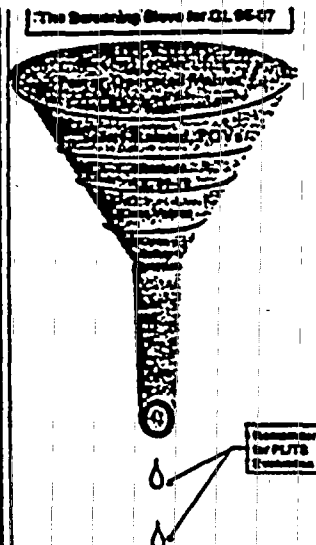


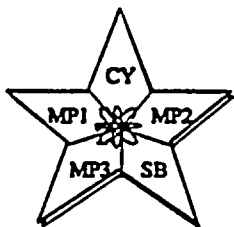


PL/TB & GL 95-07 Primarily Impact GL 89-10 MOVs

Preliminary

	CY	MP1	MP2	MP3	SB
All POVs (estimated)	504	~1000	~1200	~2000	~1000
S-R POWs	188	284	534	981	n/a
Less GL 89-10 Valves	(44)	(54)	(52)	(143)	(122)
S-R POV Gate Valves (non 89-10)	6	1	3	6	22
Open Safety Stroke	0	0	0	0	0
	0	0	0	0	0





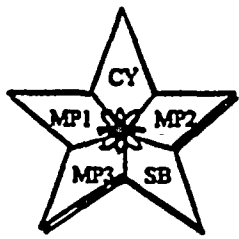
Modifications Required to Resolve PL/TB for GL 89-10 MOVs

- ➔ NU decided in Fall '94 to resolve PL/TB Issue for MOVs as a part of GL 89-10 Closure.
- ➔ This resulted in a substantial number of Modifications to NU Plants.
- ➔ Affected Systems Include:

TYPICAL SYSTEMS IMPACTED	
PWR	Shutdown Cooling Containment Sump Recirculation Main Steam Safety Injection
BWR	Feedwater Isolation Condenser - LP Coolant Injection

➔ Summary of Changes

	CY	MP1	MP2	MP3	SB
Hardware Mods:					
Equilizing Line		2	1		
Drill Disc	8		1	2	
Packing Gland Leakoff	9			2	
Planned for next RFO		4		6	10
Admin Mods:					
Procedure Changes	2	6	6		2
Prototype Experiment			2		
Operability Space				2	



Conclusions

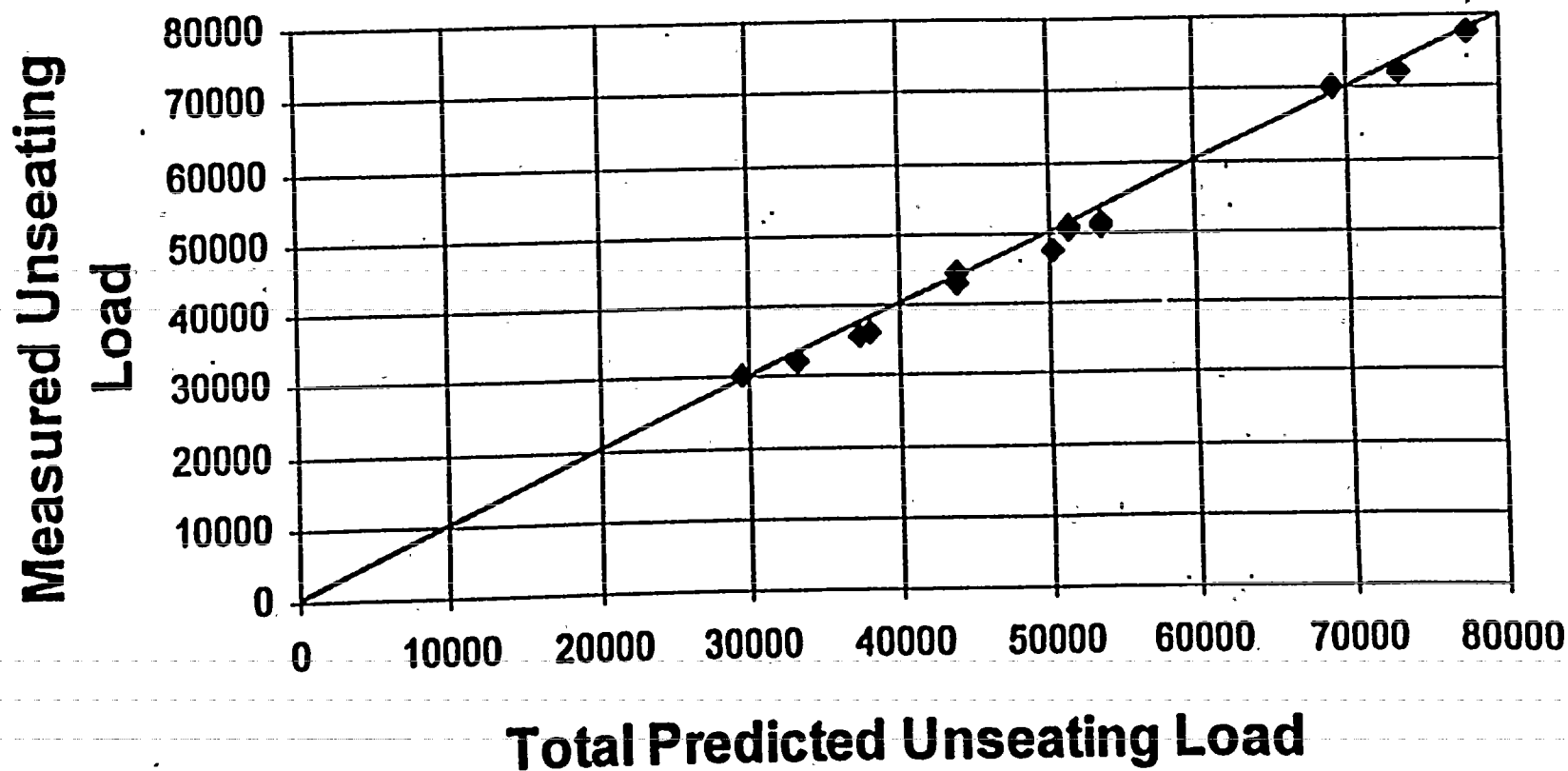
- ➔ PL/TB is real, but rare.
- ➔ Conceptually, PL&TB are reasonably simple phenomenon; however, predicting *actual* occurrences is complex and in many cases beyond State-of-the-Art.
- ➔ PL/TB is primarily a *GL 89-10 issue*, and required several modifications for NU Plants.
- ➔ GL 89-10 PL/TB Methodology is fully applicable to GL 95-07.
- ➔ At NU we had a bias toward hardware "fixes" vs. analysis.
- ➔ Further empirical data would be helpful
- ➔ Our conservative, systematic evaluation procedure (PI-20) provides the guidance to resolve GL 95-07. (some copies available)

Test Sequence

- Static (Baseline) Tests
- LLRT of Test Valve
- Hydro-Pump DP Tests to determine seat to disk friction coefficient
- Bonnet Pressure Decay Tests
- Alternating Static (Baseline) Tests and Pressure Locking Tests at various bonnet/outlet pressure combinations
- Repeat of Test Sequence at different torque switch setting(s)
- Thermally Induced Bonnet Pressurization Tests
- Thermal Binding Test for Valve Cooldown Effect

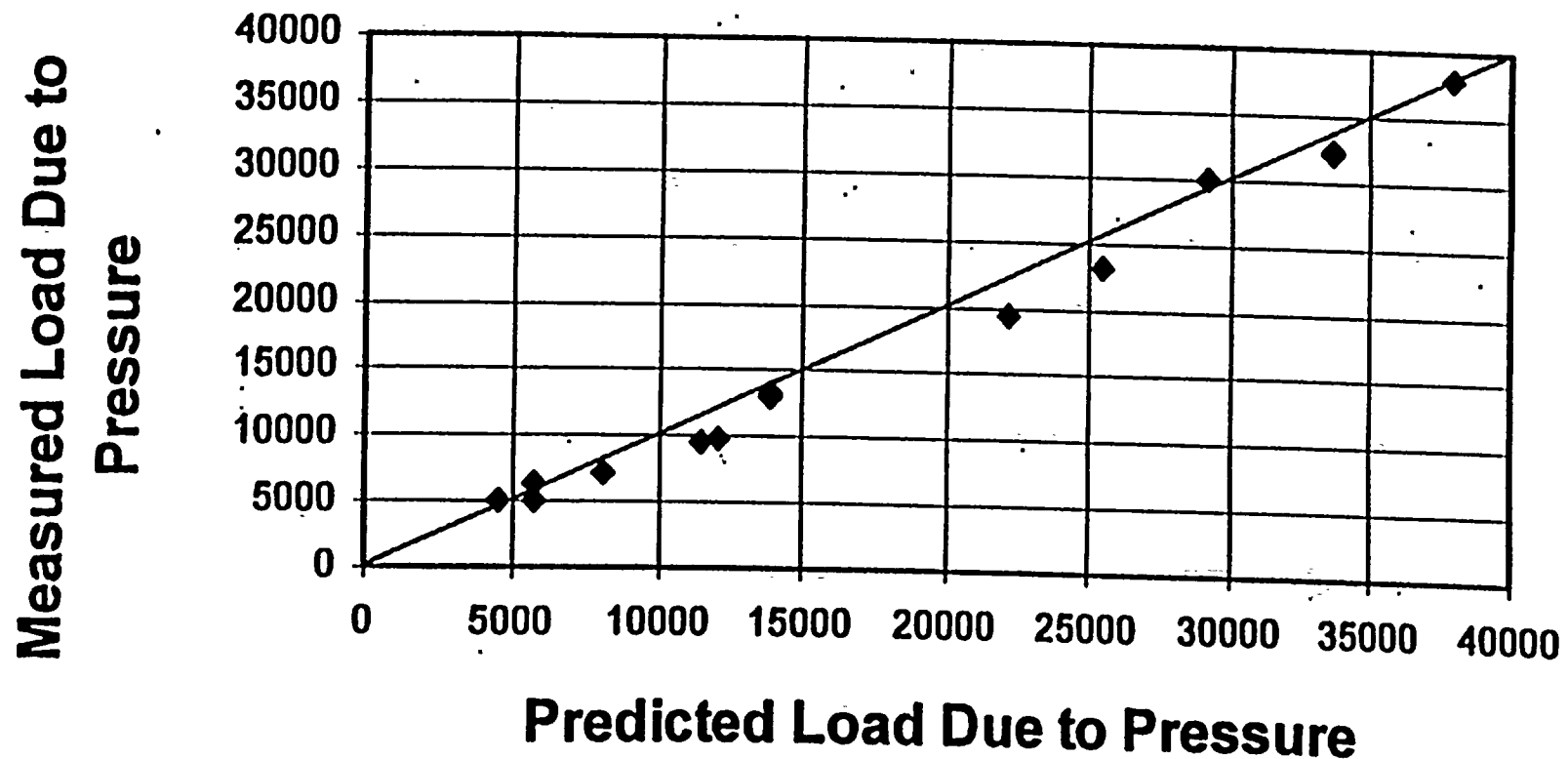
ComEd

Predicted Unseating Thrust Versus Measured Pressure Locking Unseating Force for Crane Valve



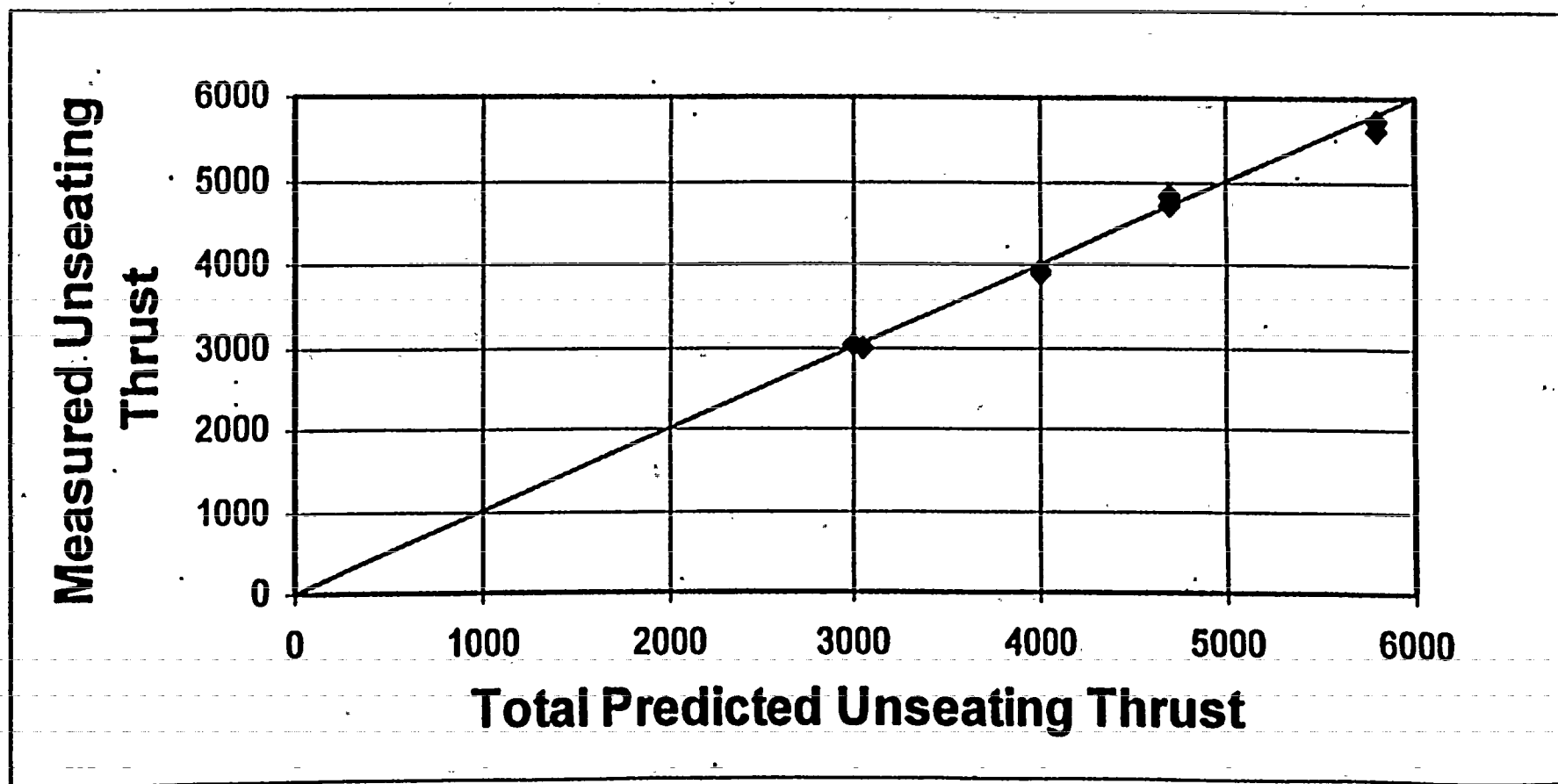
ComEd

Predicted Versus Measured Portion of Pressure Thrust Due to Pressure Forces for Crane Valve



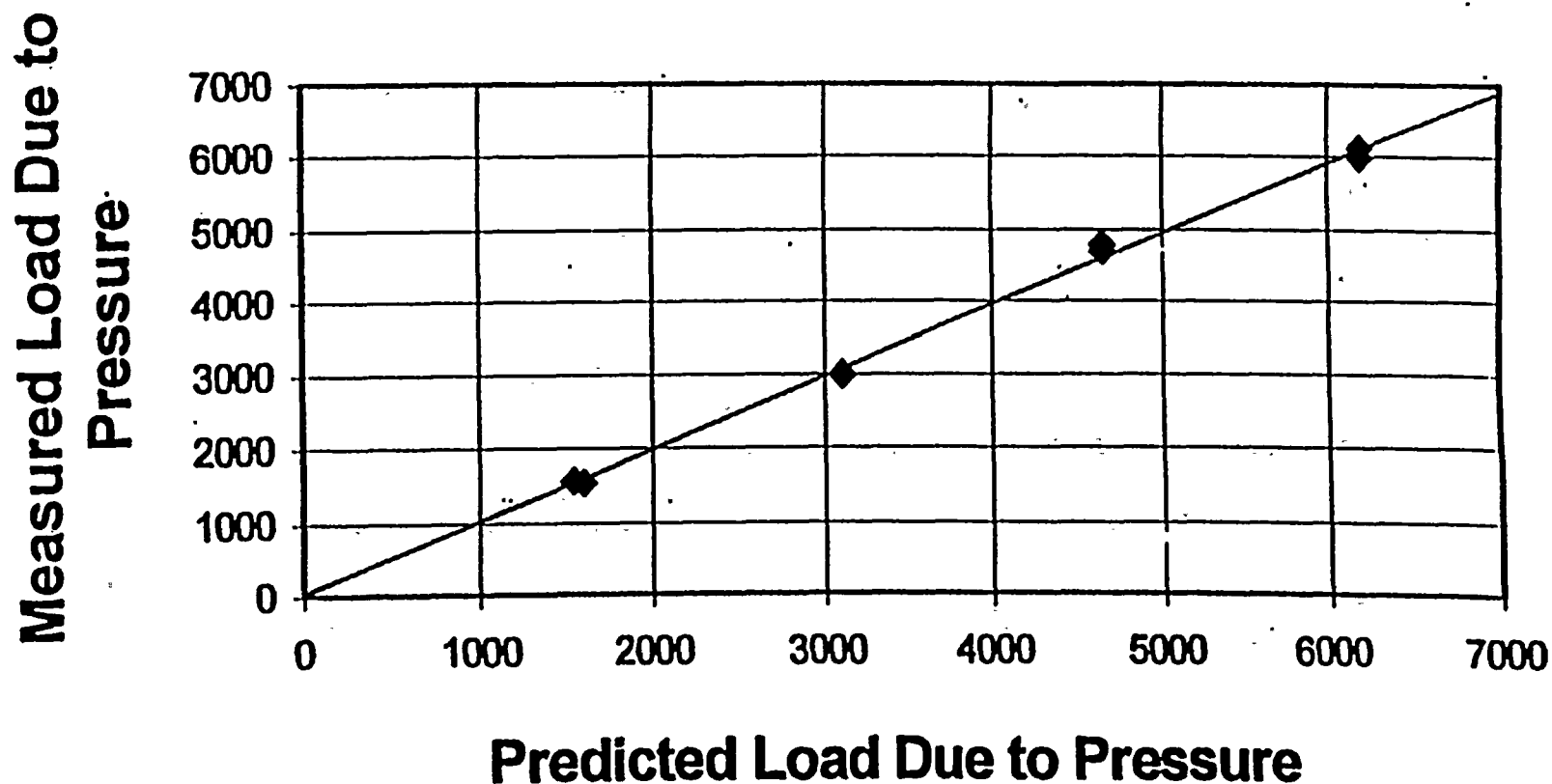
ComEd

Predicted Unseating Thrust Versus Measured Pressure Locking Unseating Thrust for Westinghouse Valve



ComEd

Predicted Versus Measured Portion of Unseating Thrust Due to Pressure Forces for Westinghouse Valve



ComEd

Summary of Test Results

- **Accuracy of Roark's Equations for Predicting Pressure Locking Force:**

Initial data analysis indicates that the ComEd model for predicting pressure locking unseating thrust is accurate and conservative

- **Bonnet Depressurization Rates**

Crane Valve: 500 psi to 50 psi / min
(depending on TSS)

West. Valve: 300 psi to 1 psi / min
(depending on TSS)

The logo for ComEd, featuring the word "ComEd" in a bold, sans-serif font. The "C" and "E" are larger and more prominent, with the "o" and "d" in between. The logo is set against a dark, textured background.

Summary of Test Results (continued)

● Thermally Induced Pressure Rise Data:

Crane Valve: Test could not be performed due to high bonnet depressurization rate

West. Valve: Pressure rise rate of 0.4 psi per degree. Temperature was raised from 70 to 260 degrees F.

● Thermal Binding Test Results

Crane Valve: (test is pending)

West. Valve: No increase in unseating thrust for 200 degree temperature drop (low seat mu makes this the expected result)

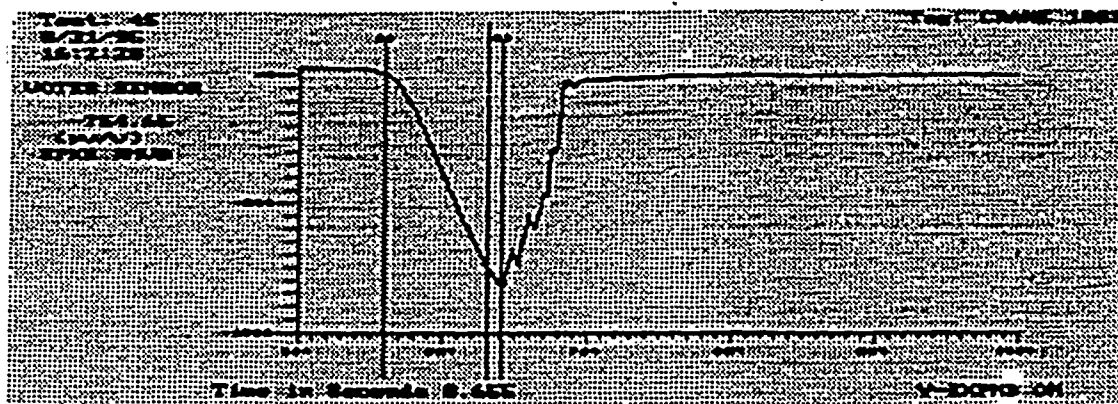
The logo for ComEd, featuring the word "ComEd" in a bold, sans-serif font. The "o" in "Com" is stylized with a horizontal line through it. The "E" in "Ed" has a small star-like symbol above it.

Future ComEd Testing Plans

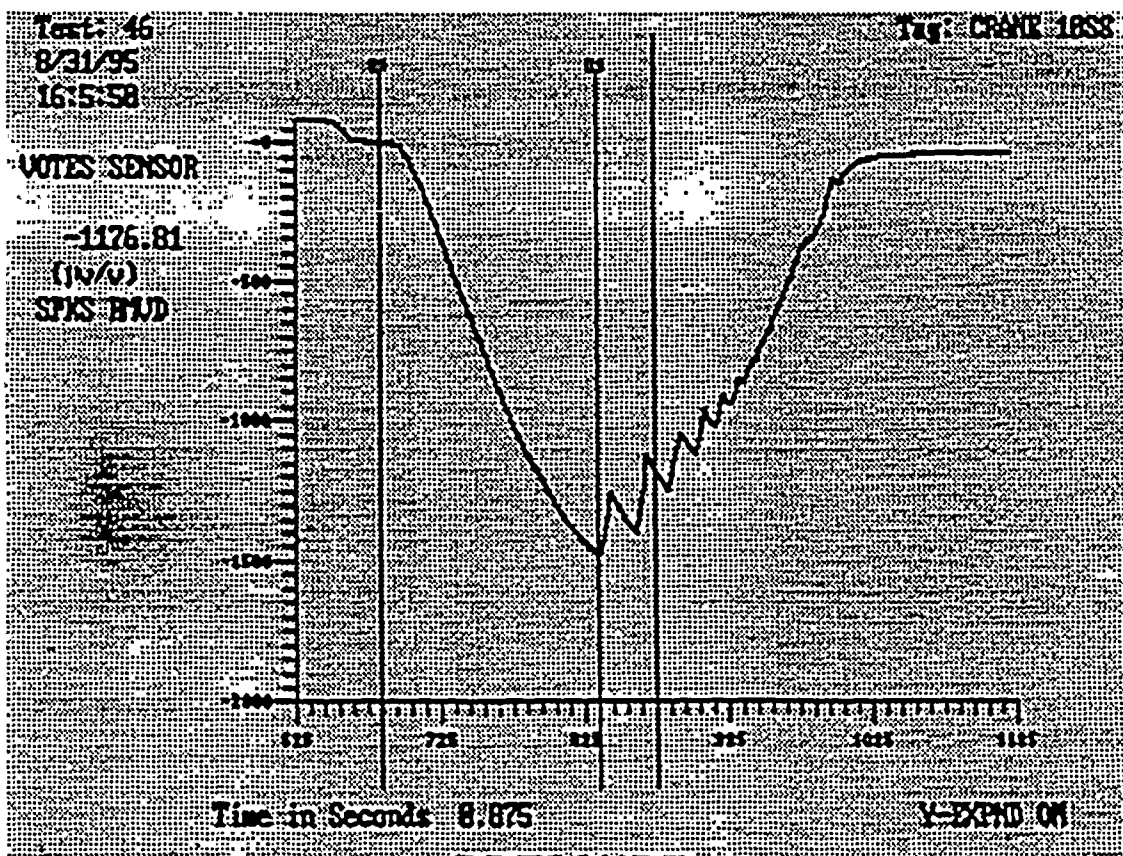
- **Thermal Binding Testing of Crane 10" Gate Valve**
- **Testing of Other Flex-Wedge Gate Valve Designs. The following valve designs are being considered:**
 - 10" Borg-Warner Gate Valve (~11/27/95)
 - 6" Anchor/Darling Gate Valve (~11/27/95)
 - 10" Westinghouse Gate Valve (~12/?/95)
- **Testing of 6" Anchor/Darling Double-Disk Gate Valve**
- **Comparison of Thermal Binding Test Data to Analytical Models Under Development**
- **Analysis of Data Collected by Other Utilities Using ComEd Pressure Locking Model**

The logo for ComEd, featuring the word "ComEd" in a bold, sans-serif font. The "C" and "o" are connected, and the "E" and "d" are connected. There is a small star-like symbol above the "d". The logo is set against a dark, textured background that looks like a horizontal bar with some internal structure.

Comparison of Static Unseating to Pressure Locking Unseating Thrust for 10" Crane 900# Class Valve



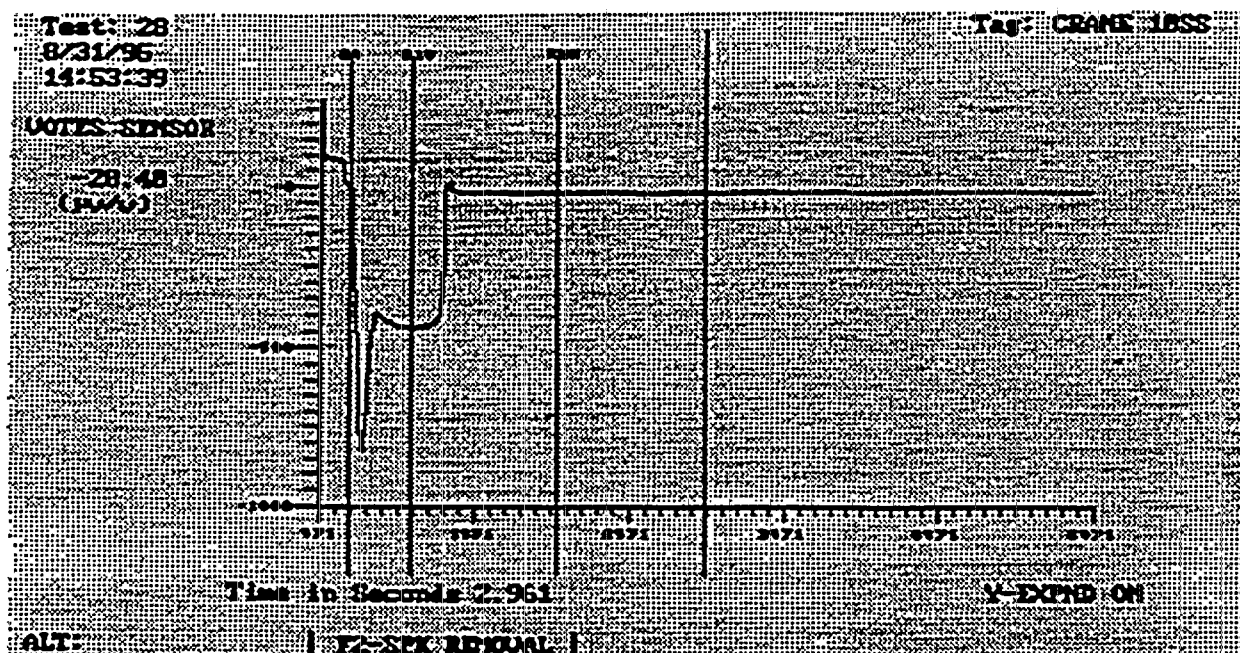
STATIC TEST



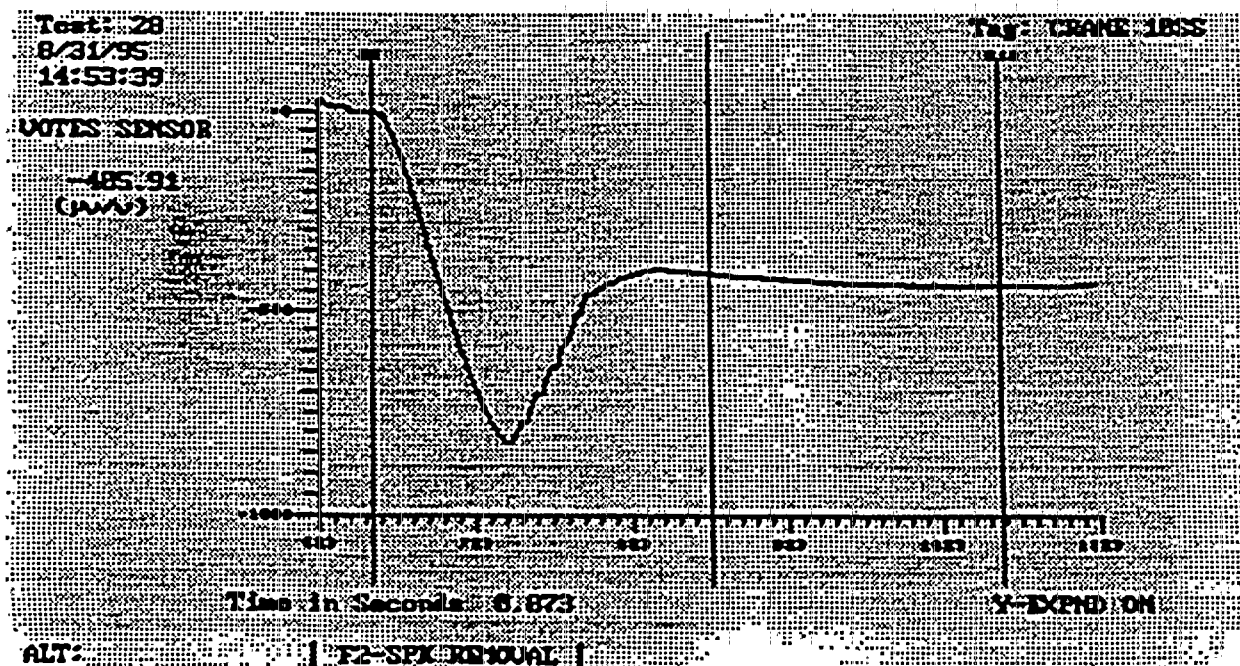
PRESSURE
LOCKING TEST

$$1 \text{ mV/V} \approx 50 \text{ lbf}$$

Example of Hydro-Pump DP Test for Determining Seat Friction Coefficient (10" Crane 900# Class Valve)

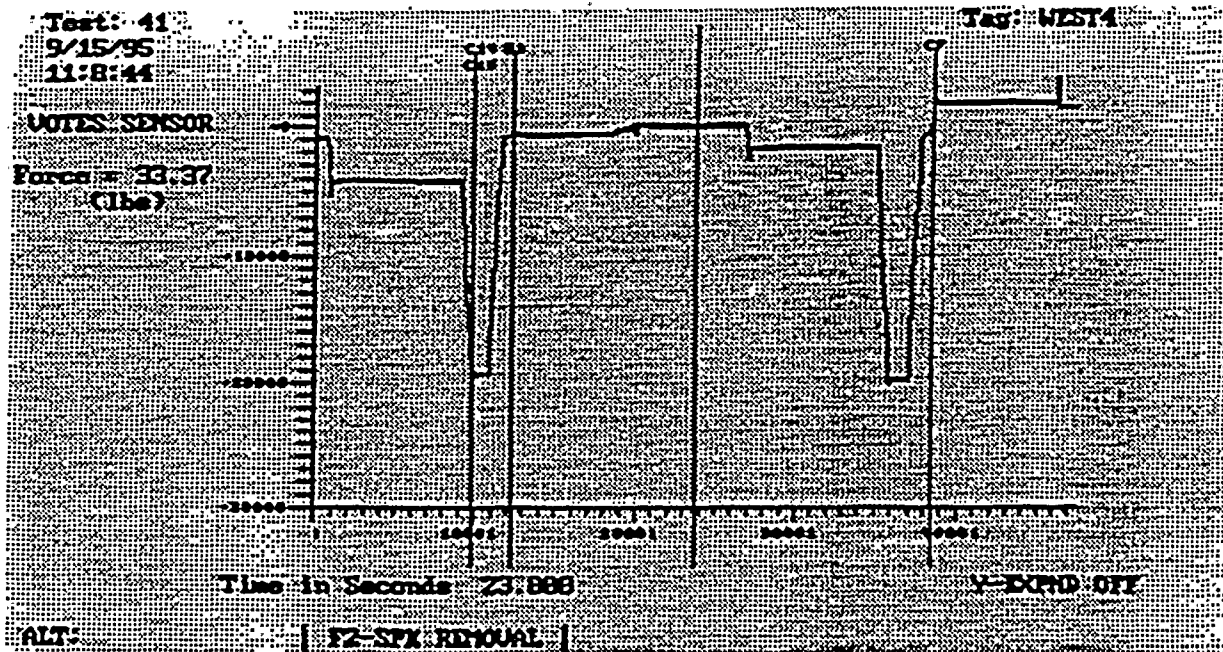


5 SECOND ZOOM

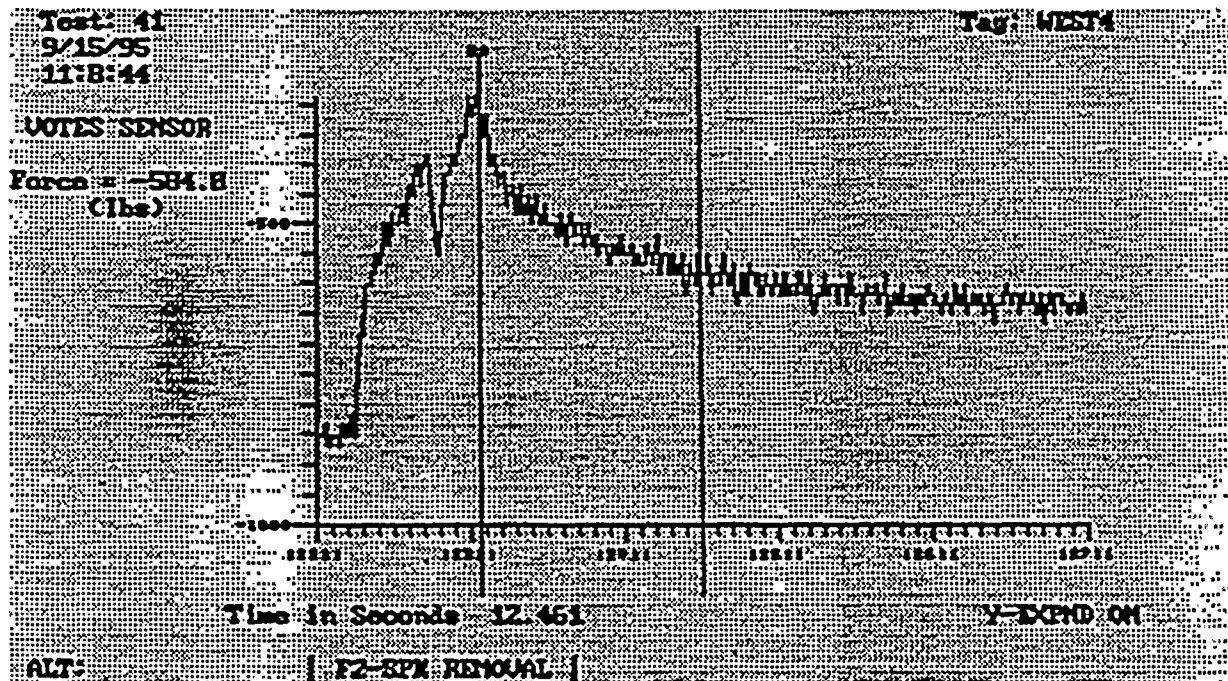


HALF SECOND ZOOM

Static Test for 4" Westinghouse 1500# Class Gate Valve

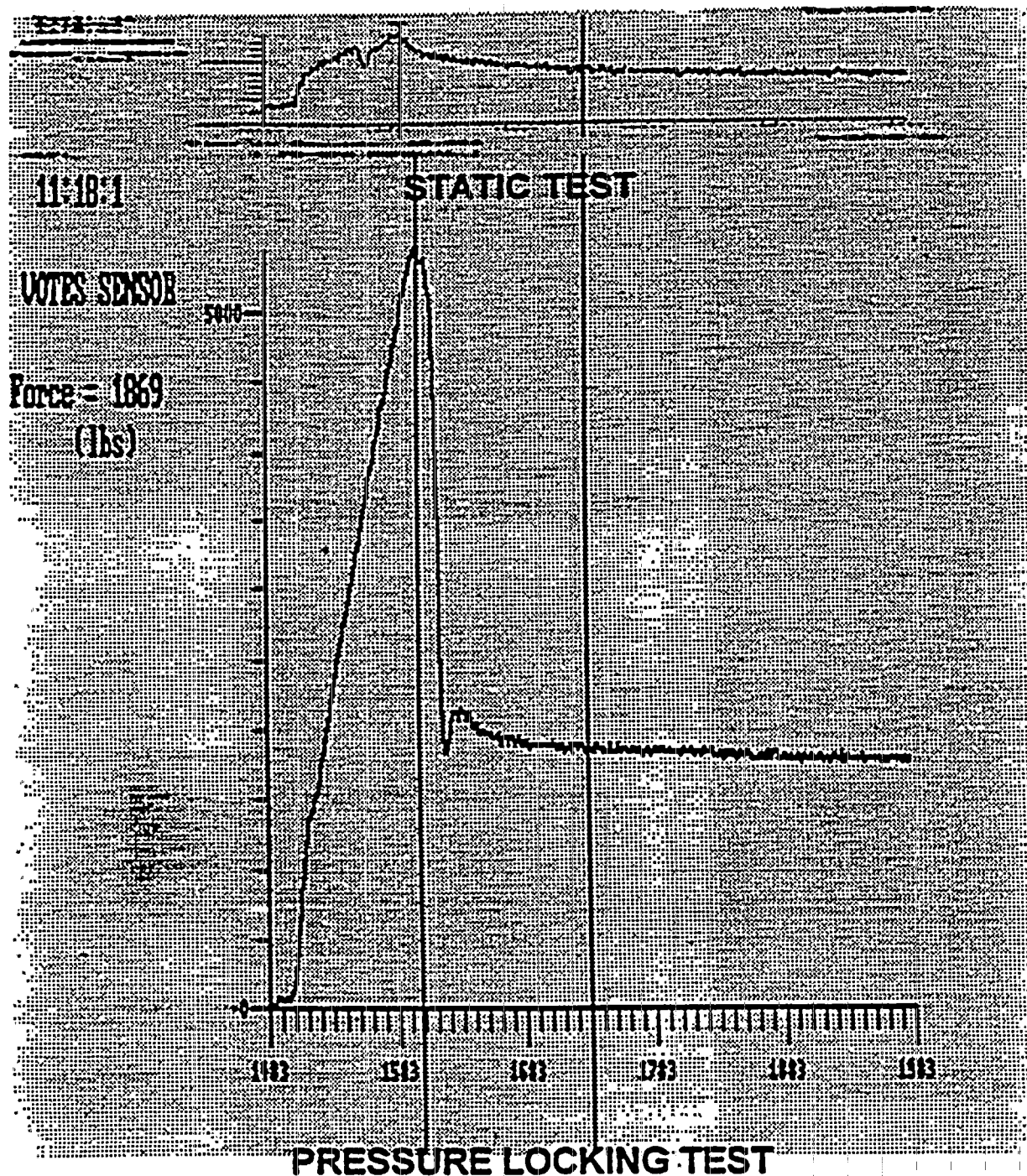


FULL VIEW OF TRACE

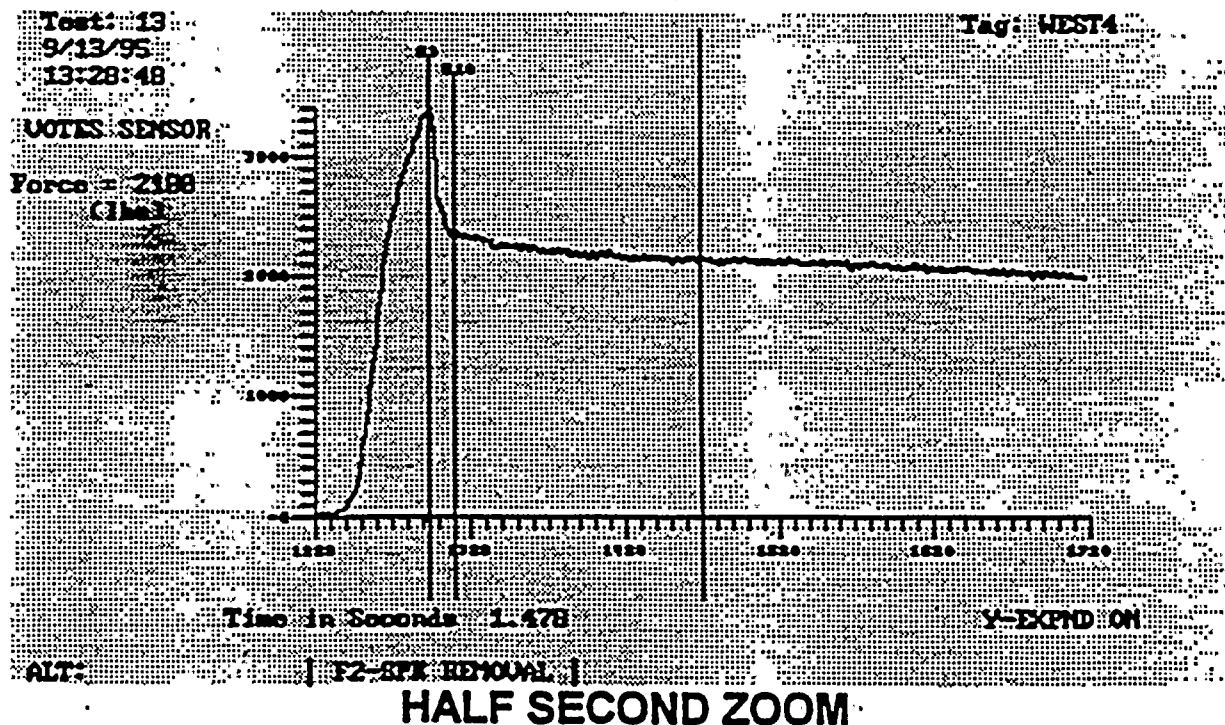
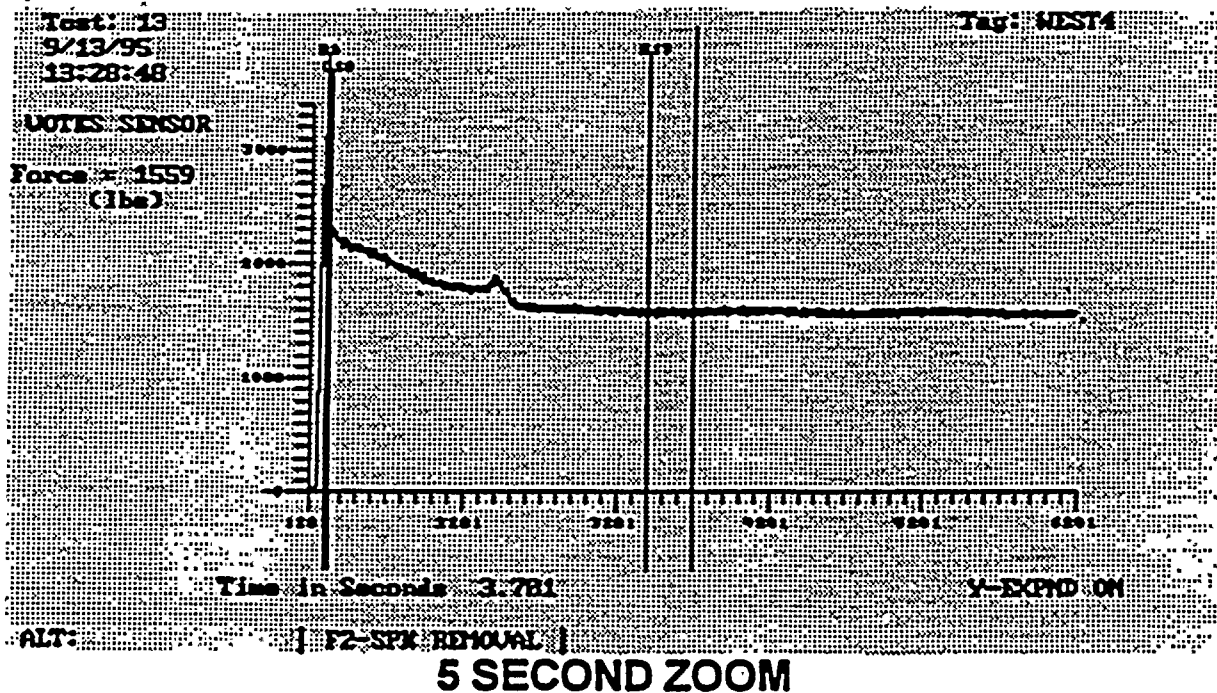


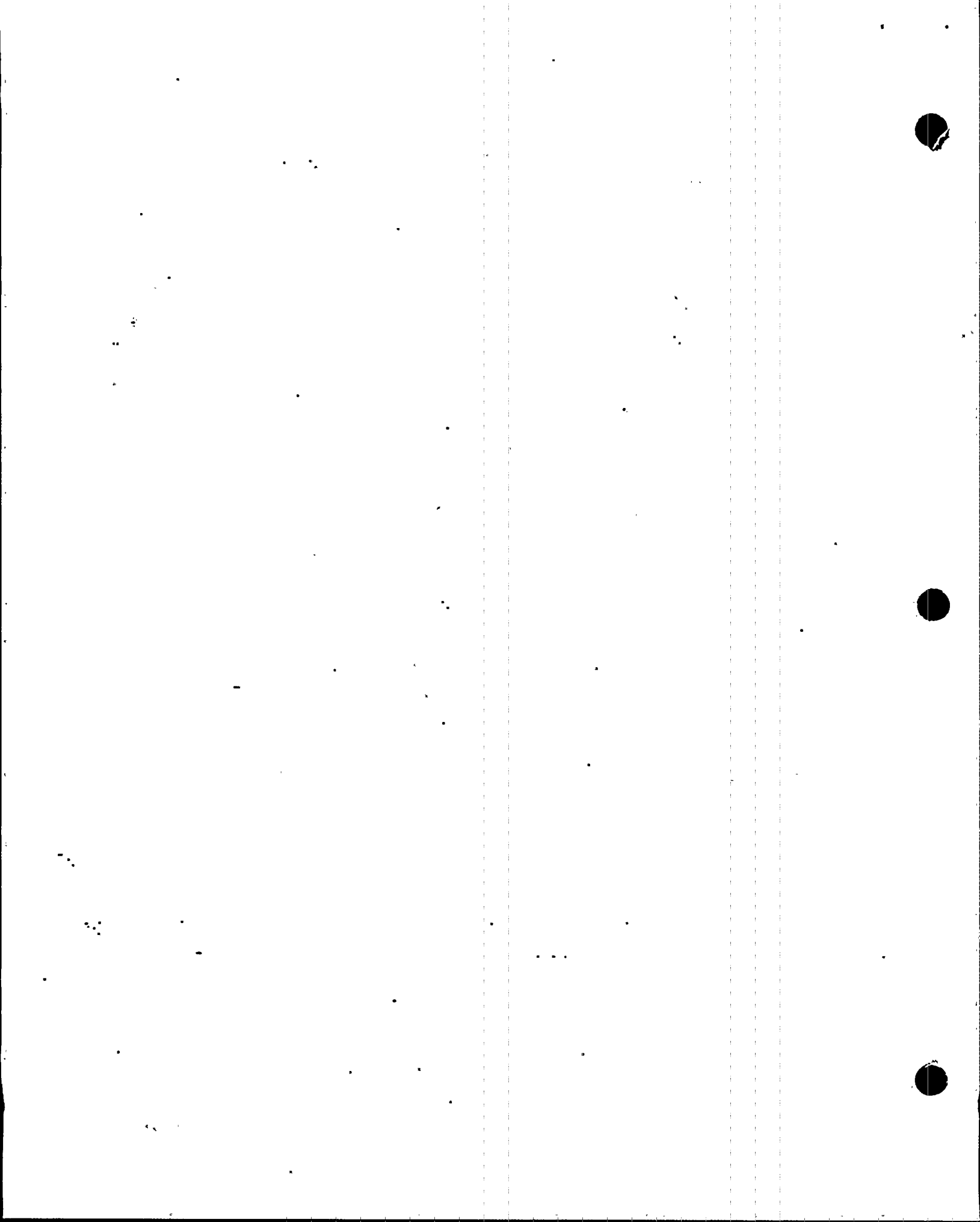
HALF SECOND VIEW OF TRACE

Comparison of Static Unseating to Pressure Locking Unseating Thrust for 4" Westinghouse 1500# Class Valve



Example of Hydro-Pump DP Test for Determining Seat Friction Coefficient (4" Westinghouse 1500# Gate Valve)





**PRESSURE LOCKING AND THERMAL BINDING
PROGRAM AT WNP-2**

**PRESENTED AT:
PRESSURE LOCKING AND
THERMAL BINDING WORKSHOP**

**ARLINGTON, TEXAS
NOVEMBER 9, 1995**

Presented by: Thomas F. Hoyle

MOV PROGRAM LEAD

SUPPLY SYSTEM

**PRESSURE LOCKING AND THERMAL BINDING
PROGRAM AT WNP-2**

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SUMMARY

The Washington Public Power Supply System took action as part of the GL 89-10 MOV Program to reassess pressure locking and thermal binding (PL/TB) of gate valves which must perform a safety function to open. Several studies have been conducted over the years at, but did not result in many physical changes to WNP-2 valves. GL 89-10 prompted yet another study. However, this study resulted in three valves being physically modified, the procedure for another valve being revised and extensive calculations performed on several other valves.

The NRC, in a recent MOV inspection, questioned the validity of one aspect on the screening criteria used in the PL/TB study. As a result of this concern and the issuance of GL 95-07, the WNP-2 PL/TB study completed in December, 1993 is being reassessed to determine if the screening criteria used and thus the study results remain valid.

Pressure Locking and Thermal Binding continue to be an industry concern as evidenced by the issuance of GL 95-07. The PL/TB phenomena is quite rare at any individual plant and thus has not been given high priority by most utilities. Non-quantifiable conditions such as seat and packing leakage and air pockets can have major impact on the effects of PL in the conditions exist. Additionally, emphasis is needed on this issue as PL/TB may occur and due to its inherent nature may not be repeatable. Thus, PL/TB may occur but is mis-diagnosed. There is enough industry experience to suggest more detailed review of the phenomena in general and at individual plants.

GL 89-10 ACTIONS

Supplement 6 of GL 89-10 contains the NRC's expectations with regard to Pressure locking/thermal binding. In Supplement 6, the NRC points out that GL 89-10 recommends that licensees review the design bases of their safety-related MOVs. Licensees are expected to have evaluated the potential for pressure locking or thermal binding of gate valves and take action to ensure that these phenomena do not affect the capability of these MOVs to perform their safety-related function. In Supplement 6, the Staff gives an acceptable approach to addressing PL/TB of gate valves in the GL 89-10 program. The evaluation would include:

- Document an evaluation of gate valves in the GL 89-10 program and: a) identify them as acceptable to pressure locking or thermal binding or b) eliminate them from further consideration.
- The evaluation should include those MOVs which could undergo PL/TB during surveillance testing as well as design basis conditions or normal operation.
- Licensees are given recommendations on acceptable and unacceptable resolutions to this issue.
- It is also stated in Supplement 6 that enforcement actions will depend on the safety significance of the issue.

CONTRACTOR

The Supply System decided to subcontract the effort to augment staff resources. As with most utilities, the issue of PL/TB was not new. Several other reviews had been conducted to determine if any corrective action was warranted. Minimal in-field work to mitigate PL/TB had been conducted in the past. As a result of the December, 1993 study, the most susceptible PL valves have been in-field worked to eliminate any PL potential. Other less susceptible valves are being re-evaluated for future modification, if required.

SCREENING CRITERIA

A screening criteria was established to determine susceptibility to PL/TB. The screening for Pressure-Hydraulic Locking consisted of all flexible wedge of parallel disc valves. PL susceptibility was based on the valve bonnet being pressurized with a subsequent depressurization of the upstream and/or downstream piping. This process potentially results in pressure locked between the discs which can cause an increased thrust to operate the valve OPEN. The screening process was in accordance with NRC Special Study, PL/TB of Gate Valves, December 1992, AEOD/S92-07. System operation was also reviewed to determine if open operation was required after PL and if the upstream valve seat would be repressurized before operation which eliminates PL.

The PL/TB report considers Hydraulic Locking to be a subset of PL which occurs when a solid fluid is trapped in the valve bonnet. Hydraulic locking is detrimental when the fluid temperature in the bonnet is increased resulting in a rapid pressure rise. Valve orientation influences the likelihood of vapor or gas pockets which prevent hydraulic lock. The likelihood of a vertically oriented valve bonnet being totally vented of all noncondensables is remote. This is being substantiated by Commonwealth Edison bench tests that induce and measure PL/HL forces. All valves were screened for orientation and temperature.

Thermal Binding (TB) was restricted to solid wedge valves that close at high temperature. The report evaluation found that there were no valves required to open that may have TB potential. As part of the re-evaluation of PL/TB at WNP-2, flex wedge gate valves will also be evaluated for thermal binding. A temperature criteria will be established to determine TB potential.

PER & OPERABILITY ASSESSMENT

The process used at WNP-2 to document conditions adverse to quality is called the Problem Evaluation Request or PER. The Pressure Locking/Thermal Binding identified eight gate valves susceptible to pressure locking. PER 294-0074 was initiated to document the issue and follow corrective action. The PL/TB report/PER identified the following MOVs as potentially susceptible to pressure locking:

LPCS-V-5

RCIC-V-13

RHR-V-8,9

RHR-V-42A,42B,42C

HPCS-V-4

Low Pressure Core Spray injection valve

Reactor Core Isolation Cooling injection valve

Residual Heat Removal shutdown cooling suction line containment isolation valves

Low Pressure Coolant Injection injection valves

High Pressure Core Spray injection Valve

As can be seen from inspection of the above valve functions, all Emergency Core Cooling injection valves were found susceptible to PL. The PER process drives a prompt operability assessment. This operability assessment found all susceptible valves operable. However, engineering judgement was used which needed more justification for long term resolution of the issue. Calculations were initially done to determine margin. These calculations used the best available information. Because the margin was low in some cases, stronger justification was needed.

MODIFICATIONS

Two valves, RHR-V-8 & 9, with the least margin were determined not to have a safety function in the open direction. However, since during their normal operation they could be subject to pressure locking, it was decided to perform a modification to the valves.

One other valve, LPCS-V-5, also had low margin and was modified at the next refueling outage.

Another valve, HPCS-V-4 is subject to pressure locking during surveillance testing. The surveillance procedures were modified to identify this potential PL condition to plant operators.

CALCULATIONS & ENHANCED METHODOLOGY

The remaining four valves, RCIC-V-13 and RHR-V-42A, 42B & 42C, as previously stated were all found to be operable by engineering calculation. RCIC-V-13 had significant margin and was not considered a concern. The LPCI injection valves, RHR-V-42A/42B/42C, were only marginally acceptable. A progressive verification approach was used where the initial calculations were later augmented with more indepth calculations. The calculational methodology used the Grand Gulf approach. After looking at this methodology, it was determined that it should be modified to also include the "wedge pressure effect". Due to the shape of a wedge gate valve a small force is created in the close direction due to the larger area that pressure has to act on in the bonnet. This force was added to the static unwedging load plus the running load. Compensation for the stem piston effect was included. Even after the wedge pressure effect was added, all of the valves were demonstrated by the calculation to be operable under the worst case scenario at degraded voltage. Attachment 1 contains an overview of the calculational methodology used at WNP-2.

To confirm the assumptions in the calculation and to provide additional justification, testing at simulated pressure locked conditions are planned.

TESTING PLANS

The Supply System's maintenance training organization has a 10", 900 lb flex wedge gate valve which is to be used for the confirmatory testing. The test setup will include welding one end of the valve and adding pressure connections to the closed end and to the bonnet. This way, one pressure can be put on one side of the valve and a different pressure can be put in the bonnet. This should simulate a pressure locked valve. In addition, this valve sticks in the closed direction which is similar to most of the flex wedge gate valves in the plant. The valve has an SMB-2 operator which is smaller than the LPCI injection valve's SMB-3 operator, but the technique is similar. A specific date has not been set for the testing at this time.

Commonwealth Edison has conducted testing of valves under pressure locked conditions. Also, valve 24 of the EPRI Performance Prediction Program was stroked under pressure locked conditions. The Supply System may opt to use the EPRI or CE test results in lieu of the testing described above.

NRC INSPECTION 95-24

During the WNP-2 MOV Closure Inspection, 95-24, pressure locking of GL 89-10 gate valves was reviewed in considerable detail. The calculational methodology was applauded since it went beyond the Grand Gulf methodology which was considered state of the art. The inspectors did take exception to the premise that hydraulic lock is a subset of pressure lock. We agreed to disagree. The inspection did point out that the basis of the screening criteria did not agree with most of the industry and that additional justification would be needed.

It is noted that the Commonwealth Edison PL testing has been unable to completely vent bonnets to get water solid conditions. The CE testing seems to demonstrate that under static conditions the previously published numbers for pressure rise may be very conservative.

GENERIC LETTER 95-07

At WNP-2, GL 95-07 does not appear to change the basic recommendations included in GL 89-10, Supplement 6. Recent NRC enforcement actions with respect to hydraulic lock and the inspection at WNP-2 have had an impact on how the previous report on PL/TB is viewed today.

OPERABILITY

One of the most important issues with PL/TB is identifying susceptible valves and then being able to continue operations. A conservative and timely call on operability may well declare a valve or valves inoperable. This, of course, is not very palatable with plant management. If one looks at the WNP-2 MOVs above, the LPCI injection valves, one quickly concludes that all valves are roughly the same. And if they were susceptible to PL/TB, then a plant shutdown would be warranted. Many times if enough time is allotted to perform a detailed analysis more margin exists than originally thought. Therefore, a conservative call on operability might unnecessarily shut the plant down.

FUTURE ACTIONS

The Supply System plans to re-evaluate its position on PL/TB. The screening criteria, particularly for hydraulic lock and thermal binding will be re-assessed. To date hydraulic lock has been viewed as a subset of PL. In other words if pressure locking (depressurization event) did not occur first than hydraulic lock would not occur. Another assumption is that horizontally installed valves will not experience hydraulic lock since there will always be some small air pocket. This may well be the case but justification for this position is not readily apparent. Thermal binding has been dispelled for all flex wedge gate valves. Again, this position may need additional justification or re-evaluation.

CALCULATIONAL METHODOLOGY

ATTACHMENT 1

Summation of Static Unwedging & Running Loads and Pressure Forces

- **Static Unwedging Load**
- **Running Load**
- **Piston Effect**
- **Wedge Pressure Effect**
- **Pressure Locking Load**

Static Unwedging Load

The unseating load measured during static testing consists of:

- The load required to overcome open packing load
- The force required to overcome the seat to disk contact load under static conditions

The Static Unwedging Loads (SUW) exist under pressure locking conditions.

Running Load

- The load measured under design basis dP conditions, or
- The calculated load for design basis dP based on the accepted valve factor.

The Running Load (RL) is conservatively included in the Required Thrust to Open (RTO) for pressure locking.

Piston Effect

- The difference between the bonnet pressure and ambient pressure outside the valve body results in a stem ejection force (or piston effect). This force is in the direction which assist valve opening. The magnitude of this force is calculated using the equation below:

$$F_{piston} = (\pi/4) \times D^2 \times (P_{bonnet} - P_{atm})$$

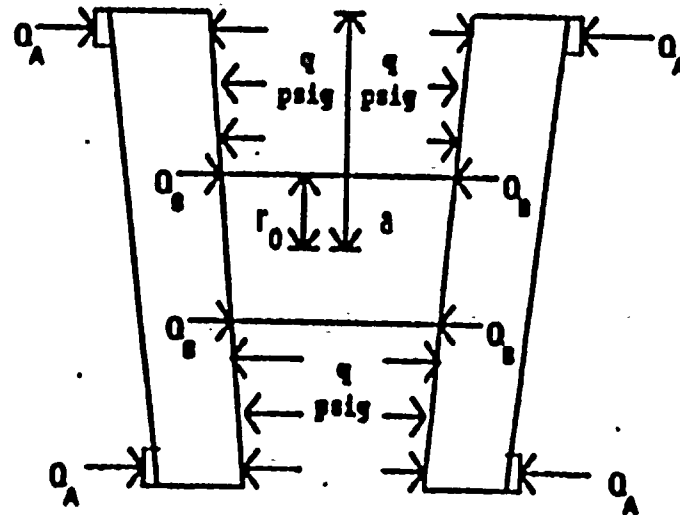
Vertical Downward Force on Disk

- Pressure exerts a downward force on the valve disk.
- This force is calculated for each side of the disk by multiplying the vertical projected area of the valve disk times the differential pressure across that disk face. The equation below is used:

$$F_{\text{vert}} = (\pi/4) \times D^2 \times \sin(\theta_{\text{seat}}) \times [2P_{\text{bonnet}} - P_{\text{inlet}} - P_{\text{outlet}}]$$

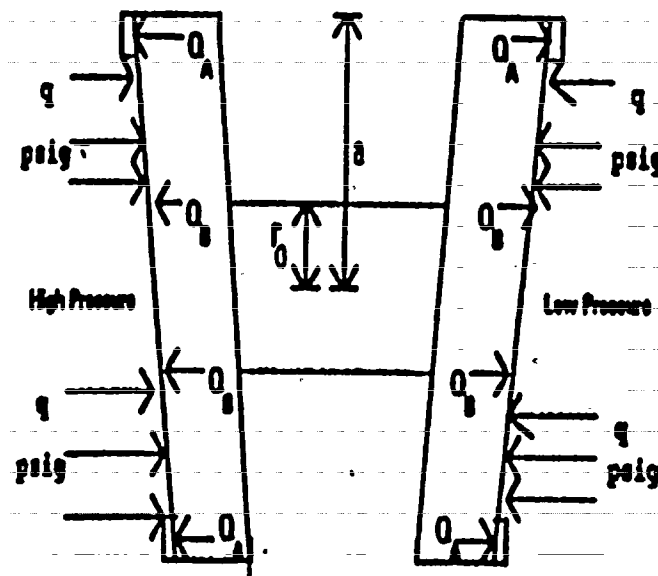
Pressure Locking Force

- Determine the force exerted on the seat ring by the disc due to internal pressure using Roark, Table 24, Case 2d.



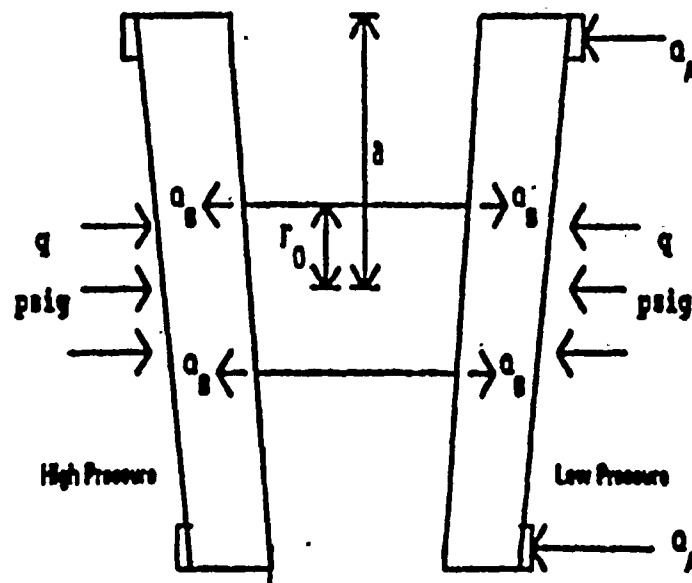
Pressure Locking Force (cont'd)

- Determine forces exerted by external pressures on the high and low pressure sides using Case 2d and 1b.



Pressure Locking Force (cont'd)

- Case 1b for increased force on the low pressure disc due to hub area that was left out of Case 2d equations.



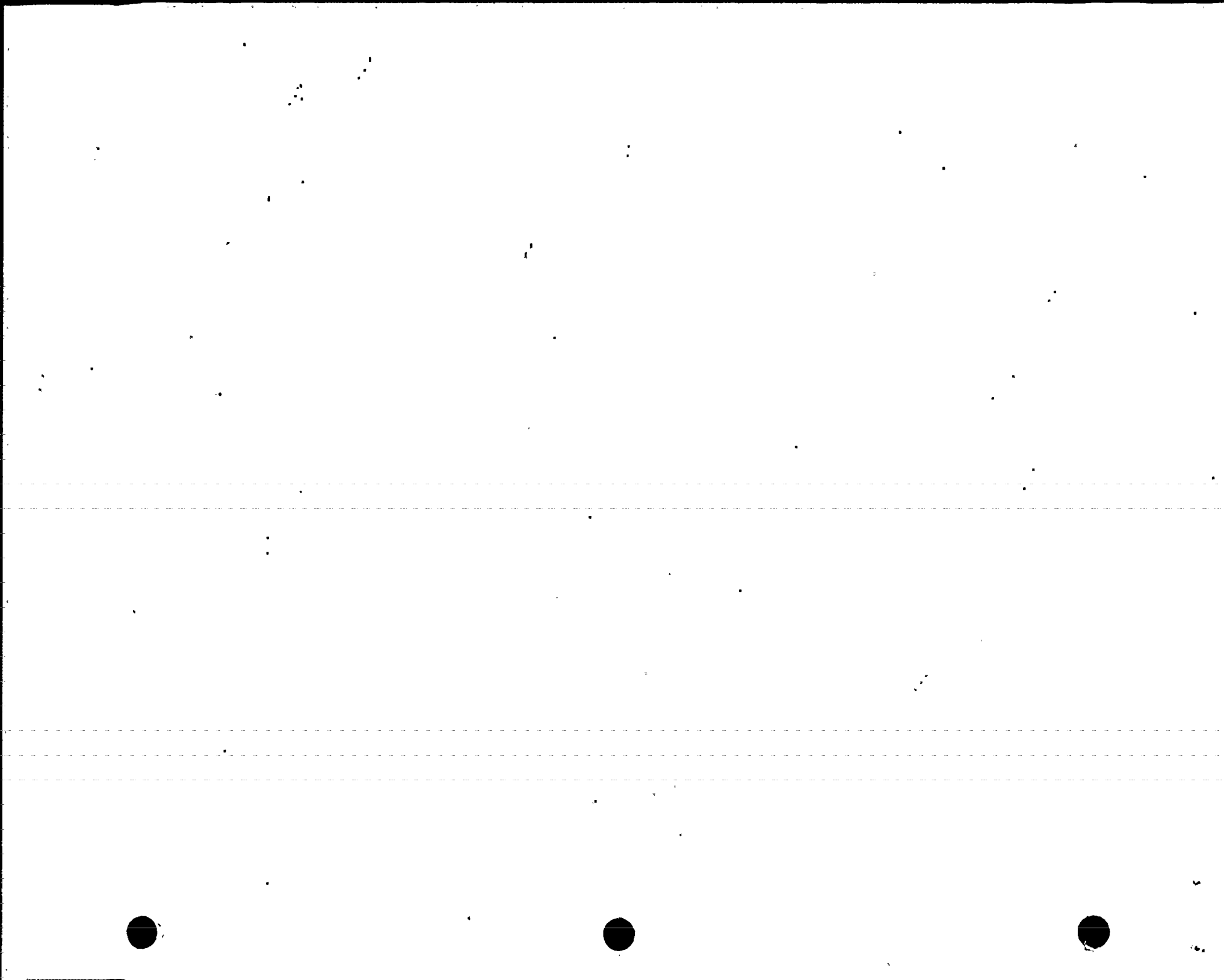
Pressure Locking Force (cont'd)

- The above analysis results in total disc force from pressure locking on the high pressure side and the low pressure side.
- The required thrust to overcome pressure locking only (RT_p) is the total disc force due to pressure locking times the valve factor.

Required Thrust To Open

- The RTO is indicated below:

$$RTO = SUW + RL - F_{piston} + F_{vert} + RT_p$$



NRC Region 4
Arlington, Texas

Workshop on Generic Letter 95-07
Pressure Locking and Thermal Binding
November 9, 1995

Thermal Binding Analysis

Bill R. Black, P.E.
TU Electric

THERMAL BINDING & PRESSURE LOCKING OF GATE VALVES

- Of COURSE it can be Analyzed!
- Do We Need To?
If so for Some MOVs,
at What Level of Sophistication?
- Challenge: Validate Analytical Method

DO WE NEED TO?

- If we can't justify operability on the basis of prior operation with conditions equal or greater than the design pressure/thermal conditions.

AT WHAT LEVEL OF SOPHISTICATION?

- as little as we can get by with!
- Formulas for Stress and Strain, Roark & Young

MODEL VALIDATION - WHAT TESTING?

- The Least Possible
- In the Lab

LOADS ON THE DISK AFFECTING UNSEATING THRUST ($T_{un,t}$)

- Design Basis Upstream & Downstream Pressure
- Residual Wedging from Prior Closing Stroke
- Loads due to Temperature Changes:
 - Bonnet Cavity Pressure
 - Stem Elongation/Body Shrinkage after closing
 - Piping Loads on Valve End
 - Different Rates of Thermal Growth/Shrinkage:

Disk, Seat Rings, Body

$$T_{un,t} = T_{un,d} + T_{un,bp} + T_{un,sg} + T_{un,ax}$$

DESIGN BASIS UPSTREAM & DOWNSTREAM PRESSURE

- Use Results of Generic Letter 89-10 for determining dynamic unseating thrust $T_{un,d}$
- Use As-Built Total Closing Stroke Stem Thrust (greater closing thrust → greater unseating thrust)
- Use Upstream & Downstream Pressure postulated when Thermal Binding potential is also postulated (large valves: DP increases unseating thrust)

CALCULATING GL 95-07 LOADS:

Tun,bp & Tun,sg & Tun,ax

Tun,bp = additional unseating load required to overcome the effects of the bonnet cavity pressure

Being developed by Commonwealth Edison

- Similar simple analytical model
- Testing in progress to validate the model

CALCULATING GL 95-07 LOADS:

$T_{un,bp}$ & $T_{un,sg}$ & $T_{un,ax}$

DETERMINE: μ_{avg} = average seat friction coeff.

$$\frac{T_{un,s}}{TTOTc} < \frac{(\mu_{avg} \cos\theta - \sin\theta)(\cos\theta - \mu_{avg} \sin\theta)}{(\mu_{avg} \cos\theta + \sin\theta)(\cos\theta + \mu_{avg} \sin\theta)}$$

where θ = Seat angle

$T_{un,s}$ = Static Unseating Thrust

$TTOTc$ = Prior Static Total Closing Thrust

CALCULATING GL 95-07 LOADS:

$T_{un,bp}$ & $T_{un,sg}$ & $T_{un,ax}$

DETERMINE: K_m = MOV stiffness along stem axis, excluding the stem

$$K_m = \frac{\Delta T T O T c}{(\Delta \theta_{sn}/360^\circ)(L_{stem}) - (\Delta T T O T c)(K_{stem})}$$

where $K_{stem} = (K_{threaded}^{-1} + K_{threaded,inc}^{-1} + K_{solid}^{-1})^{-1}$

CALCULATING GL 95-07 LOADS:

$T_{un,bp}$ & $T_{un,sg}$ & $T_{un,ax}$

$$T_{un,sg} = (\Delta T_{sg})(A)$$

where

$$A = \frac{(\mu_{avg} \cos\theta - \sin\theta)(\cos\theta - \mu_{avg} \sin\theta)}{(\mu_{avg} \cos\theta + \sin\theta)(\cos\theta + \mu_{avg} \sin\theta)}$$

$$\Delta T_{sg} = (C_{ts})(L_{exp})(\Delta \text{temp},sg)(K_{mov})$$

$$K_{mov} = (K_m^{-1} + K_{threaded}^{-1} + K_{solid}^{-1} + K_{solid,inc}^{-1})^{-1}$$

CALCULATING GL 95-07 LOADS:

$T_{un,bp}$ & $T_{un,sg}$ & **$T_{un,ax}$**

$$T_{un,ax} = (F_{body,therm}) \cdot (2) \cdot \frac{(\mu_{avg} \cos\theta - \sin\theta)}{(\cos\theta + \mu_{avg} \sin\theta)}$$

$$F_{body,therm} = \frac{(K_{ba})(K_{net,a})}{K_{ba} + K_{net,a}} \cdot (\sum C_i \cdot L_i \cdot \Delta temp_i)$$

K_{ba} = body stiffness between ends of seat rings

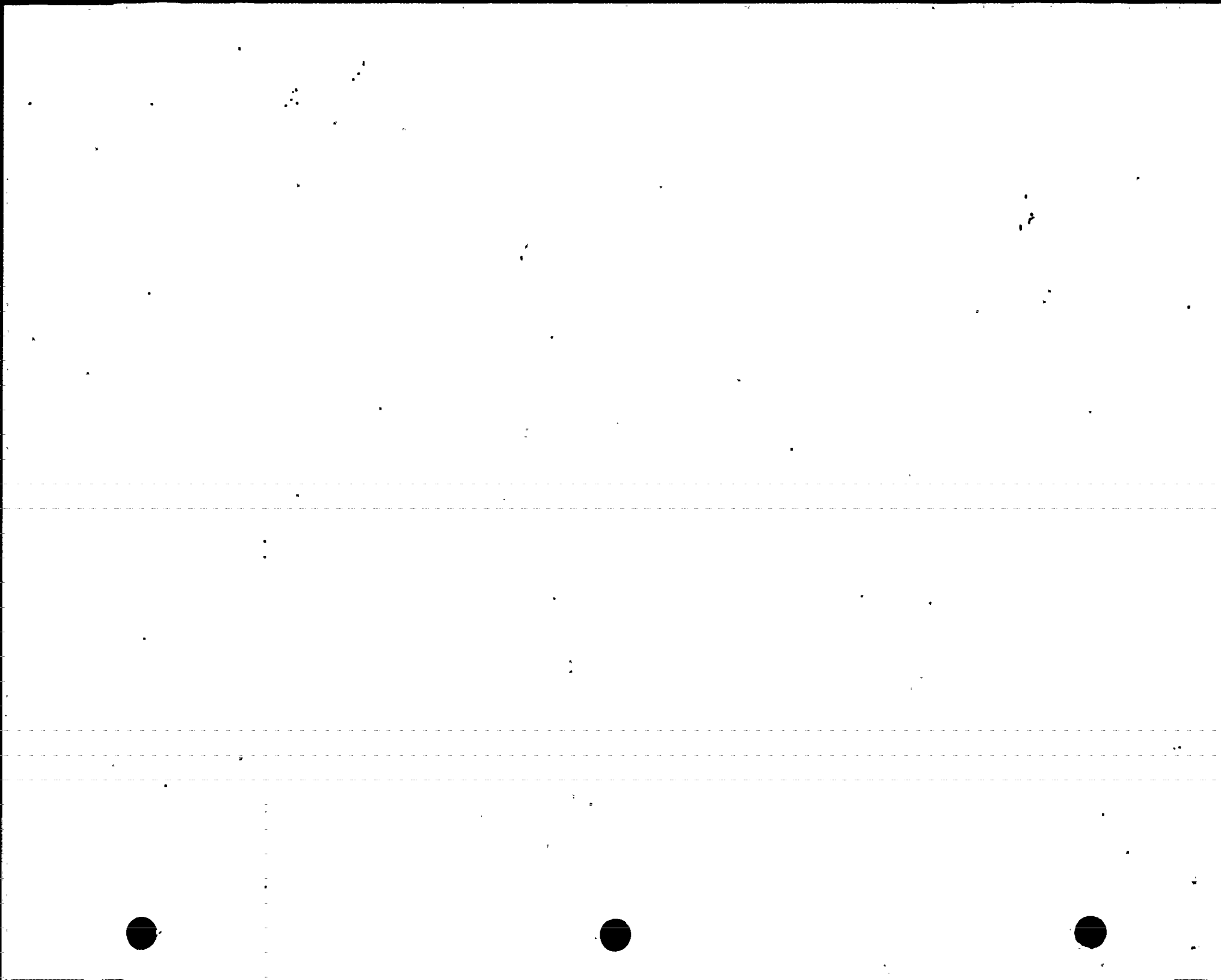
$K_{net,a}$ = net stiffness along pipe axis of the 2 seat rings, 2 wedge "plates" and wedge "hub"

THERMAL BINDING MODEL VALIDATION STATUS

Transmit to Commonwealth Edison	10-25-95
Transmit to Westinghouse Owner's Group	11- 1 -95

Commonwealth Edison presentation to Region 3 on
11-7-95: pursuing validation testing of model.

Copy of TU Electric transmittal to Commonwealth
Edison is available to any interested party.





October 25, 1995

Mr. Brian Bunte
Commonwealth Edison
708-663-3824
708-663-7118 FAX

Dear Mr. Bunte:

TU Electric has created and is trying to validate an analytical model of gate valve body, seat ring, gate wedge, stem, and extended structure stiffnesses. It is intended that the model will be used to analyze the effects of differential pressure distributions on, and temperature changes in, the structural elements. If successful, the model will be a useful tool in responding to the recent NRC Generic Letter 95-07. Your on-going tests to assess these effects may provide data by which validation of the analytical model may be accomplished.

This letter is intended to solicit your cooperation in assessing the present analytical model developed by TU Electric. Our cooperative efforts may result in providing utilities with a less expensive way to resolve Generic Letter 95-07 concerns.

If you have insights which would beneficially refine TU Electric's efforts, you are cordially invited to share these with us. The methodology we are presently planning to use for modeling the stiffnesses of the various structural components (excluding the stem and the extended valve structure) is described below.

1. Use simple flat plate, and solid or hollow right cylinders, in combination to simulate the structures.
2. Model the hub of the wedge as a solid cylinder of radius r_{hub} , and length L_{hub} . The stiffness K_{hub} of the hub model relating axial deflection to an axial load uniformly applied over the end of the cylinder (along the pipe axis) is:

$$\begin{aligned} K_{hub} &= (\text{Area})(\text{Young's Modulus}) / (\text{Length}) \\ &= [(\pi)(r_{hub})^2] [E_{wedge} / L_{hub}] \end{aligned}$$

3. Model each of the two disks of the wedge as a flat plate of outer radius a_{disk} , thickness t_{disk} , and inner radius r_{hub} . Model the inner edge as rigidly fixed, and the outer edge as free. Model the applied load on the disk seat ring as a ring load of radius r_{load} equal to the mean valve body seat radius. The stiffness K_{plate} of each plate model relating bending

deflection of the plate at radius r_{load} to the ring load at that diameter is (Ref. 1, Table 24, Case 11):

$$K_{plate} = [2 \pi r_{load} D / (a_{disk})^3] / [(C_2 / C_3) \{ (r_{load} C_3 / r_{hub}) - L_3 \} - (r_{load} C_3 / r_{hub}) + L_3]$$

where $D = E_{wedge} (t_{disk})^3 / 12 (1 - \nu^2)$

4. The overall stiffness K_{wedge} of the wedge is the series combination of the stiffnesses of the hub and the two disks:

$$K_{wedge} = [(1 / K_{plate}) + (1 / K_{hub}) + (1 / K_{plate})]^{-1}$$

5. Given an compressive ring load of magnitude F_{seat} and radius r_{load} applied to the upstream wedge seat and reacted at the downstream wedge seat, the relative deflection y_{seat} of the upstream seat toward the downstream seat is:

$$y_{seat} = F_{seat} / K_{wedge}$$

It is important to select values for the hub radius and length, and the disk plate thickness and outer radius so that the model closely simulates the actual wedge's relative seat deflection under the same loading. TU Electric presently believes the plate thickness t_{disk} should be the average thickness of the actual wedge's plate from the bottom of the disk to the top of the wedge and from the inner radius r_{hub} to the outside radius a_{disk} .

Figures 1 through 3 provide illustrations of the dimensions which may be appropriate for the model described above. Note the following derived dimensions:

t_{disk} = thickness of wedge plate along the pipe centerline from the outer surface of the plate (point A) to the average thickness of the sloped inner surface of the plate (point B). Point B is the point on the axis of the pipe which intersects a plane perpendicular to the pipe axis and at a distance $((L_a + L_b)/2)$ from the stem centerline.

L_{hub} = $L_a + L_b$

r_{load} = $(D2 + E2) / 2$

6. Model each of the valve body seat ring inserts as hollow right cylinders of inside diameter $E3$ and outside diameter $D3$ and average length L_{sr} (in a plane perpendicular to the stem axis and containing the pipe axis). The stiffness K_{sr} of the seat ring model relating deflection along the pipe axis to an axial load F_{seat} uniformly applied over the end of the seat ring is:

$$\begin{aligned} K_{sr} &= (\text{Cross-sectional Area})(\text{Young's Modulus}) / (\text{Length}) \\ &= [(\pi)(D3^2 - E3^2)/4] [E_{sr} / L_{sr}] \end{aligned}$$

7. Model the valve body between the outer ends of the seat ring inserts as a hollow right circular cylinder of inner diameter r_{body} and outer radius equal to the sum $(r_{body} + t_{body})$ and length L_{body} equal to the sum $(2 L_{sr} + 2 t_{disk} + L_{web})$. The stiffness K_{body} of the valve body model relating deflection along the pipe axis to a load F_{seat} uniformly applied over the end of the seat ring along the pipe axis is:

$$\begin{aligned} K_{body} &= (\text{Cross-sectional Area})(\text{Young's Modulus}) / (\text{Length}) \\ &= [(\pi)((r_{body} + t_{body})^2 - r_{body}^2)] [E_{body} / L_{body}] \end{aligned}$$

Other dimensions needed in order for TU Electric to perform the desired analyses are illustrated in Figure 4: the length L_{st} of the stem from the bottom of the stem "T Head" to the bottom of the packing chamber in the valve bonnet when the valve is in the closed position with the disk pushed hard into the valve body seat by the stem, and the length L_{sm} of the stem from the bottom of the "T Head" to the start of the threaded section of the stem. Also required is the length L_{stem} of the stem from the bottom of the stem "T Head" to the bottom of the actuator stem nut when the stem is pushing the wedge hard into the valve body seat:

$$L_{stem} = L_{wy} + Y_{an}$$

where $L_{wy} =$ length of the stem from the bottom of the stem "T Head" to the top of the yoke-actuator mounting platform when the stem is pushing the wedge hard into the valve body seat
 $Y_{an} =$ distance from the top of the yoke (the base of the actuator) to the bottom of the stem nut inside the actuator.

Note: TU Electric can obtain the value of the dimension Y_{an} by inspection of an appropriate actuator sample. You are requested to provide the values of dimensions L_{st} , L_{sm} , and L_{wy} .

Mr. Bunte : Valve Data for TU Electric

TU Electric will use the above dimensions to also quantify loads resulting from the thermal growth or contraction of the structural components. It is intended that confidence in the applicability of the analytical model will be gained by comparing test results with the results of the analytical model. As needed, the model will be refined.

Test data which is being collected by Commonwealth Edison can be used along with the needed dimensions and material properties to evaluate or verify the model. To accomplish this, in addition to the data identified above, please provide the following test data and other information for use by TU Electric in evaluating the analytical model:

- A. Static test data from pairs of closing and subsequent opening strokes. Data for several pairs of close and open strokes is desirable for addressing repeatability of valve performance. For the duration of these tests, the temperature of the valve body and internal components shall be maintained at room temperature.
- | | |
|---|--------|
| Thrust at control switch trip, | Tcst,s |
| Total thrust after control switch trip, | TTOTs |
| Peak unseating thrust, | Tun,s |
- B. With the valve fully closed, measure the amount of stem thrust increase resulting from further rotation of the stem nut. Small amounts of rotation, 10 to 15 degrees, are sufficient if measured accurately (within about 5% of reading) along with the resulting stem thrust changes that are also accurately measured. Provide the results of the measurements and the accuracies of the measurements.
- C. Stem geometry as follows:
- Stem unthreaded section diameter
 - Stem threaded section outside diameter, thread pitch, thread lead, and thread style: (ACME standard or stub)
- D. Materials of the valve body, valve body seat ring inserts, the wedge (obturator), and the stem. If available, also provide:
- the average thermal coefficients of expansion (in/in/degree F) for the ranges of temperature changes experienced by the wedge, the seat rings, the valve body, the stem inside the valve body, and the stem outside the valve body during testing of the valve assemblies for thermal binding effects.
 - Young's Modulus for each material

Mr. Bunte : Valve Data for TU Electric

- E. The sequence and values of temperature of the wedge upstream face, the hub, the wedge downstream face (if these are different), the upstream and downstream valve body seat ring inserts, and the valve body between the outer ends of the seat ring inserts.

Your interest in this effort as previously expressed to me is greatly encouraging to me. I look forward to our cooperation in evaluating the analytical model. If you have any questions, please contact Sid Chiu at 817-897-6510 or me at 817-897-6477. Our FAX number is 817-897-0868.

Sincerely,

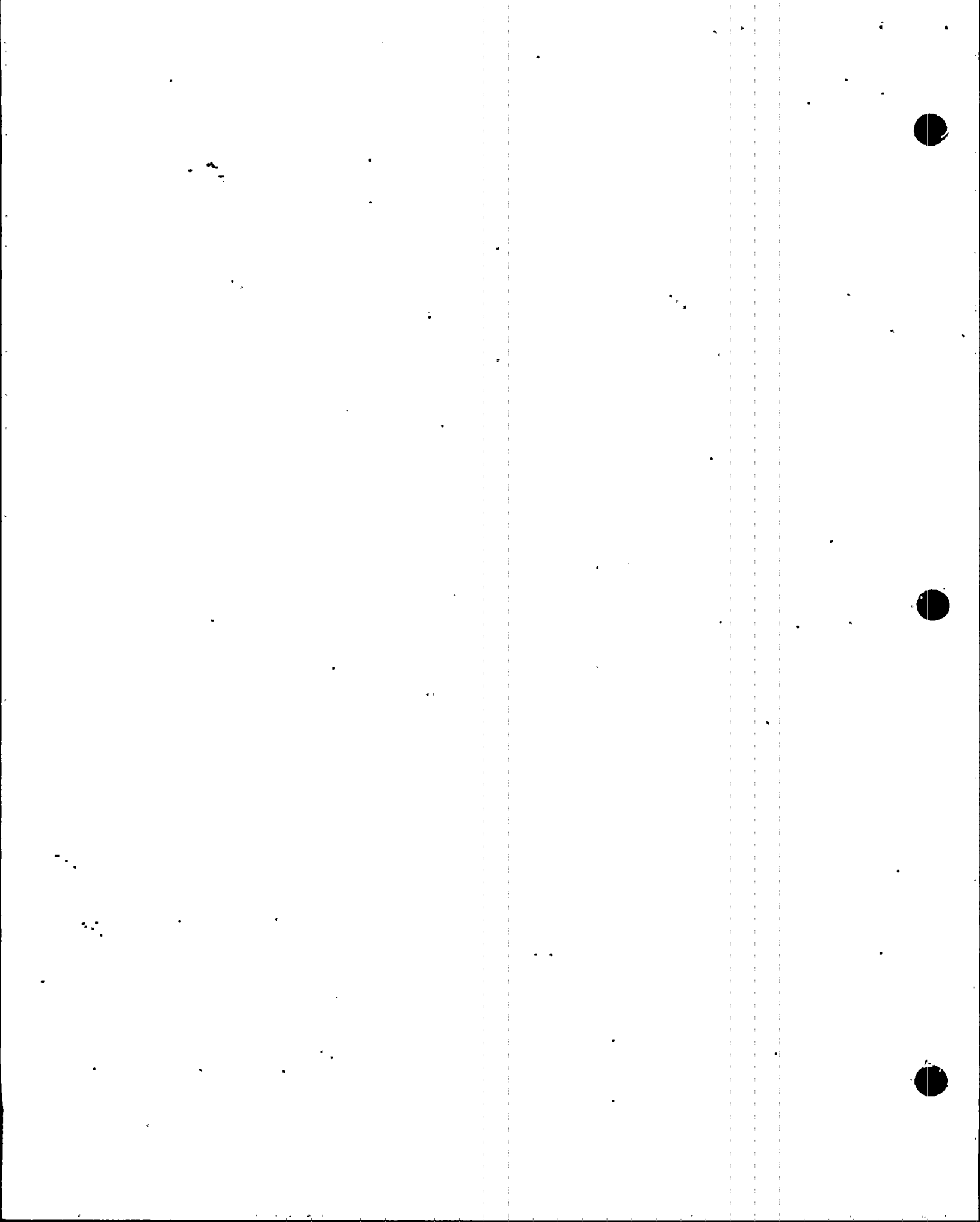
Bill R. Black
Bill R. Black, P.E.

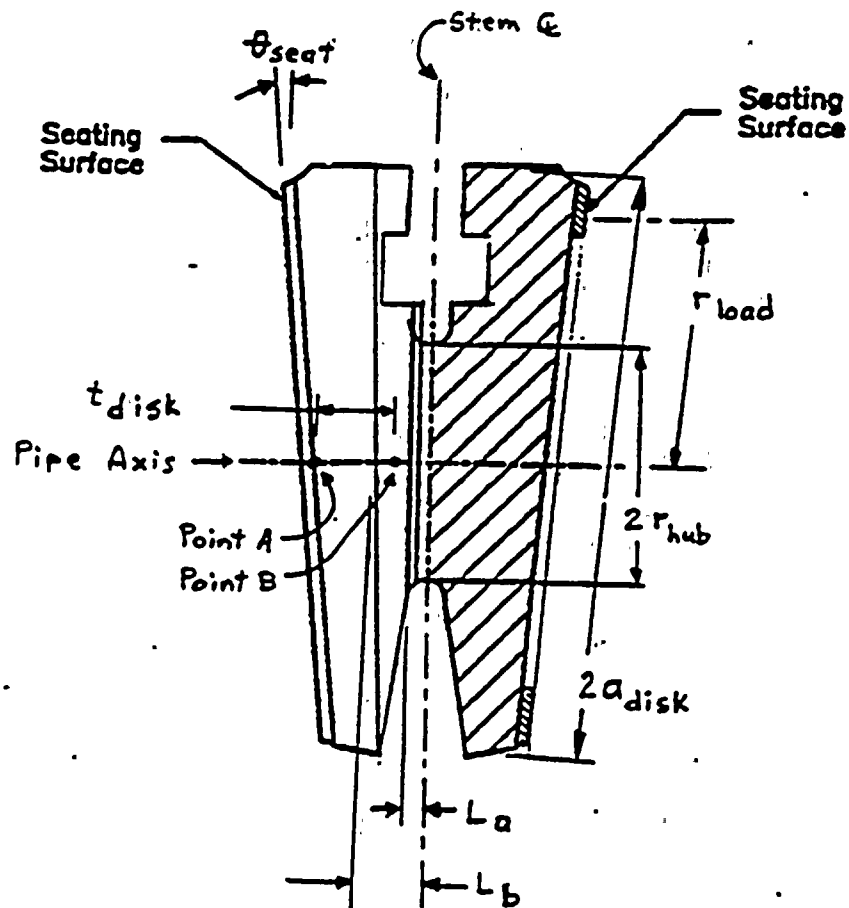
Attachments

(Figures 1-4)

(Hand-written development of analysis method, 5 pages)

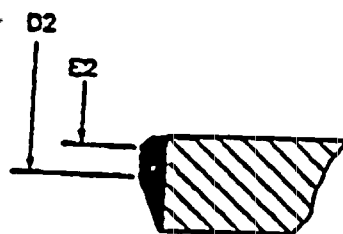
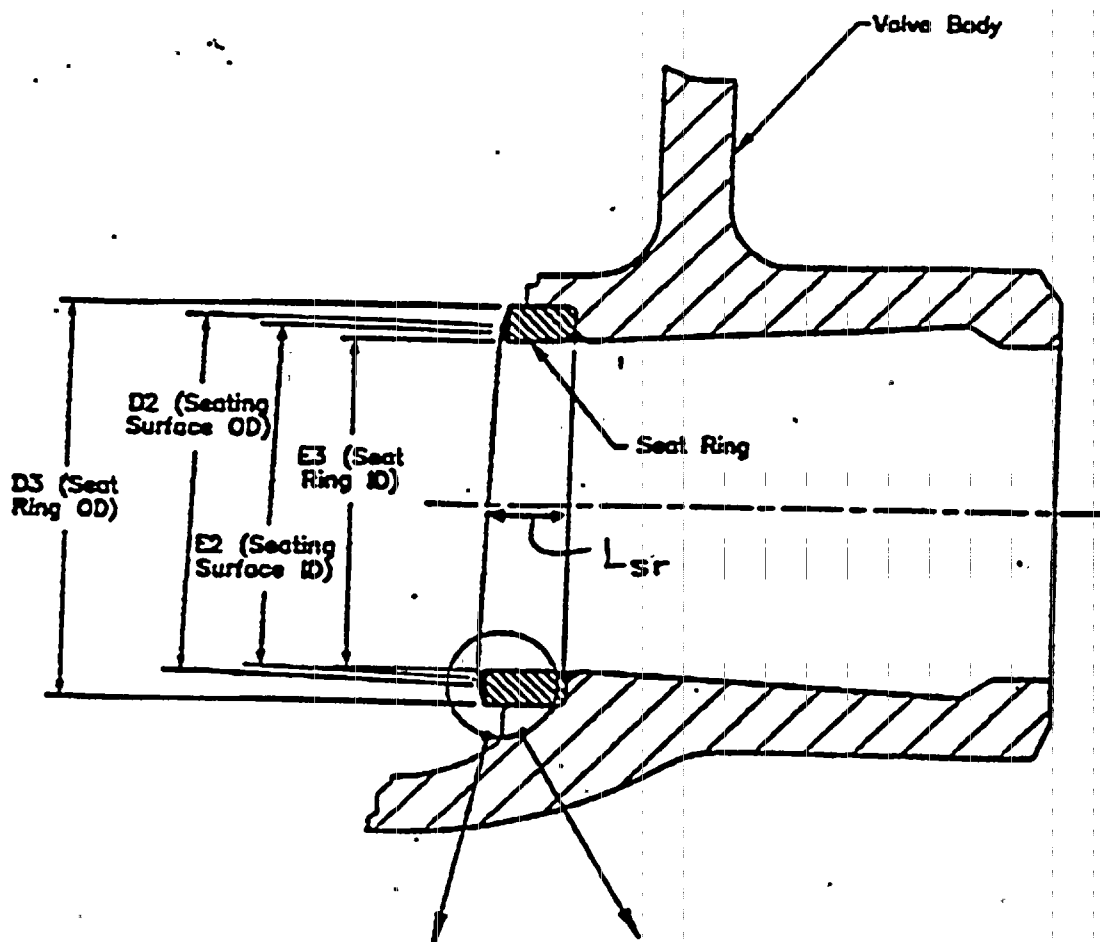
cc: Sid Chiu



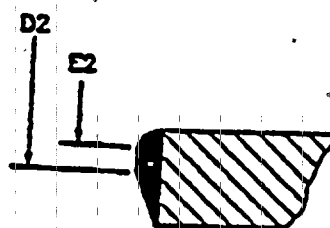


DIMENSIONS FOR FLEXIBLE WEDGE GATE VALVES

FIGURE 1



Chamfer



Radius

D2 and E2 are Diameters to the Edge of the Flat Seating Surfaces, Measured in the Plane of the Seat Ring.

SEAT RING DIAMETERS

FIGURE 2

$\Delta T_{\pm bs}$ = increase in post-close stem thrust due to thermal shrink of body

$$\Delta T_{\pm bs} = \Delta L_{\pm bs} \cdot K_{net, b}$$

where $\Delta L_{\pm bs}$ = reduction in body length along stem axis minus reduction in disk length along stem axis

$$\Delta L_{\pm bs} = C_{tb} \cdot L_{eb} \cdot |\Delta t_{bs}| - C_{td} \cdot L_{ed} \cdot |\Delta t_{ds}|$$

C_{tb} = therm. exp. coeff. for body matl.

C_{td} = therm. exp. coeff. for disk matl.

L_{eb} = length along stem axis from seat axis to top of valve neck which experiences temp change

L_{ed} = length along stem axis from seat axis to base of stem which experiences temp. change.

Δt_{bs} = temp. decrease affecting valve body

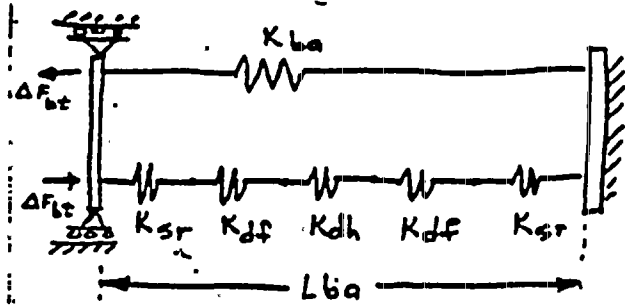
Δt_{ds} = temp. decrease affecting disk

$$K_{net, b} = \left[\frac{1}{K_s} + \frac{1}{K_m} \right]^{-1} = \frac{K_s K_m}{K_s + K_m}$$

$$\Delta T_{\pm bs, un} = (\Delta T_{\pm bs}) (A)$$

$$= \Delta L_{\pm bs} \cdot K_{net, b} \cdot A$$

$$\Delta T_{\pm bs, un} = [(C_{tb} \cdot L_{eb} \cdot |\Delta t_{bs}|) - (C_{td} \cdot L_{ed} \cdot |\Delta t_{ds}|)] \frac{K_s \cdot K_m \cdot A}{(K_s + K_m)}$$



K_{ba} = valve body stiffness from seat ring to seat ring, approximated as pipe of ID = nominal pipe size
 $OD = ID + 4(t_{min}, w)$
 $t_{min, w}$ = min wall thickness

$$K_{ba} = \frac{\pi (OD^2 - ID^2) / 4 \cdot (E_b)}{L_{ba}}$$

L_{ba} = distance between outer ends of seat rings, along pipe axis

K_{sr} = stiffness of downstream and upstream valve body seat rings along pipe axis

$$K_{sr} = \frac{\pi (OD_r^2 - ID_r^2) / 4 \cdot (E_r)}{L_{sr}}$$

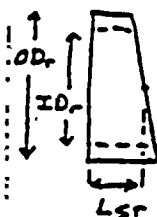
where

OD_r = outside diameter of seat ring

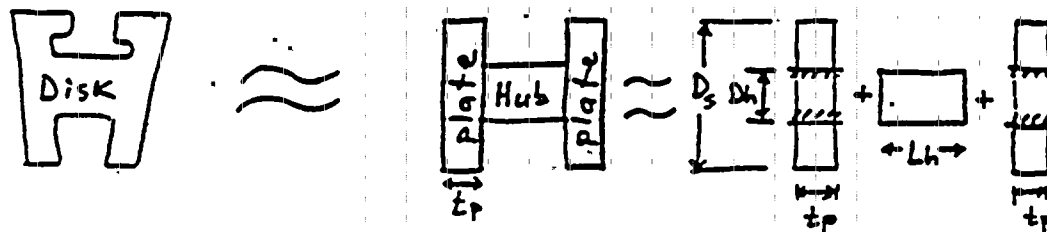
ID_r = inside diameter of seat ring

E_r = Young's Modulus of seat ring matl.

L_{sr} = average length along pipe axis of seat ring.



Model disk as solid circular hub with solid flat plate ends with uniform flange thickness.



Model disk flexure by assuming the plate ends are fixed at the hub diameter D_h and free at the mean seat radius D_s :

$$D_s = (OD_r + ID_r) / 2$$

Change in length L_{ba} due to temperature change accompanies change in compressive load between body seat rings and disk, the compressive load in the disk hub.

K_{df} = stiffness of disk plate for ring load F_{bt} at free outer diameter (from Roark 5th ed. Table 24 Case 16):

$$K_{df} = \frac{2\pi (D_h/2) D}{(D_s/2)^3} \left(\frac{C_3 C_7}{C_1 C_9 - C_3 C_7} \right), \quad D = \frac{E_d \cdot (t_p)^3}{12(1 - \nu^2)}$$

where E_d = Young's Modulus of the disk material

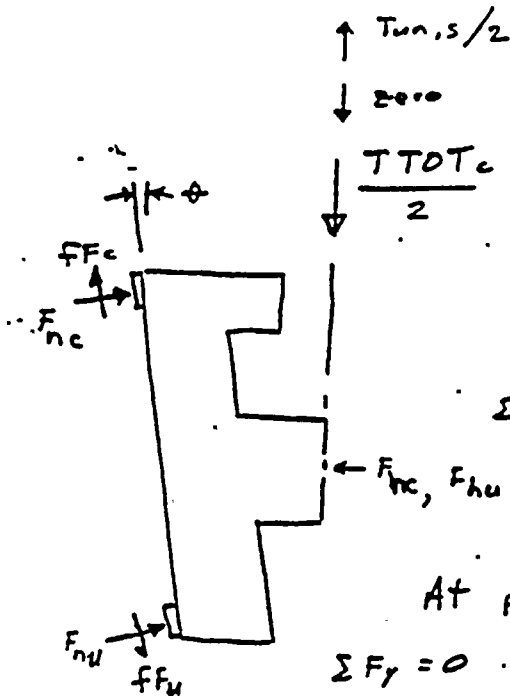
ν = Poisson's ratio, assumed to be 0.30

t_p = disk plate average thickness

D_h = disk hub diameter

C_1, C_3, C_7 , and C_9 = Roark 5th ed Table 24

Determine average seat friction coefficient from test:



At peak seating, impending slip:

$$\sum F_y = 0, \quad fF_c = \mu F_{nc}$$

$$\frac{T_{TOTc}}{2} = F_{nc} \sin \theta + \mu F_{nc} \cos \theta$$

$$= F_{nc} [\sin \theta + \mu \cos \theta]$$

$$\therefore F_{nc} = T_{TOTc} / [2(\sin \theta + \mu \cos \theta)]$$

$$\sum F_x = 0: F_{nc} [\cos \theta - \mu \sin \theta] = F_{hc}$$

$$\therefore F_{hc} = \frac{T_{TOTc} (\cos \theta - \mu \sin \theta)}{2(\sin \theta + \mu \cos \theta)}$$

At peak unwedging, impending slip:

$$\sum F_y = 0, \quad fF_u = \mu F_{nu}$$

$$(T_{un,s}/2) + F_{nu} \sin \theta = \mu F_{nu} \cos \theta$$

$$\therefore T_{un,s} = 2 F_{nu} (\mu \cos \theta - \sin \theta)$$

$$\text{and } F_{nu} = T_{un,s} / [2(\mu \cos \theta - \sin \theta)]$$

$$\sum F_x = 0 \Rightarrow F_{nu} \cos \theta + \mu F_{nu} \sin \theta = F_{hu}$$

$$F_{nu} (\cos \theta + \mu \sin \theta) = F_{hu}$$

$$\therefore F_{hu} = \frac{T_{un,s} (\cos \theta + \mu \sin \theta)}{2(\mu \cos \theta - \sin \theta)}$$

Since

$$\frac{T_{un,s} (\cos \theta + \mu \sin \theta)}{2(\mu \cos \theta - \sin \theta)} < \frac{F_{hc}}{2(\sin \theta + \mu \cos \theta)}$$

$$\therefore \frac{T_{un,s}}{T_{TOTc}} < \frac{(\mu \cos \theta - \sin \theta)(\cos \theta + \mu \sin \theta)}{(\mu \cos \theta + \sin \theta)(\cos \theta + \mu \sin \theta)} = A$$

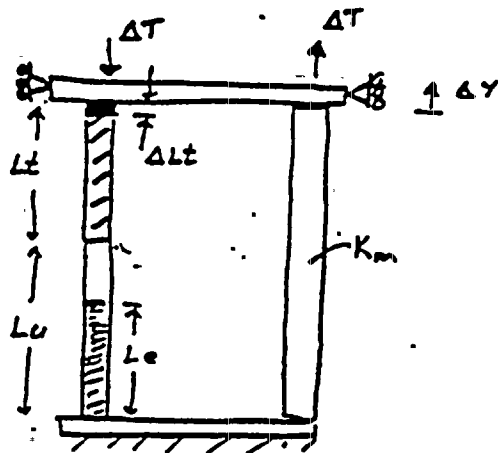
Example: assume

$$\theta = 7^\circ: \quad \frac{T_{un,s}}{T_{TOTc}} = 0.50:$$

Thus, given measured values of $T_{un,s}$ and T_{TOTc} , and given the seat angle θ , the average seat coefficient μ can be determined iteratively.

μ	$(T_{un,s}/T_{TOTc})$	A	$[(T_{un,s}/T_{TOTc}) - A]$
0.40	0.5	0.4806	0.0194
0.50	0.5	0.5356	-0.0356
0.42	0.5	0.4939	0.0061
0.43	0.5	0.5000	-0.0000

$$\mu_{max} = 0.43$$



K_m = stiffness along stem axis of disk, body seats, body, all connections, yoke, actuator housing, drive sleeve, etc but excluding the stem.

K_{ss} = stiffness of solid stem section

K_{sti} = stiffness of threaded stem section

ΔT_{TOT} = increase in total thrust

$\Delta \theta_{sn}$ = degrees stem nut rotation for thrust increase ΔT_{TOT}

Testing: measure ΔT and $\Delta \theta_{sn}$

$$\Delta Y = \Delta T_{TOT} / K_m = \Delta L_t - (\Delta T_{TOT} / K_{st}) - (\Delta T_{TOT} / K_{ss}) - (\Delta T_{TOT} / K_{sti})$$

$$\frac{\Delta T_{TOT}}{K_m} = \left(\frac{\Delta \theta_{sn}}{360^\circ} \right) (L_{stem}) - \Delta T_{TOT} \left(\frac{1}{K_{st}} + \frac{1}{K_{ss}} + \frac{1}{K_{sti}} \right)$$

where L_{stem} = stem lead (inch/rev)

$$\therefore K_m = \frac{\Delta T_{TOT}}{\left(\frac{\Delta \theta_{sn}}{360^\circ} \right) (L_{stem}) - \Delta T_{TOT} \left(\frac{1}{K_{st}} + \frac{1}{K_{ss}} + \frac{1}{K_{sti}} \right)}$$

Thermal Stem Growth

$$\Delta Y = \Delta T_{ts} / K_m = \Delta L_e - \Delta T_{ts} / K_{st} - \Delta T_{ts} / K_{ss} - \Delta T_{ts} / K_{sti}$$

$$\frac{\Delta T_{ts}}{K_m} = (C_{ts} \cdot L_e \cdot \Delta t_{sg}) - \Delta T_{ts} \left(\frac{1}{K_{st}} + \frac{1}{K_{ss}} + \frac{1}{K_{sti}} \right)$$

$$\therefore \frac{\Delta T_{ts}}{K_m} + \Delta T_{ts} \left(\frac{1}{K_{st}} + \frac{1}{K_{ss}} + \frac{1}{K_{sti}} \right) = C_{ts} \cdot L_e \cdot \Delta t_{sg}$$

$$\Delta T_{ts} \left(\frac{1}{K_m} + \frac{1}{K_{st}} + \frac{1}{K_{ss}} + \frac{1}{K_{sti}} \right) = C_{ts} \cdot L_e \cdot \Delta t_{sg}$$

$$\Delta T_{ts} = C_{ts} \cdot L_e \cdot \Delta t_{sg} \left(\frac{1}{K_m} + \frac{1}{K_{st}} + \frac{1}{K_{ss}} + \frac{1}{K_{sti}} \right)^{-1}$$

$$K_{ss} = \frac{\pi (D_u)^2}{4} \frac{E_s}{L_u}$$

$$K_{sti} = \frac{\pi (D_u)^2 E_s}{4 (C_{ts} \cdot L_e \cdot \Delta t_{sg})}$$

$$K_{st} = \frac{\pi (D_t)^2}{4} \frac{E_s}{L_t}$$

$$K_{sti} = \frac{\pi (D_u)^2 \cdot E_s}{4 \left(\frac{\Delta \theta_{sn}}{360^\circ} \right) (L_{stem})}$$

$$\Delta T_{ts,un} = (\Delta T_{ts}) (A), \text{ additional unseating thrust}$$

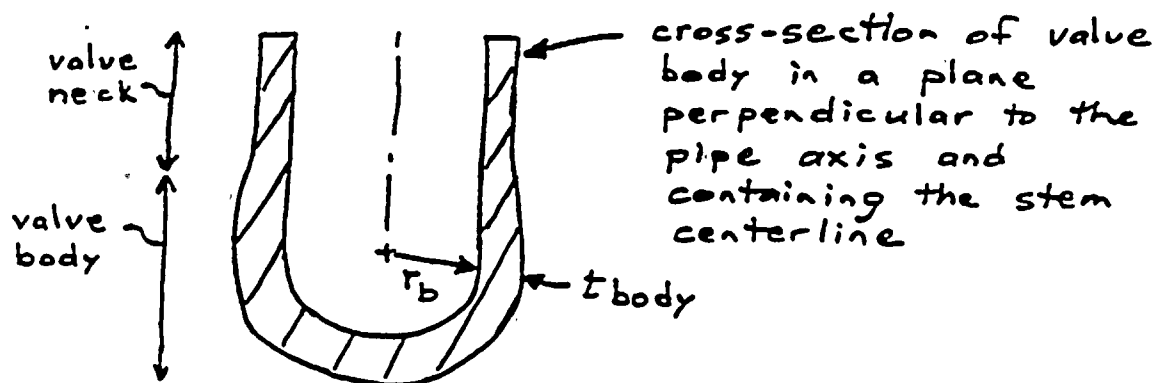
where C_{ts} = therm. exp. coeff. of stem matl.

L_e = length of stem undergoing temp increase Δt_{sg}

ΔT_{ts} = closing thrust increase due to temperature increase Δt_{sg} .

L_t = threaded stem length up to base of stem nut

L_u = unthreaded stem length



r_b = typical inside radius of valve body in the cross-section illustrated above.

t_{body} = typical valve body as-built wall thickness in the cross-section illustrated above.

Figure 3

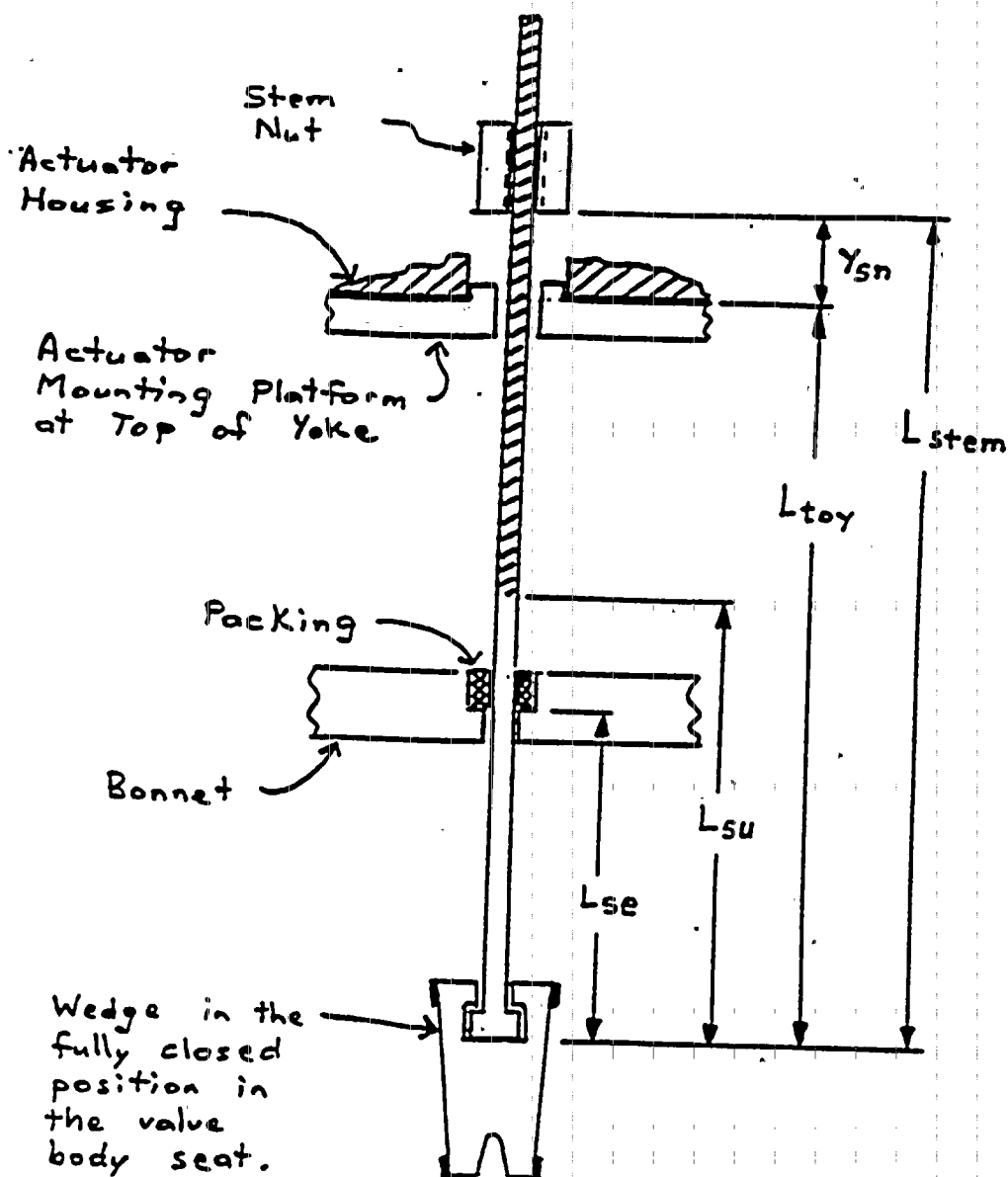


Figure 4

K_h = stiffness of disk hub for axial load $F_b t$

$$K_h = \frac{\pi (D_h)^2 (E_d)}{4 L_h}$$

Thermal Expansion or Contraction Loads :

$$e_{ba} = e_{sr1} + e_{df1} + e_{dh} + e_{df2} + e_{sr2}$$

$$e_{ba} = C_{tba} \cdot L_{ba} \cdot \Delta t_{ba} + \frac{F_b t}{K_{ba}}$$

$$\text{Also, } e_{ba} = C_{tsr} \cdot L_{sr} \cdot (\Delta t_{sr1} + \Delta t_{sr2}) + C_{td} \cdot t_p \cdot (\Delta t_{d1} + \Delta t_{d2}) + C_{td} \cdot L_h \cdot \Delta t_h - \frac{F_b t}{K_{net,a}}$$

$$K_{net,a} = \left[\frac{2}{K_{sr}} + \frac{2}{K_{df}} + \frac{1}{K_h} \right]^{-1}$$

$$\begin{aligned} \therefore \frac{F_b t}{K_{ba}} + \frac{F_b t}{K_{net,a}} &= \left[C_{tsr} \cdot L_{sr} \cdot (\Delta t_{sr1} + \Delta t_{sr2}) + C_{td} \cdot t_p \cdot (\Delta t_{d1} + \Delta t_{d2}) \right. \\ &\quad \left. + C_{td} \cdot L_h \cdot \Delta t_h - C_{tba} \cdot L_{ba} \cdot \Delta t_{ba} \right] \\ &= F_b t \frac{(K_{ba} + K_{net,a})}{K_{ba} \cdot K_{net,a}} \end{aligned}$$

$$\therefore F_b t = \frac{K_{ba} \cdot K_{net,a}}{(K_{ba} + K_{net,a})} \left[C_{tsr} \cdot L_{sr} \cdot (\Delta t_{sr1} + \Delta t_{sr2}) + C_{td} \cdot t_p \cdot (\Delta t_{d1} + \Delta t_{d2}) + C_{td} \cdot L_h \cdot \Delta t_h - C_{tba} \cdot L_{ba} \cdot \Delta t_{ba} \right]$$

where e_{ba} , e_{sr1} , e_{df1} , e_{dh} , e_{df2} , e_{sr2} are the elongations of the parts of corresponding stiffnesses K_{ba} , K_{sr} , K_{df} , K_{dh} , K_{df} , and K_{sr} ; and

where C_{tba} = therm. exp. coeff. of body matl.

C_{tsr} = " " " " seat ring matl.

C_{td} = " " " " disk matl.

Δt_{ba} = increase (= if decrease) of temp. of body matl.

Δt_{sr1} = " " " " " " downstream seat ring

Δt_{sr2} = " " " " " " upstream seat ring

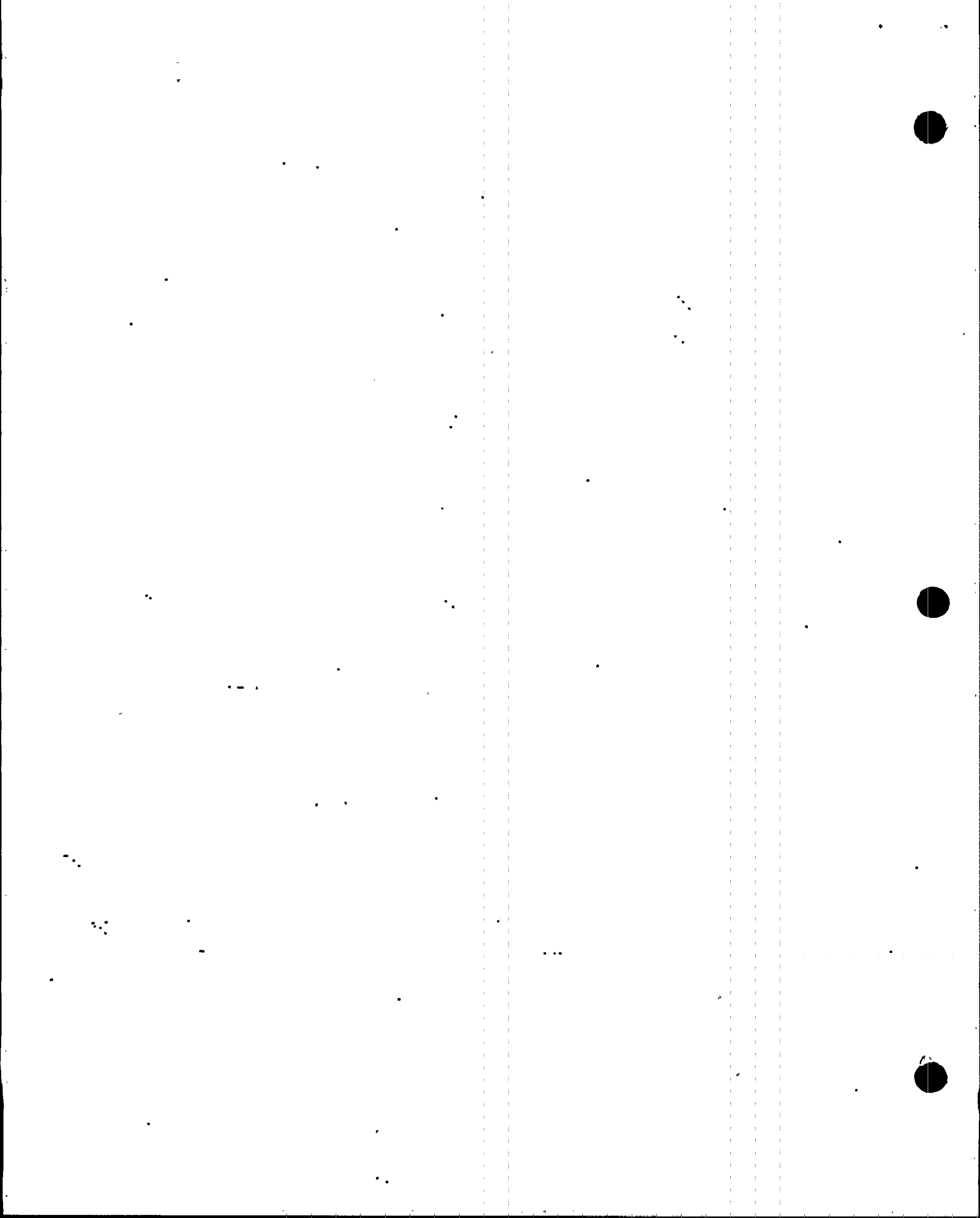
Δt_{d1} = " " " " " " downstream disk plate

Δt_{d2} = " " " " " " upstream disk plate

Δt_h = " " " " " " disk hub matl.

From pg.1 : $F_{hu} = T_{u,s} (\cos \theta + \mu \sin \theta) / [2(\mu \cos \theta - \sin \theta)]$

$$\therefore \Delta T_{ax,un} = \frac{F_b t (2)(\mu \cos \theta - \sin \theta)}{(\cos \theta + \mu \sin \theta)}$$

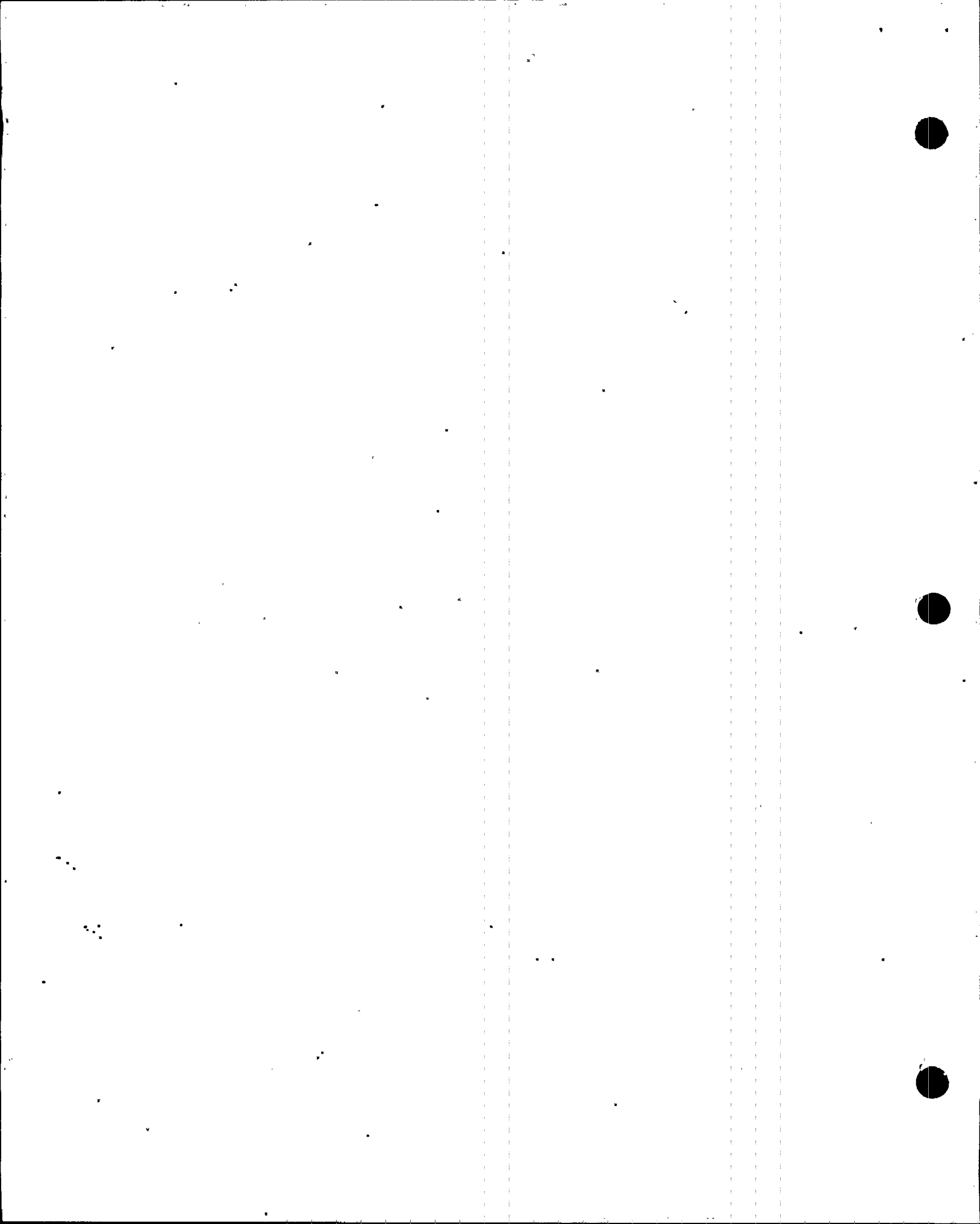


“Utility Perspective”

Pennsylvania Power & Light Co.

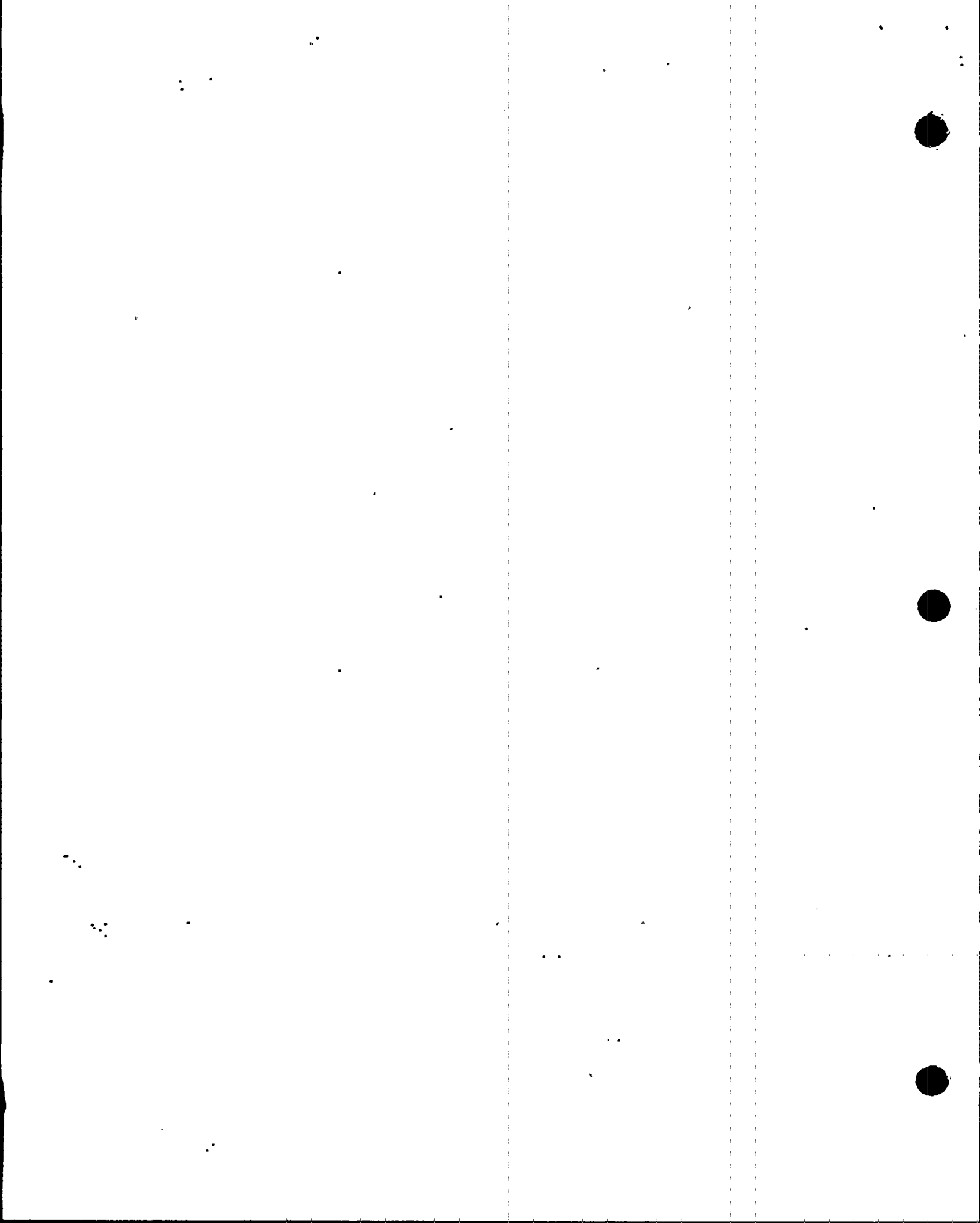
Susquehanna SES

Units 1 & 2



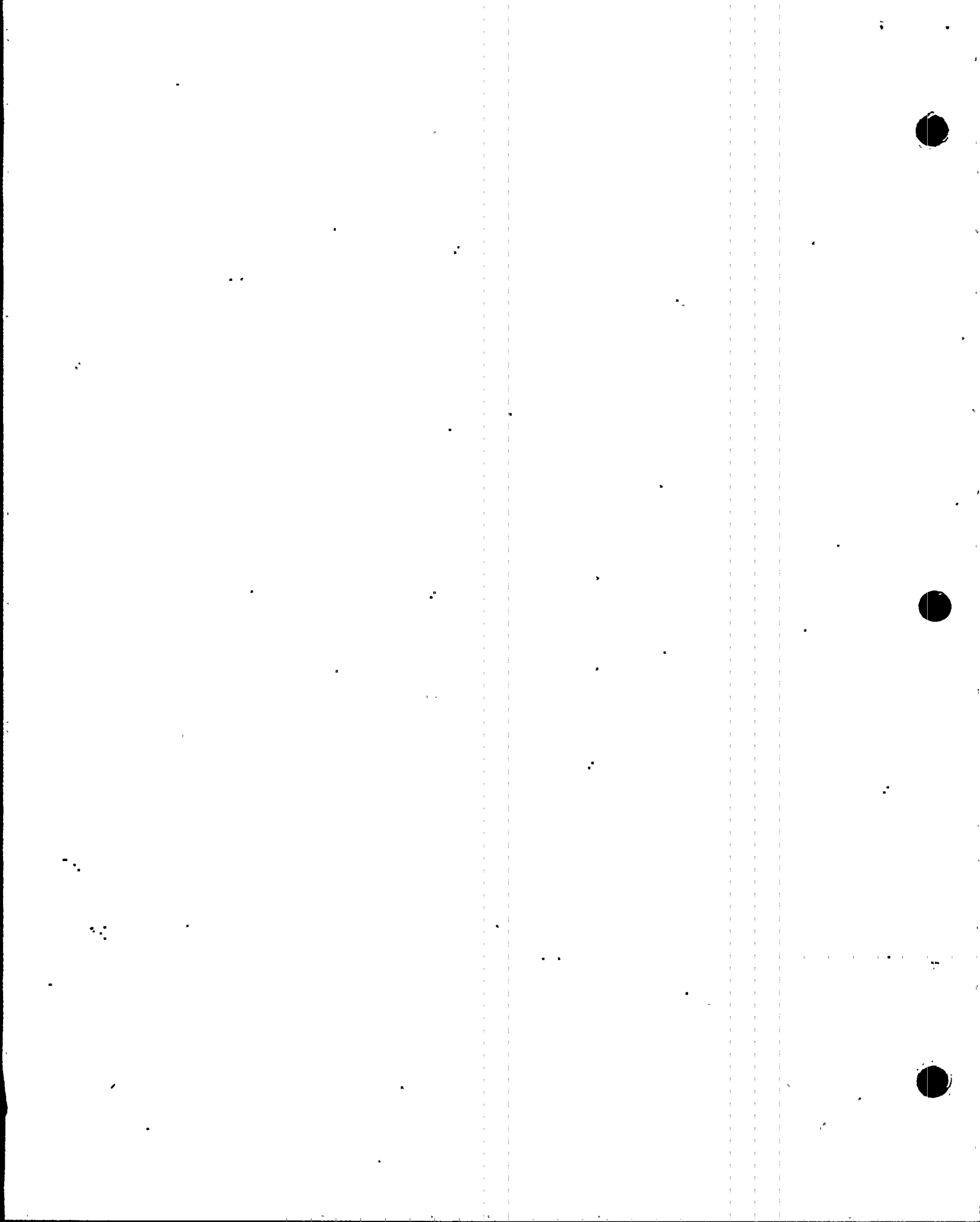
Susceptibility Evaluation Criteria

- General Exclusion Criteria
- Thermal Binding Exclusion Criteria
- Pressure Locking Exclusion Criteria
- Specific Scenarios for PL/TB
 - Focus on specific conditions of concern
 - Supports detailed analyses to confirm susceptibility later



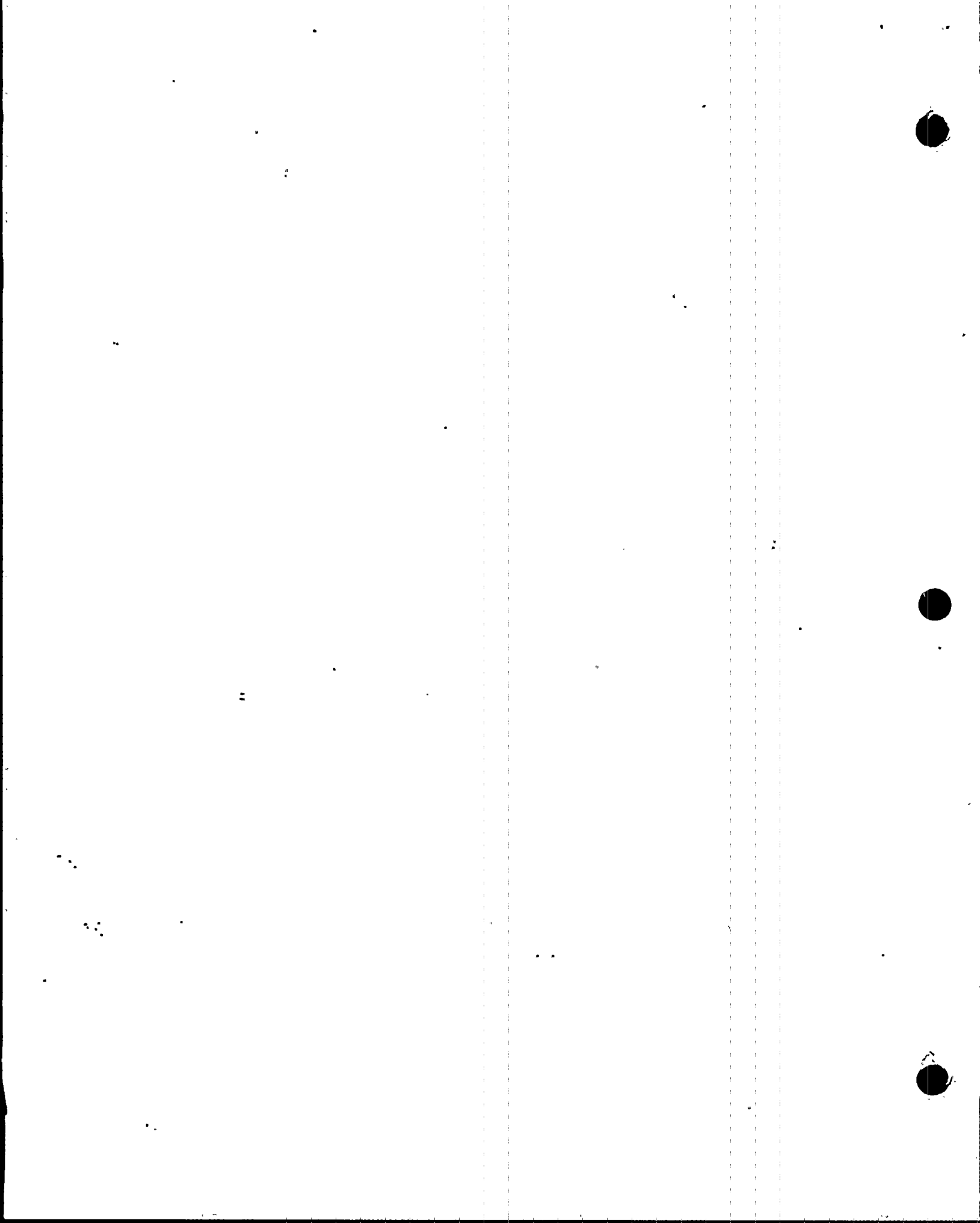
Risks Associated with GL 95-07

- 180 Day Completion Schedule
 - Concern: New issues arise during evaluation period
- Lack of Accepted Analytical Methodology
 - Concern: Developing methodologies in parallel with industry testing



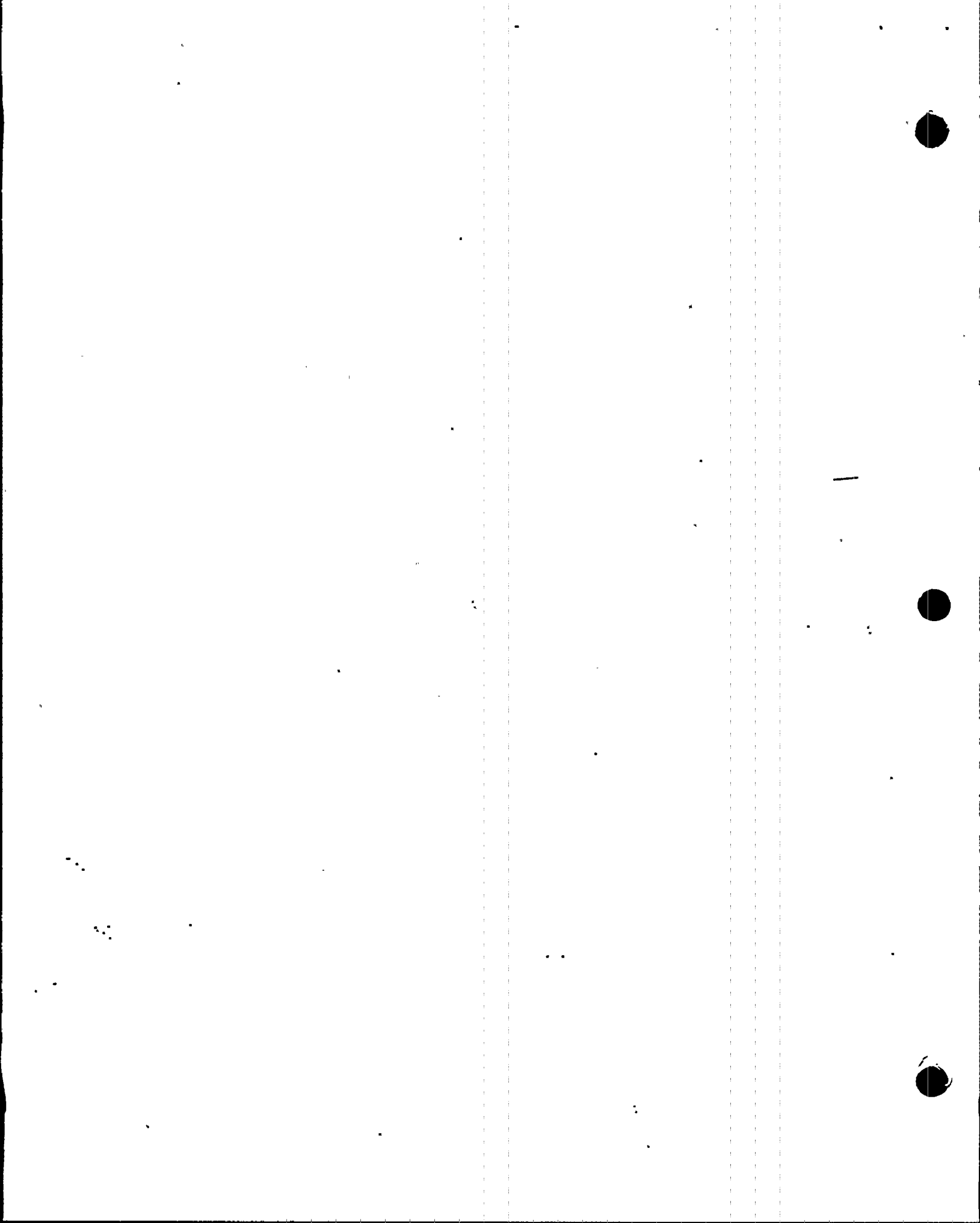
Plan for Addressing GL 95-07

- Develop Susceptibility Evaluation Criteria
- Develop PL/TB Analytical Methodology
- Perform Screening/Operability Evaluations
- Perform Detailed Analyses - Confirm Susceptibility
- Incorporate PL/TB into MOV Calculations
- Identify Corrective Actions as necessary



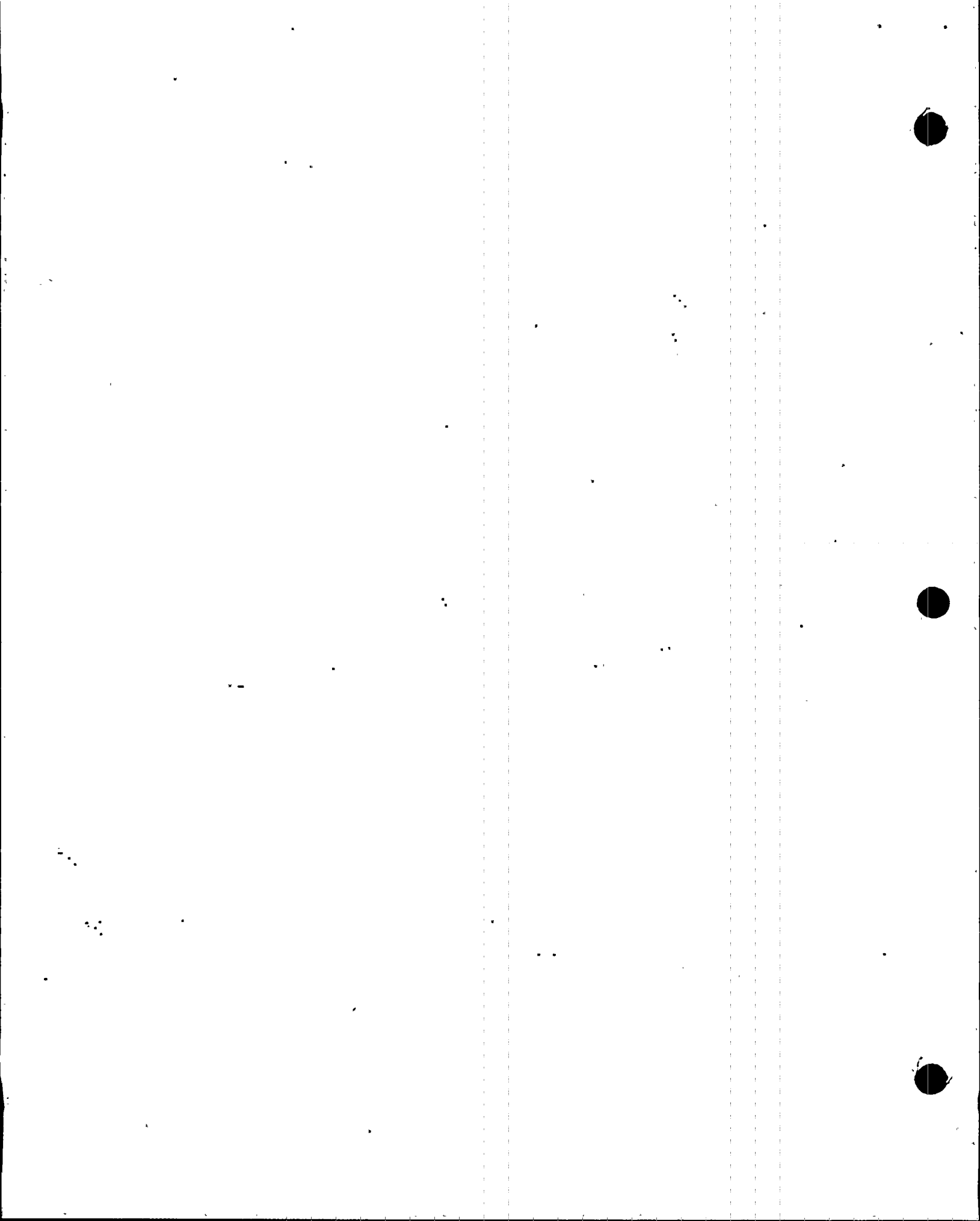
Previous PL/TB Experience

- Drilled holes in the discs of the following valves to prevent Pressure Locking:
 - LPCI & Core Spray injection valves
 - Feedwater Pump discharge valves
- Procedure changes made to the following valves:
 - HPCI & RCIC IB Steam Supply CIVs (PL)
 - RHR Heat Exchanger discharge valves (TB)



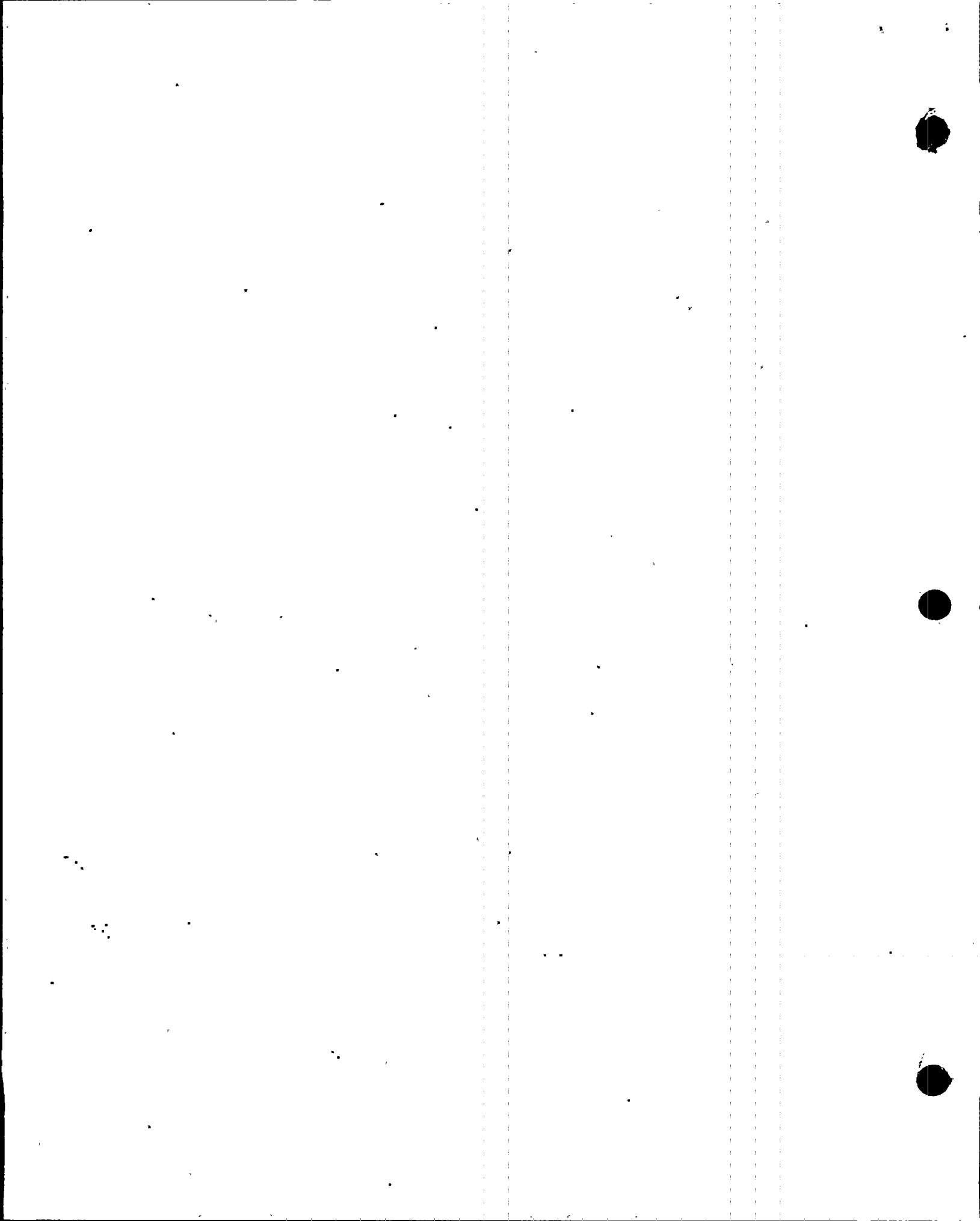
Previous PL/TB Experience

- In response to INPO SOER 84-7, all MOV/AOVs evaluated for PL/TB
 - 388 valves evaluated
 - 26 valves identified with PL/TB concerns
 - All valves handled thru our deficiency management program
 - Operability/Reportability
 - Corrective Actions



Previous PL/TB Experience

- Monitored industry activity via our Industry Events Review Program (IERP)
- Implemented corrective actions in response to these industry events
- Continue to monitor industry activity to improve overall plant safety



PP&L Perspective

- Previous Experience at Susquehanna SES
- Plan for Addressing Generic Letter 95-07
- Susceptibility Evaluation Criteria
- Pressure Locking/Thermal Binding
Analytical Methodology

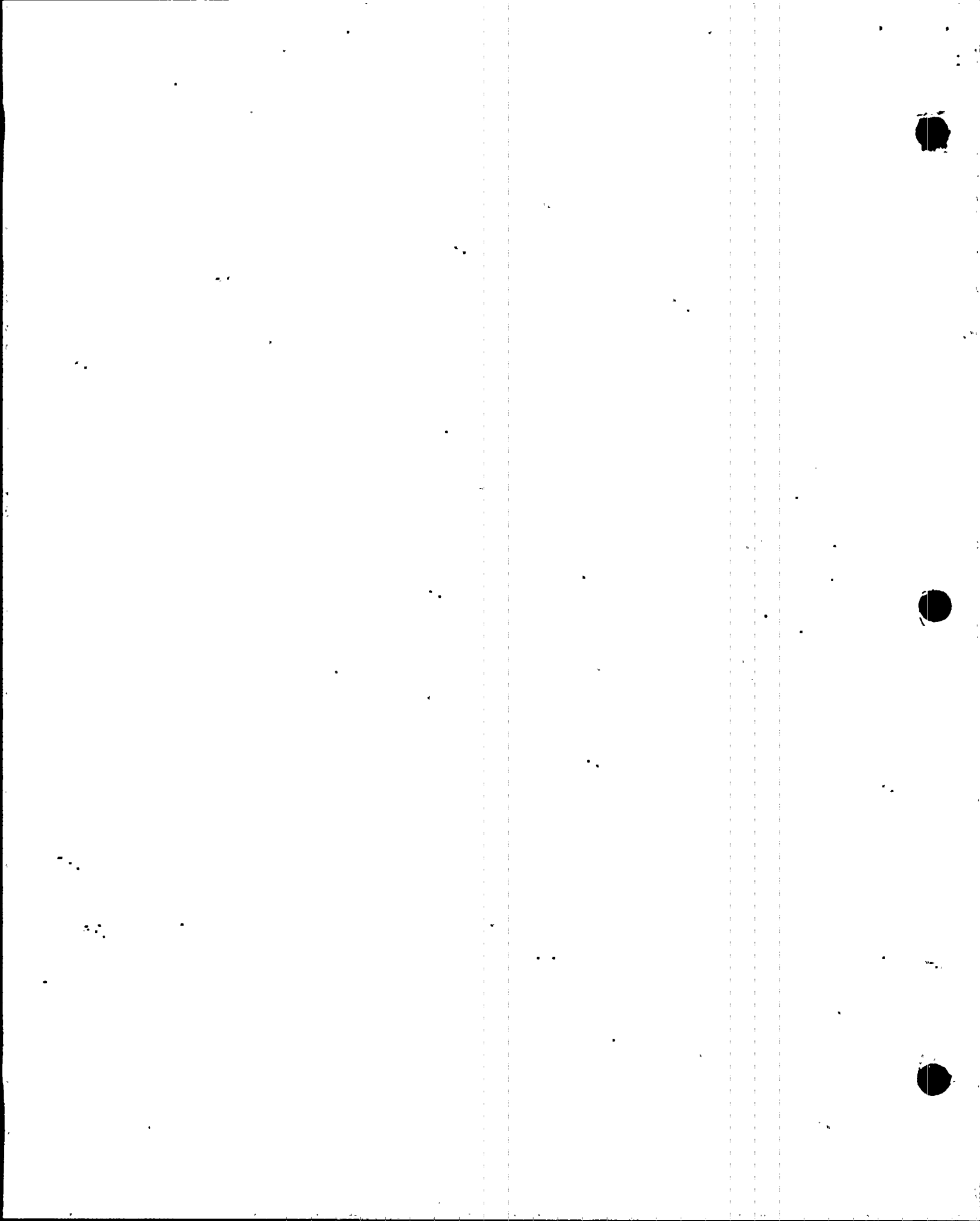
THERMAL GROWTH

$$\delta L = L_{TEE} (\alpha_{BODY} - \alpha_{STEM}) \Delta T_{BODY} + \\ (L_{SI} - L_{TEE}) [(\alpha_{BODY}) \Delta T_{BODY} - (\alpha_{STEM}) \Delta T_{SR}]$$

δL = RELATIVE THERMAL GROWTH

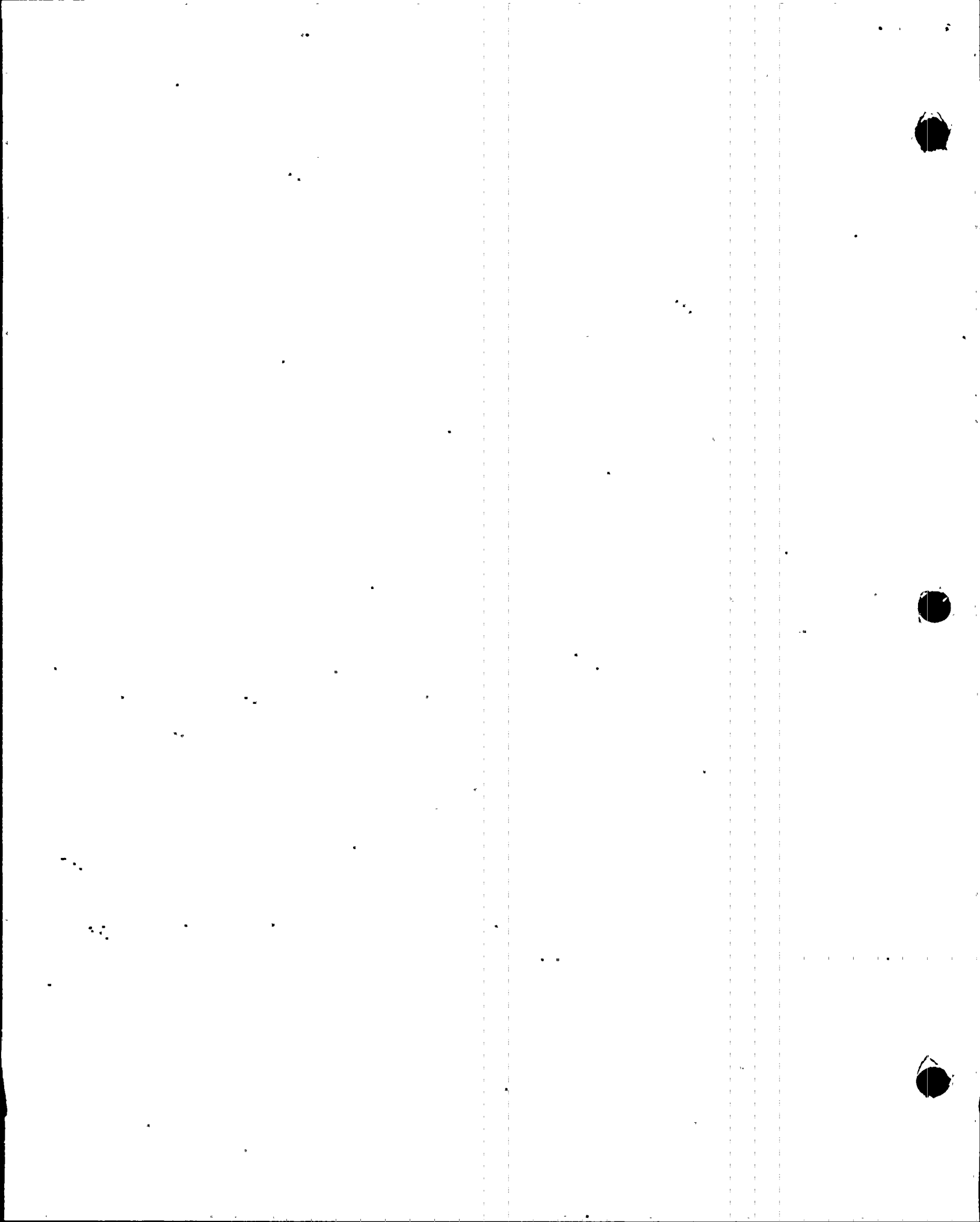
L_{SI} = LENGTH OF STEM INSERTED INTO BODY

ΔT_{SR} = ΔT OF STEM INITIALLY RETRACTED FROM
THE VALVE BODY



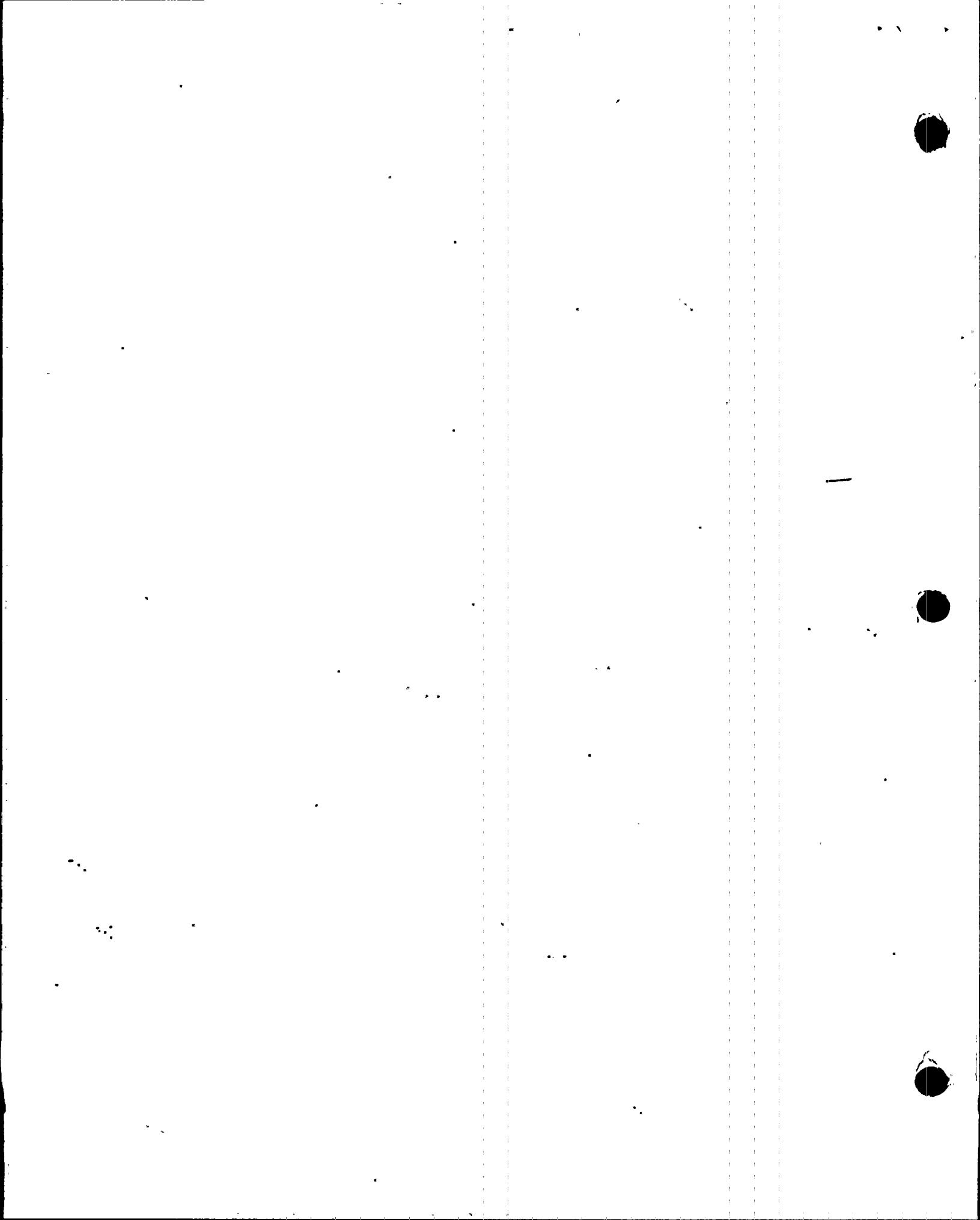
ASSUMPTIONS

- THRUST VS STEM POSITION IS LINEAR
- STEM SPEED IS CONSTANT
- ALL THERMAL GROWTH RESULTS IN WEDGING
- α_S & α_B ARE REASONABLE
- STEM OUTSIDE OF BODY IS COLD
- YOKE SHRINKAGE CANCELS OUT THAT OF EXTERNAL STEM
- ALL THERMAL FORCE ADDED TO UNSEATING



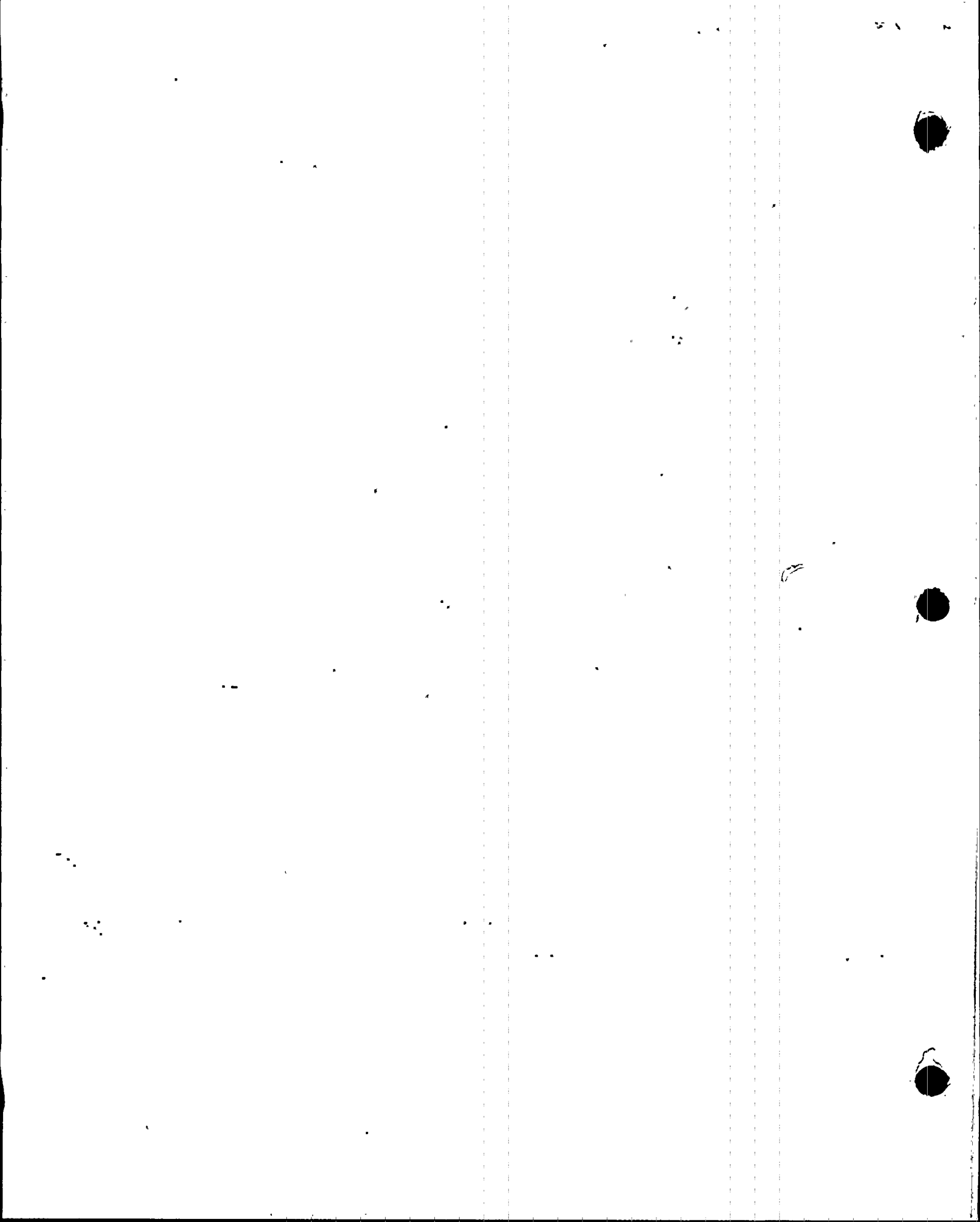
PHILOSOPHY

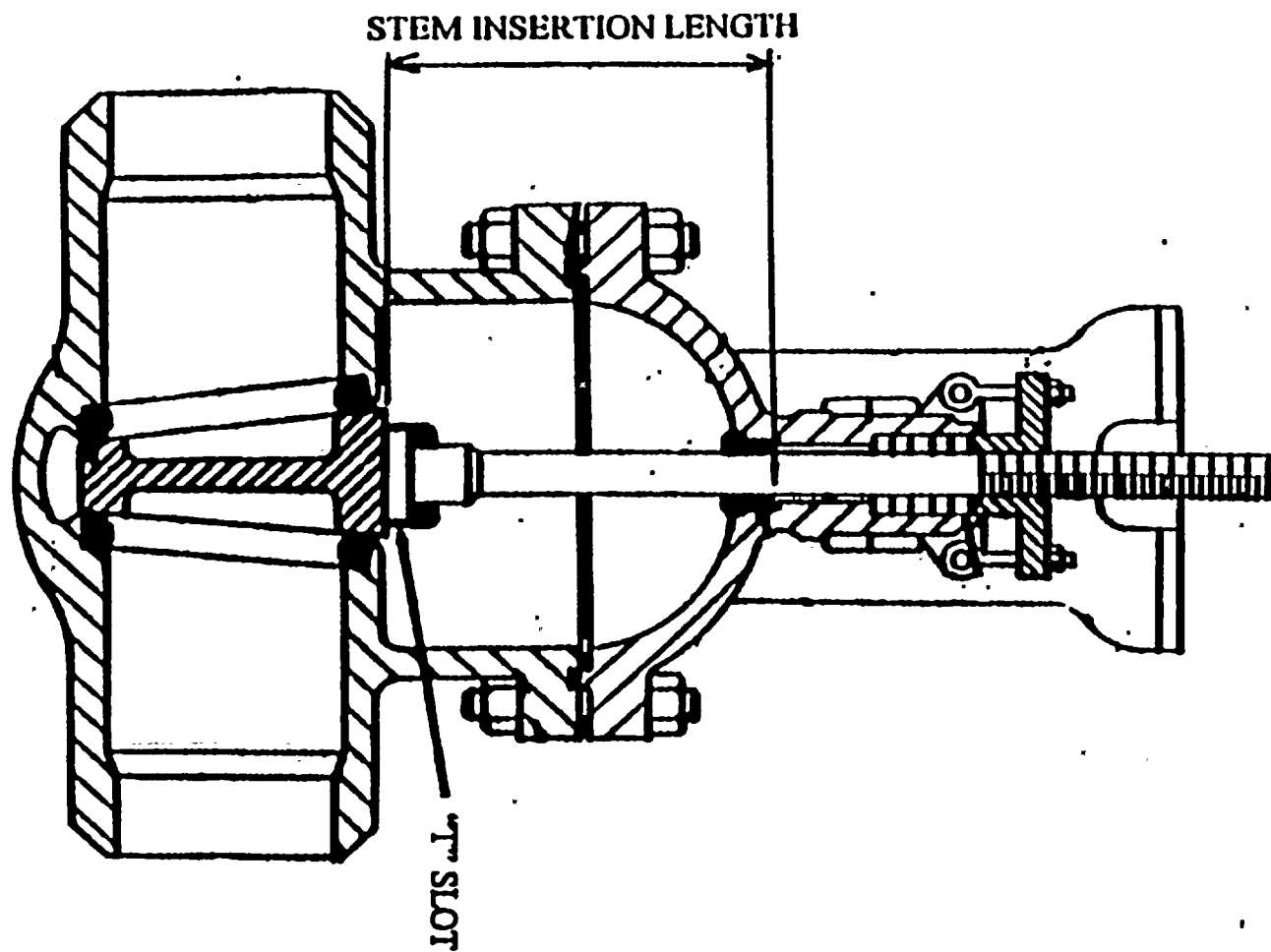
- ASSURE SAFE PLANT OPERATION
- USE BEST AVAILABLE INFORMATION
- CONSERVATISM FOR UNCERTAINTY



DETERMINE THERMAL GROWTH δL

VALVE CONDITION	THERMAL MOVEMENT	δL
HOT OPEN	NONE	0
CLOSED	STEM ELONGATION	$L_s \alpha_s \Delta T_1$
CYCLE VALVE	NEGATE STEM ELONGATION	$-L_s \alpha_s \Delta T_1$
COOLDOWN	STEM CONTRACTION BODY CONTRACTION	$L_s (\alpha_B - \alpha_s) \Delta T_2$

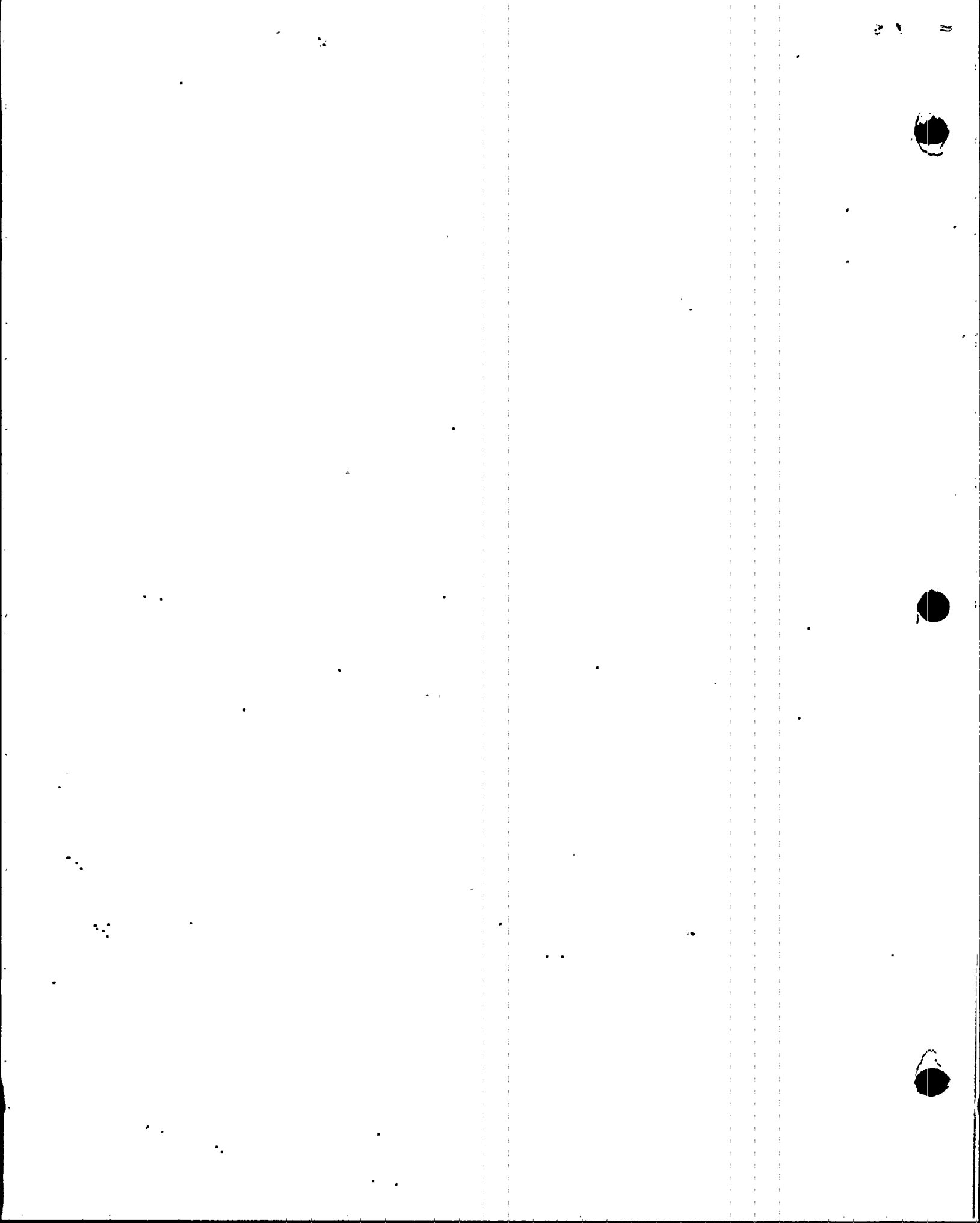






THERMAL BINDING

- SPECIFIC THERMAL BINDING EXAMPLE
- CAUSE: DIFFERENTIAL EXPANSION/ CONTRACTION
- BINDING MECHANISMS: DISK/BODY
 STEM/BODY
- THERMAL COEFFICIENTS: $\alpha_{\text{BODY}} = \alpha_{\text{DISK}}$
 $\alpha_{\text{BODY}} > \alpha_{\text{STEM}}$
- VALVE POSITION: CLOSED
- SAFETY FUNCTION: CLOSE



ASSUMPTIONS

- PL / TB FORCES ADDITIVE TO STATIC UNSEATING
- MOV CAPABILITY BASED UPON G.L. 89-10 CRITERIA
- PL/TB MOV SCENARIO USED TO DEVELOP G.L.

89-10 ALLOWABLE THRUST

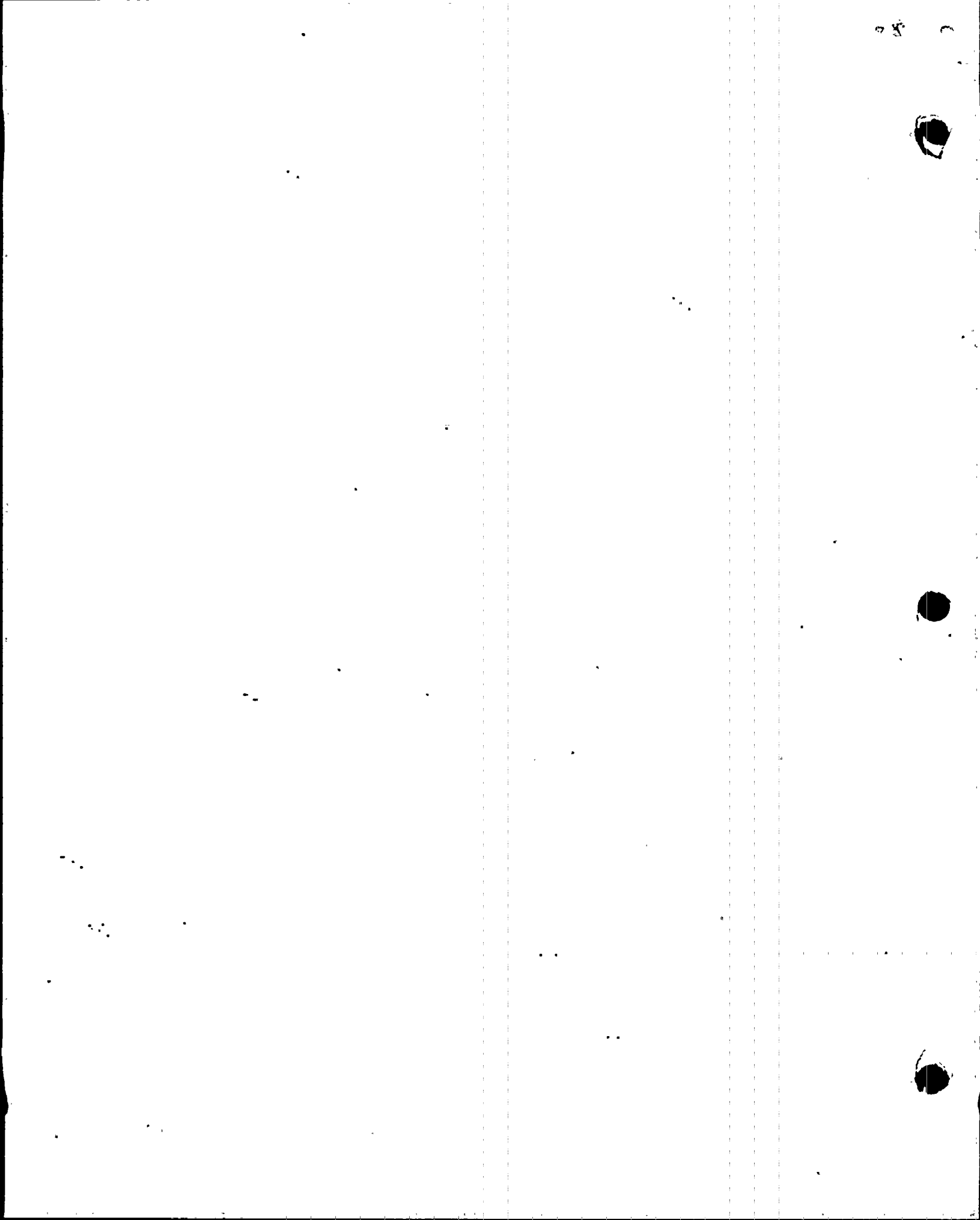
CONSIDER - TEMPERATURE

- PRESSURE
- VOLTAGE
- TIMELINE



PP&L EXPERIENCE

VALVE	INITIATOR	ACTION	PREVENTS
RHR F015	84-07	MODIFICATION	PL
CS F005	84-07	MODIFICATION	PL
HPCI F002	INPO OE 5906	PROCED. REV.	TIPL
RCIC F007	INPO OE 5906	PROCED. REV.	TIPL
RHR F003	SSES TB	PROCED. REV.	TB
FW 0603	SSES TIPL	MODIFICATION	TIPL

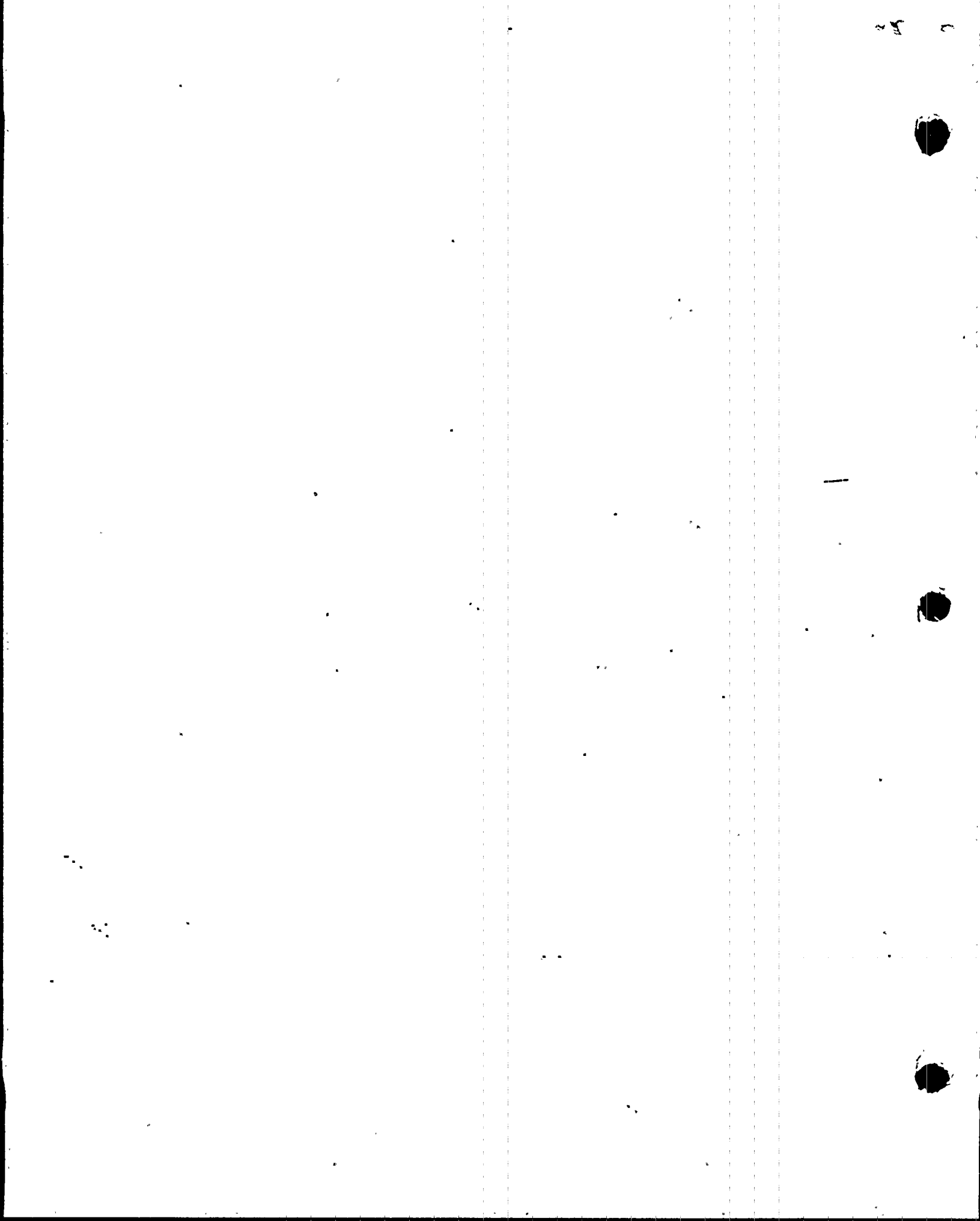


GENERIC LETTER 95-07

PRESSURE LOCKING/THERMAL BINDING

ANALYTICAL METHODOLOGY

CONSIDERATIONS



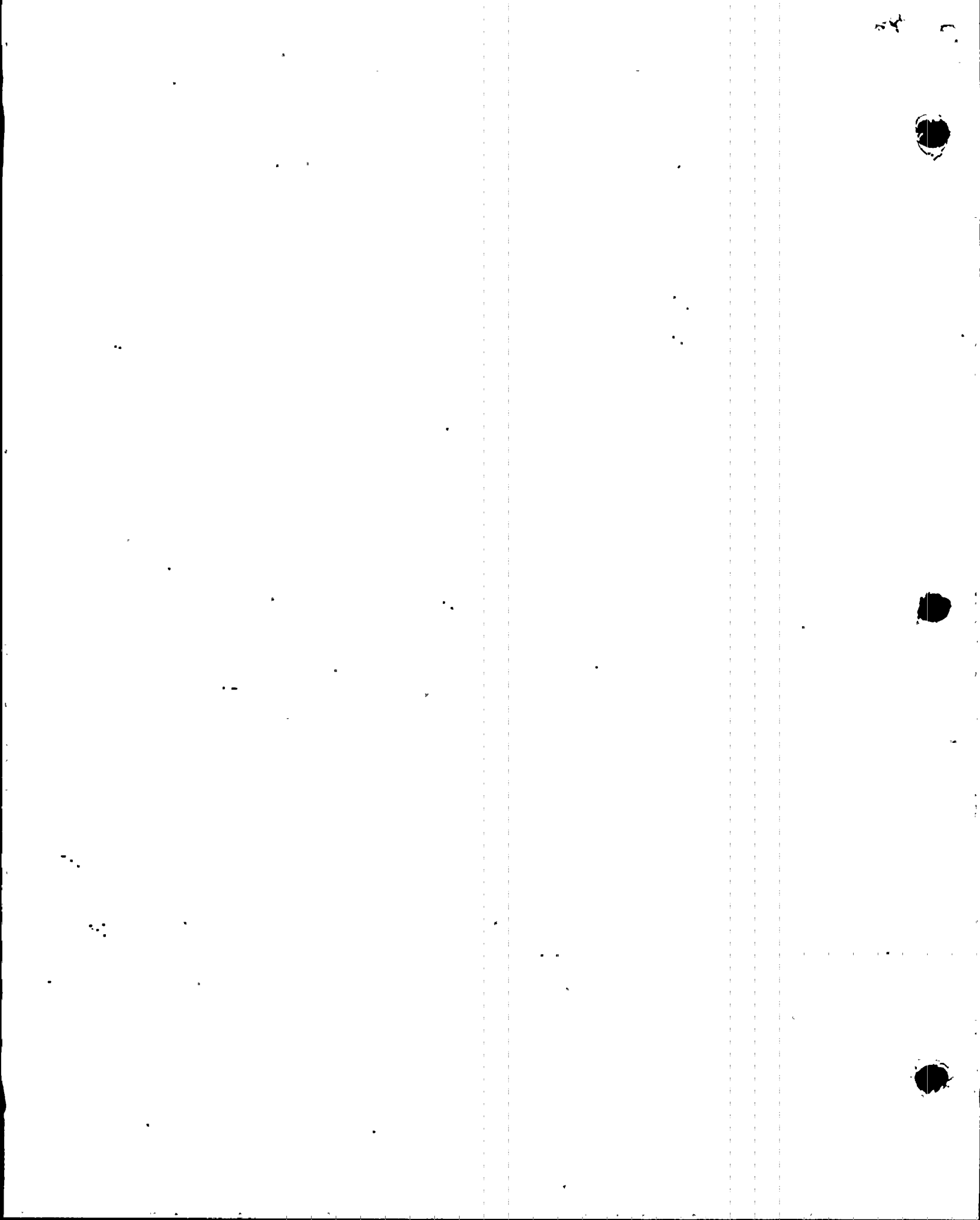
CONVERT THERMAL GROWTH TO FORCE

$$\frac{\Delta \text{THRUST}}{\delta L} = \frac{\Delta \text{THRUST/SEC}}{V_{ST}}$$

$\Delta \text{THRUST/SEC}$: FROM VOTES

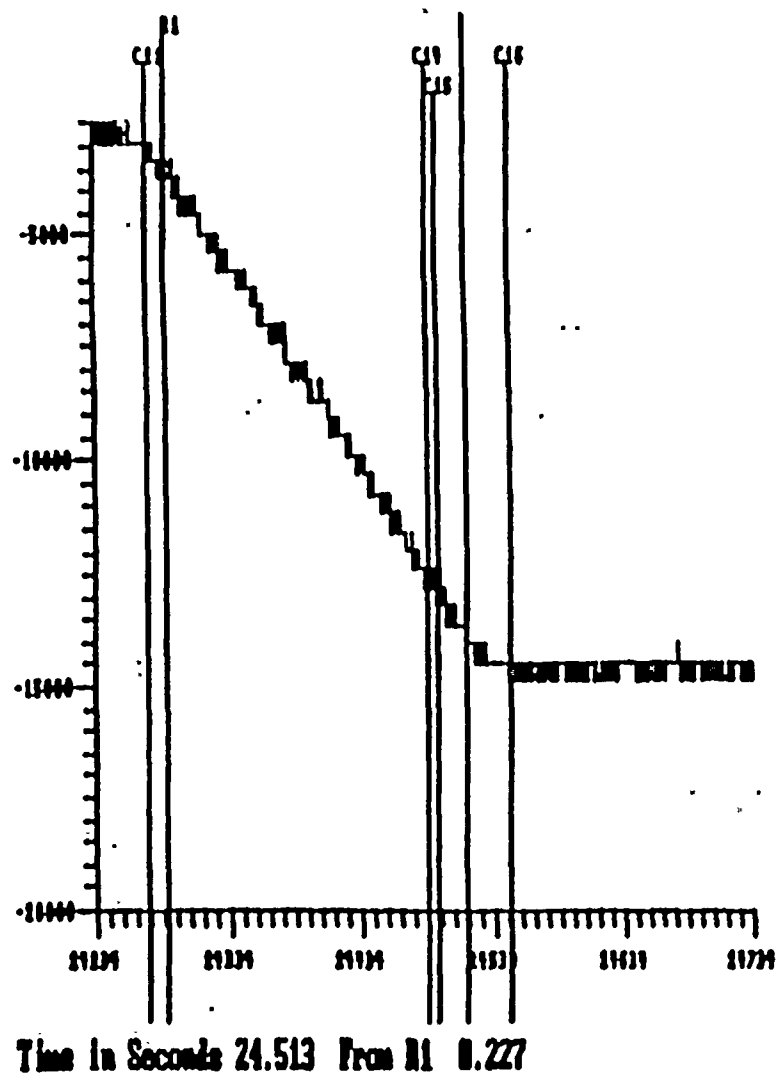
$$V_{ST} = (\text{MOTOR RPM}) (\text{STEM LEAD}) (1/60)/\text{OAR}$$

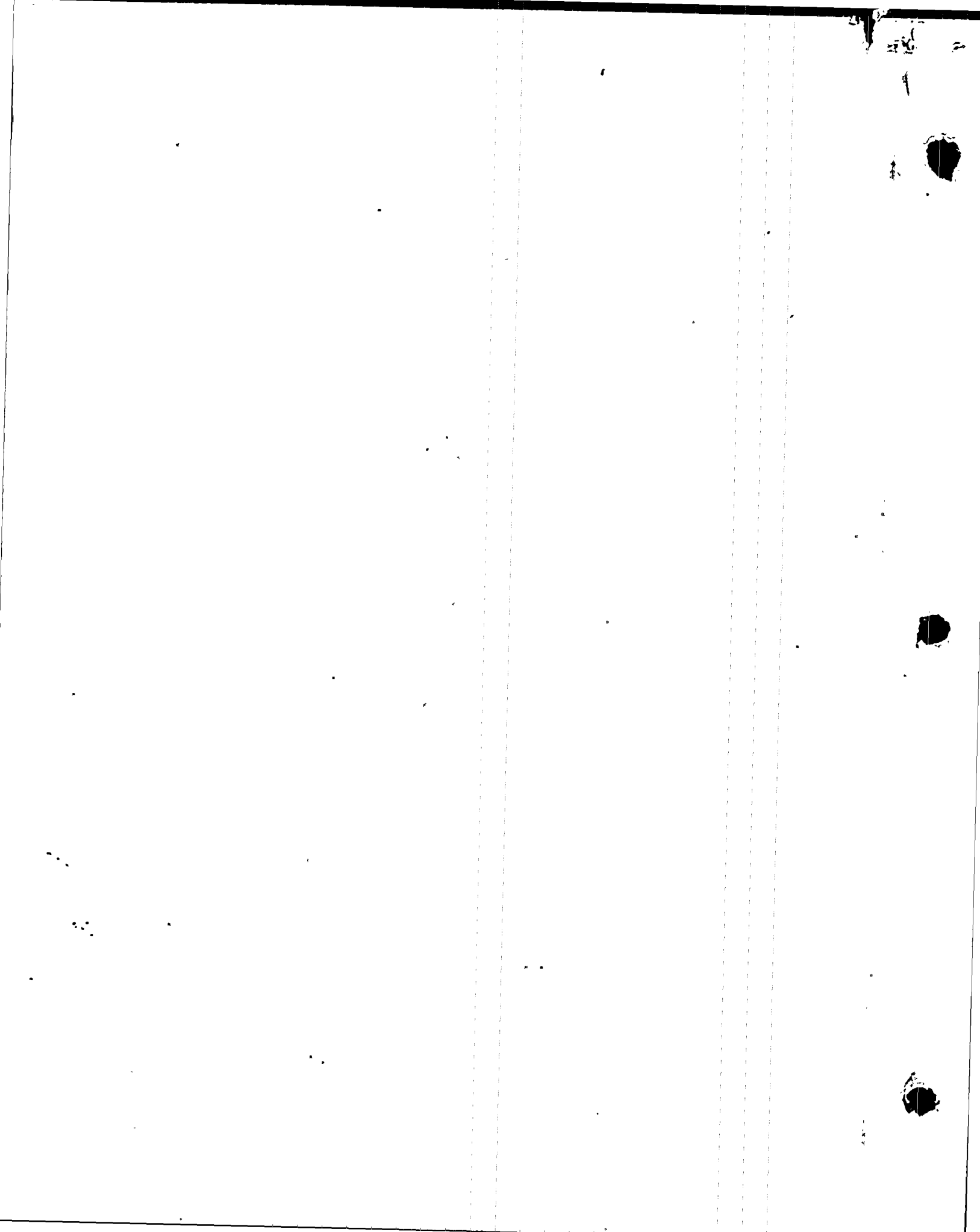
$$\Delta \text{THRUST} = \frac{[\Delta \text{THRUST/SEC}]}{V_{ST}} \delta L$$



Test: 5
10/14/93
15:46:31

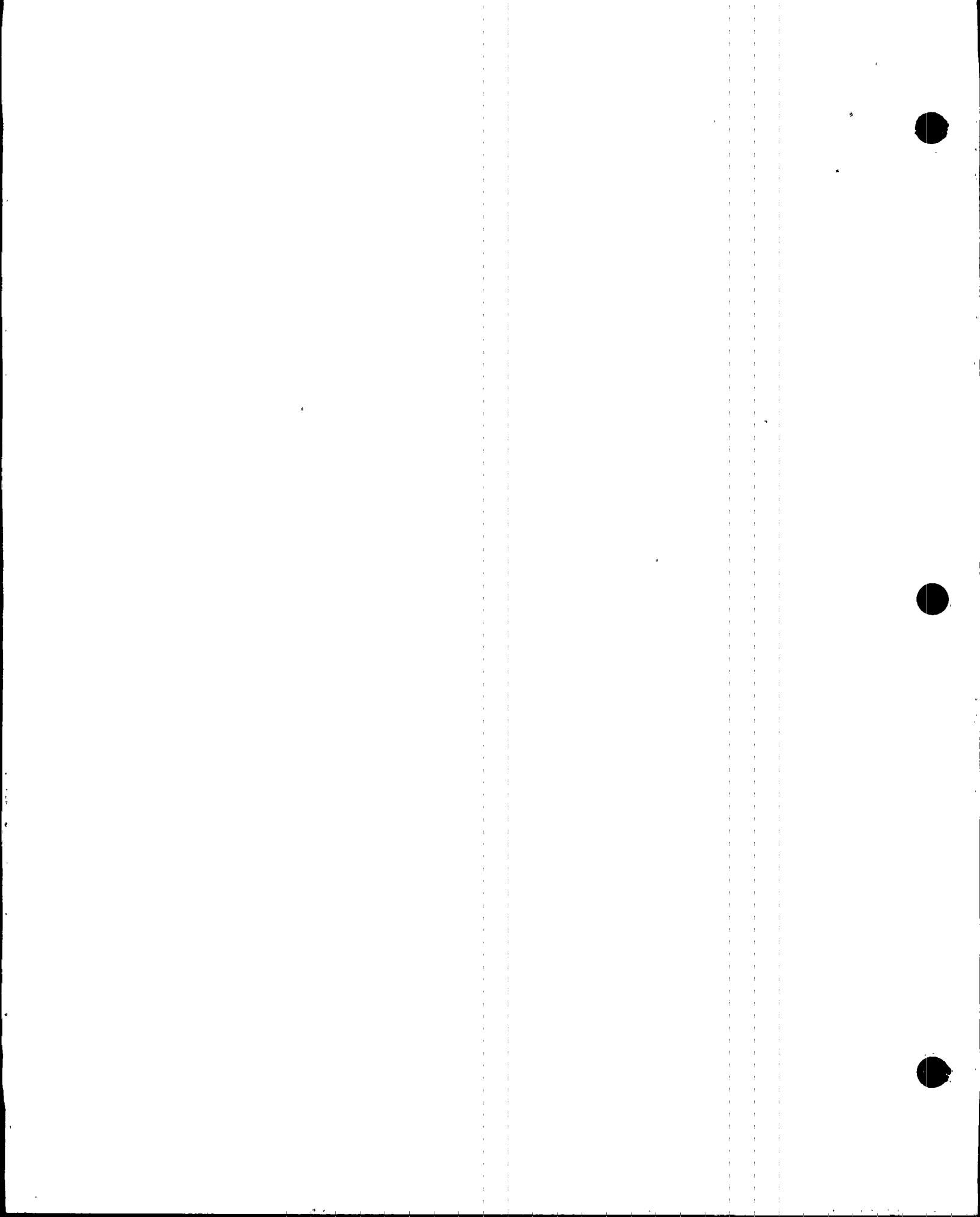
CALIBRATOR/
ALX SENSOR
-14814.5
(lbs)





**TURKEY POINT UNIT 3
1995 REFUELING OUTAGE**

Summary of Inservice Inspection Examinations.



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

PAGE: 1

REACTOR PRESSURE VESSEL

ZONE NUMBER: 3-001

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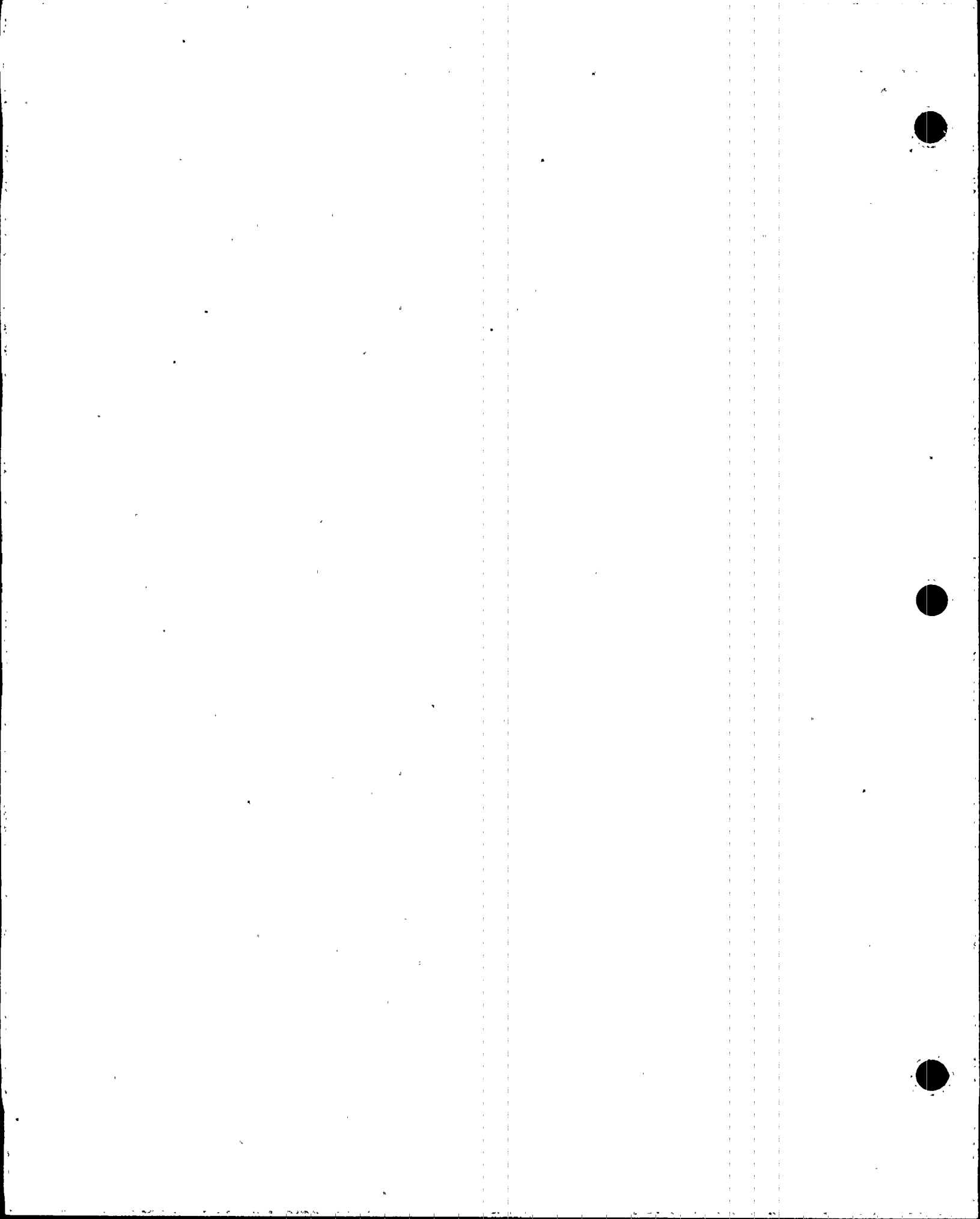
SUMMARY EXAMINATION AREA
NUMBER IDENTIFICATION

CATGY EXAM
ITEM NO METHOD PROCEDURE

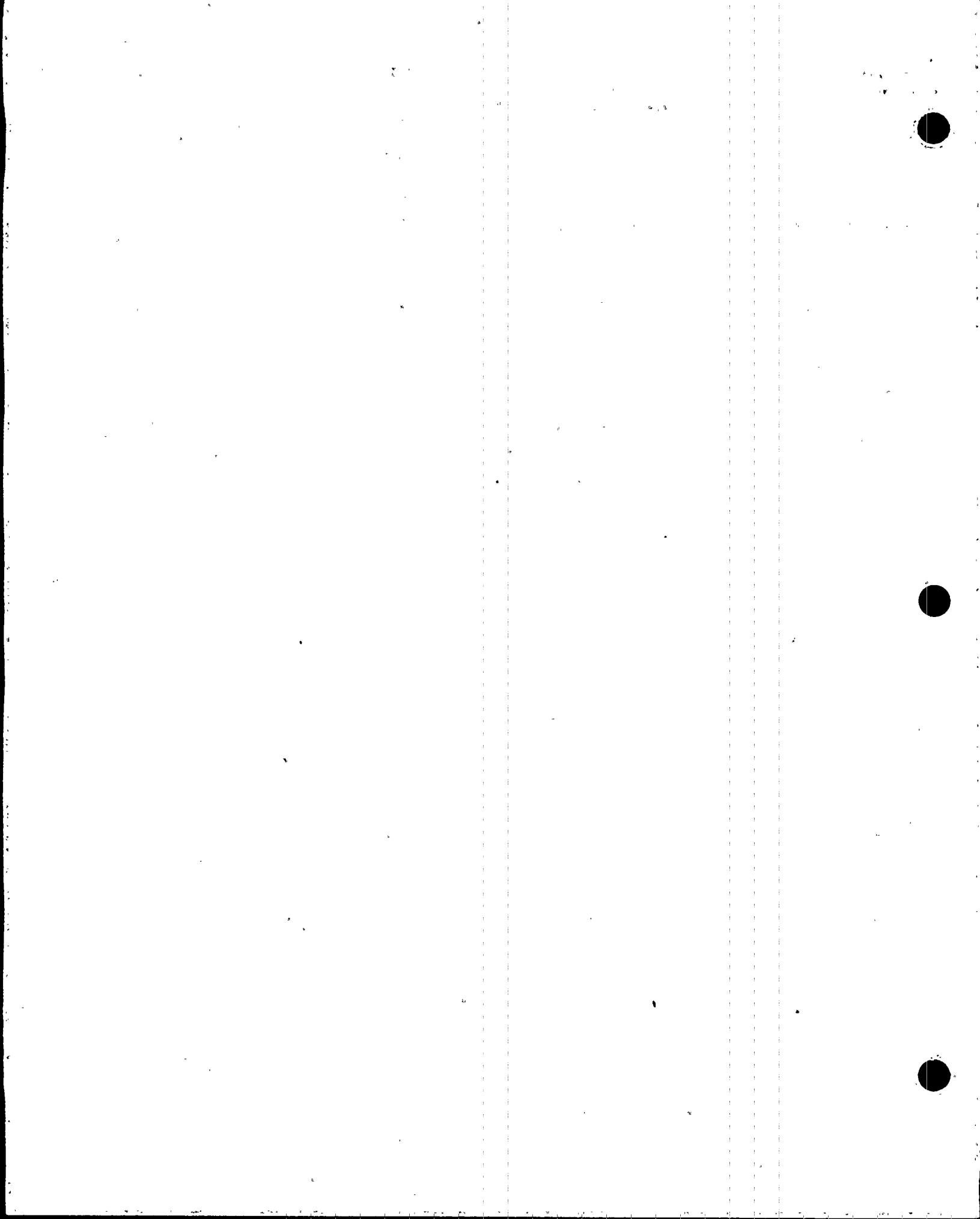
E I O E REMARKS
C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-M-4001

014515	3-CH-S-19 THRU 40 RPV STUDS	B-G-1 B6.30	MT UT 80 UT 50	NDE 2.2-1 NDE 5.7-1 NDE 5.7-1	X - - - X - - - X - - -	9/16/95 - MT COMPLETE, 9/18/95 - UT COMPLETE, EXAMINED STUDS 19 THRU 40 **UT-11**
014535	3-CH-N-19 THRU 40 RPV CLOSURE HEAD NUTS	B-G-1 B6.10	MT UT 45	NDE 2.2-1 NDE 5.10-1	X - - - X - - -	9/16/95 - MT COMPLETE, 9/18/95 - UT COMPLETE, EXAMINED NUTS 19 THRU 40 **UT-25**
014555	3-CH-LW-19 THRU 40 RPV LARGE WASHERS	B-G-1 B6.50	VT-1	NDE 4.1-7	X - - -	9/14/95 - VT-1 COMPLETE, EXAMINED LARGE WASHERS 19 THRU 40
014575	3-CH-SW-19 THRU 40 RPV SMALL WASHERS	B-G-1 B6.50	VT-1	NDE 4.1-6	X - - -	9/14/95 - VT-1 COMPLETE, EXAMINED SMALL WASHERS 19 THRU 40



9/18/95 - VT-1 COMPLETE, 16 BOLTS
EXAMINED, 1 BOLT REJECTED WITH 3
FLATTENED THREADS, BOLT WAS REPLACED,
EXAMINED AT PLANT REQUEST PER CONDITION
REPORT 95-761



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

PAGE: 3

STEAM GENERATOR B PRIMARY SIDE

ZONE NUMBER: 3-004

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SUMMARY EXAMINATION AREA

CATGY

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NUMBER IDENTIFICATION

ITEM NO

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PROCEDURE

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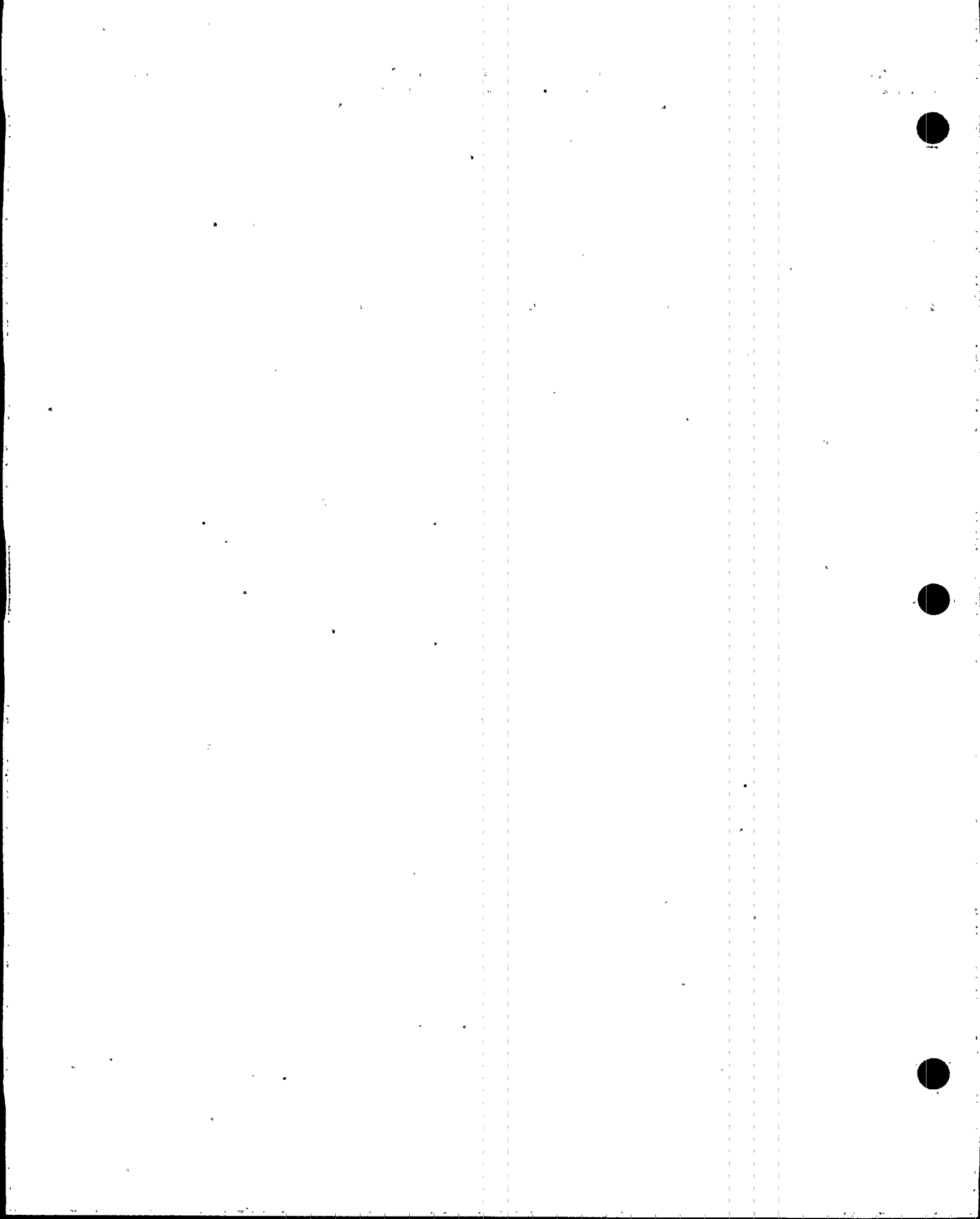
REMARKS

C G M R

CALIBRATION BLOCK

REF. DWG. NO. 5613-M-4004

040500	3-SGB-I BOLTING	B-G-2	VT-1	NDE 4.1-16	X - - X	9/18/95 - VT-1 COMPLETE, 16 BOLTS
	STEAM GENERATOR INLET MANWAY	B7.30	CR	95-761		EXAMINED, 2 BOLTS REJECTED, ONE WITH
	BOLTING		VT-1	NDE 4.1-18	X - - -	MISSING THREAD, ONE WITH FLATTENED
						THREAD CROWNS, BOTH BOLTS REPLACED,
						EXAMINED AT PLANT REQUEST PER CONDITION
						REPORT 95-761
040600	3-SGB-O BOLTING	B-G-2	VT-1	NDE 4.1-17	X - - X	9/18/95 - VT-1 COMPLETE, EXAMINED 16
	STEAM GENERATOR OUTLET MANWAY	B7.30	CR	95-761		BOLTS, 2 BOLTS REJECTED, FLATTENED
	BOLTING		VT-1	NDE 4.1-18	X - - -	THREADS, BOLTS WERE REPLACED, EXAMINED
						AT PLANT REQUEST PER CONDITION REPORT
						95-761



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

PAGE: 4

STEAM GENERATOR C PRIMARY SIDE

ZONE NUMBER: 3-005

ASME:

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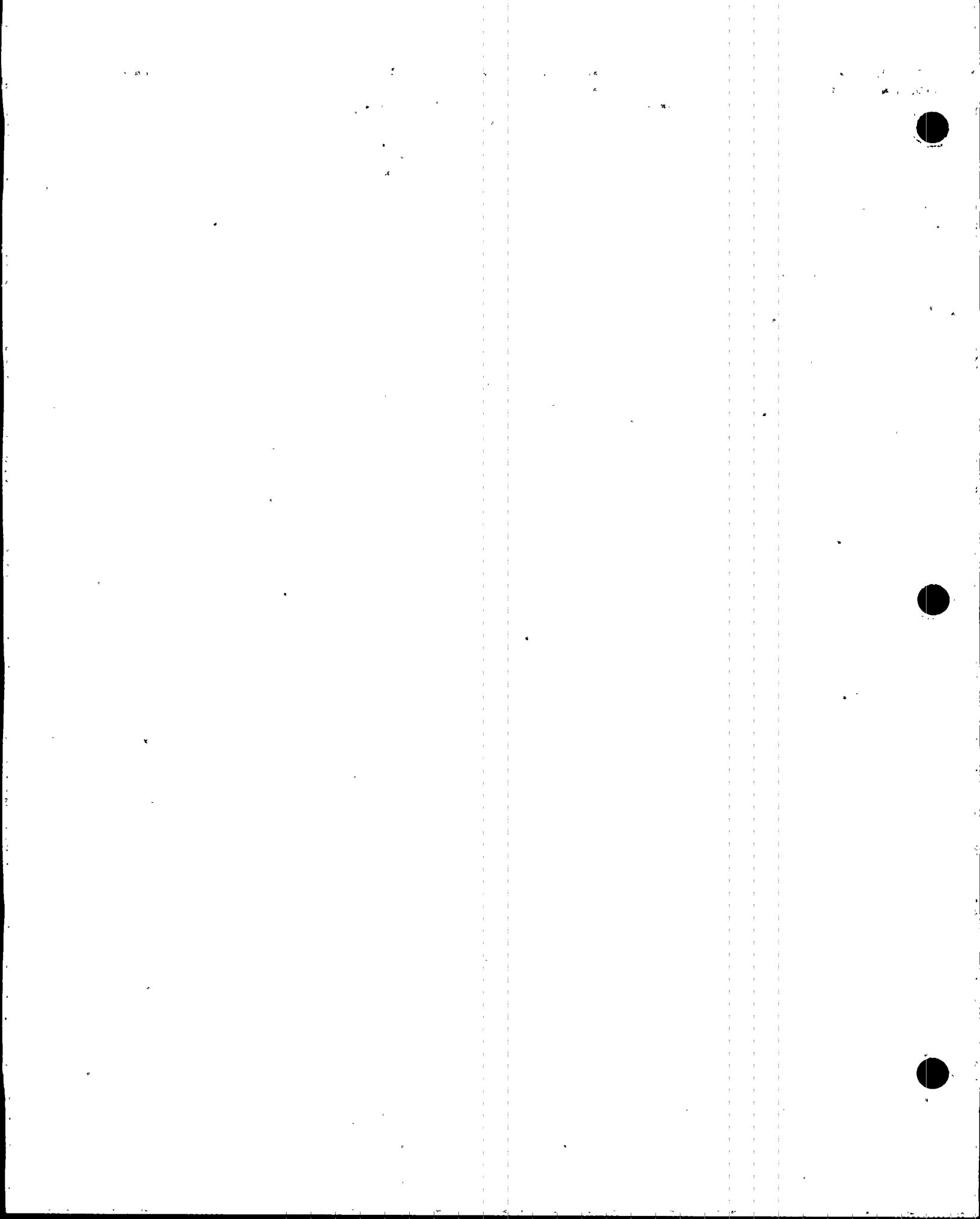
REMARKS

CALIBRATION BLOCK

SUMMARY EXAMINATION AREA
NUMBER IDENTIFICATION

REF. DWG. NO. 5613-M-4005

041300	3-SGC-I BOLTING	B-G-2	VT-1	NDE 4.1-10	X - - X	9/18/95 - VT-1 COMPLETE, 28 BOLTS
	STEAM GENERATOR INLET MANWAY	B7.30	CR	95-761		EXAMINED FOR BASELINE, 4 BOLTS EXAMINED
	BOLTING		VT-1	NDE 4.1-11	X - - -	WITH MT, EXAMINED AT PLANT REQUEST PER
			VT-1	NDE 4.1-12	X - - -	CONDITION REPORT 95-761
			MT	NDE 2.2-2	X - - -	
041400	3-SGC-O BOLTING	B-G-2	VT-1	NDE 4.1-10	X - - X	9/18/95 - VT-1 COMPLETE, 28 BOLTS
	STEAM GENERATOR OUTLET MANWAY	B7.30	CR	95-761		EXAMINED FOR BASELINE, 4 BOLTS MT,
	BOLTING		VT-1	NDE 4.1-11	X - - -	EXAMINED AT PLANT REQUEST PER CONDITION
			VT-1	NDE 4.1-12	X - - -	REPORT 95-761
			MT	NDE 2.2-2	X - - -	



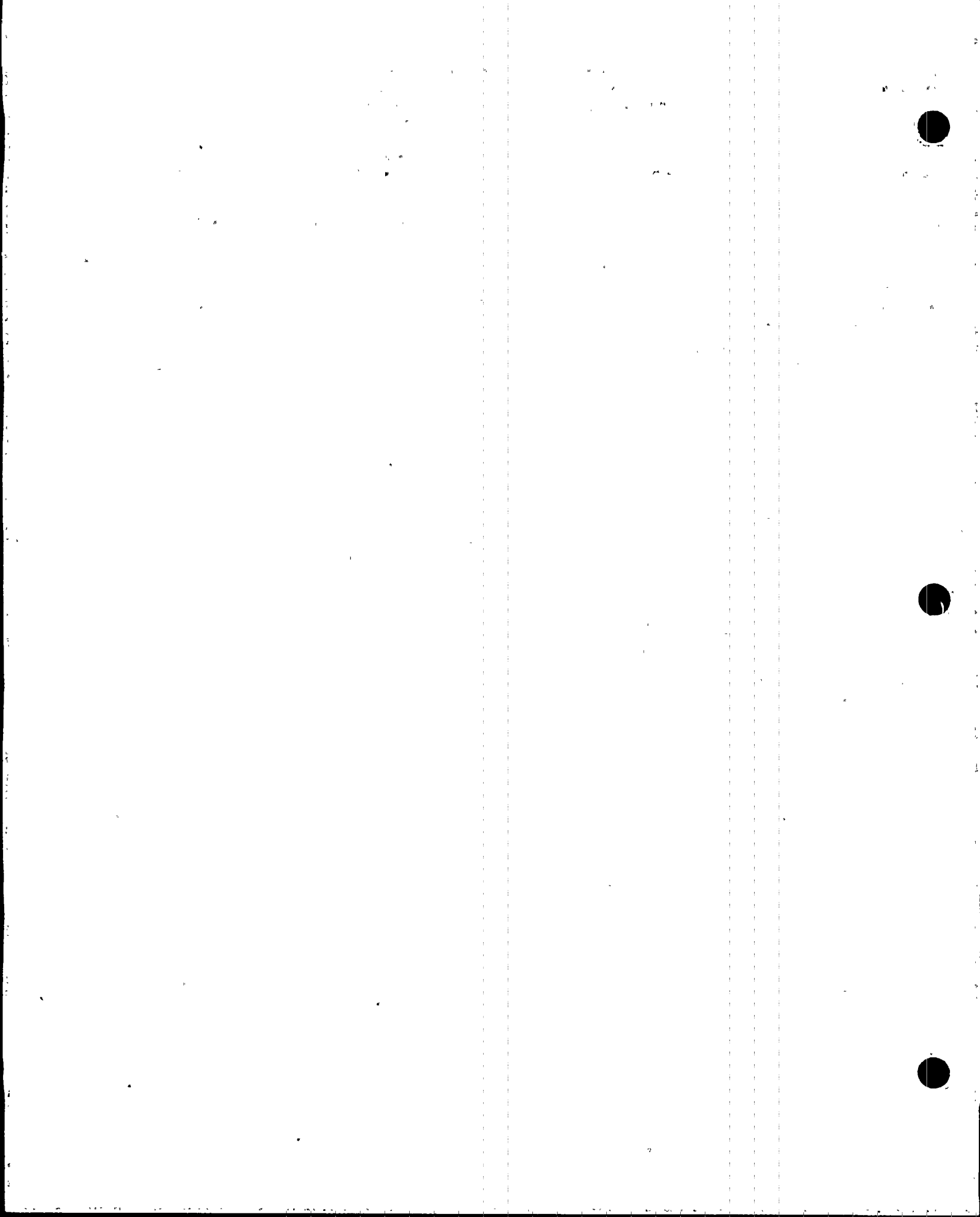
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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PRESSURIZER

ZONE NUMBER: 3-006		ASME			N I O	
		SEC. XI			O N G T	
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS
					C G H R	**CALIBRATION BLOCK**
<u>REF. DWG. NO. 5613-M-4002</u>						
042000	3-PRZ-SUPPORT PRESSURIZER VESSEL SUPPORT	F-A F1.40V	VT-3	NDE 4.3-14	X - - -	9/18/95 - VT-3 COMPLETE
042800	3-PLW-2 UPPER SHELL LONG SEAM	B-B B2.12	UT 0 UT 45 UT 60 UT 70	NDE 5.1-3 NDE 5.1-3 NDE 5.1-3 NDE 5.1-3	X - - - X - - - X - - - X - - -	9/17/95 - UT COMPLETE **UT-6**
042900	3-PCW-7 UPPER SHELL TO HEAD	B-B B2.11	UT 0 UT 45 UT 60 UT 70	NDE 5.1-3 NDE 5.1-3 NDE 5.1-3 NDE 5.1-3	X - - - - - - X - - - X X - - -	9/17/95 - UT COMPLETE, ACCEPTABLE INCLUSIONS **UT-8**
043000	RV-03-551A-IR SAFETY NOZZLE INNER RADIUS SECTION	B-D B3.120	UT 60	NDE 5.13-2	X - - -	9/17/95 - UT COMPLETE **UT-8**
043100	RV-03-551B-IR SAFETY NOZZLE INNER RADIUS SECTION	B-D B3.120	UT 60	NDE 5.13-2	X - - -	9/17/95 - UT COMPLETE **UT-8**
043200	RV-03-551C-IR SAFETY NOZZLE INNER RADIUS SECTION	B-D B3.120	UT 60	NDE 5.13-2	X - - -	9/17/95 - UT COMPLETE **UT-8**



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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PRESSURIZER

ZONE NUMBER: 3-006

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SUMMARY EXAMINATION AREA
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ITEM NO METHOD PROCEDURE

REF. DWG. NO: 5613-M-4002

043300 RN-03-1-IR
RELIEF NOZZLE INNER RADIUS
SECTION

B-D UT 60 NDE 5.13-2
B3.120

X - - - 9/17/95 - UT COMPLETE

UT-8

043400 SP-03-1-IR
SPRAY NOZZLE INNER RADIUS
SECTION

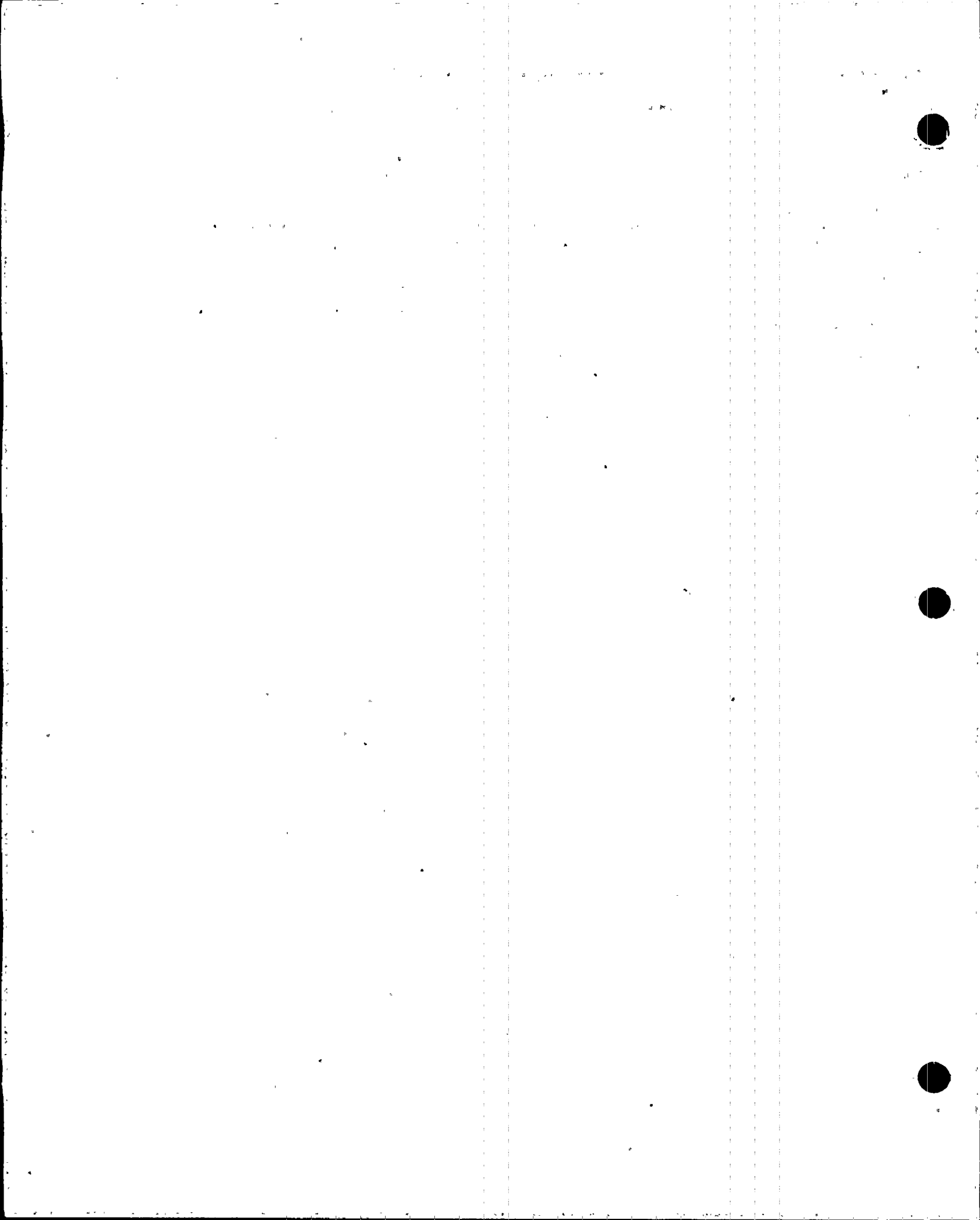
B-D UT 30 NDE 5.13-1
B3.120 UT 60 NDE 5.13-1

X - - - 9/17/95 - UT COMPLETE, LIMITED
X - - - EXAMINATION DUE TO RAISED LETTERS IN
EXAMINATION AREA AND NOZZLE
CONFIGURATION
UT-8

043500 03-PZR-1 THRU 16
PRESSURIZER MANWAY BOLTING

B-G-2 VT-1 NDE 4.1-8
B7.20

X - - - 9/18/95 - VT-1 COMPLETE



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3.
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM LOOP A COLD LEG

ZONE NUMBER: 3-009		ASME			N I O
		SEC. XI			O N G T
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E REMARKS
					C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-766-S SH. 1

045700	27.5"-RCS-1307-2	B-J	PT	NDE 3.3-21	X - - - 9/20/95 - PT COMPLETE, 9/21/95 - UT
	10" BRANCH CONNECTION	B9.31	UT 45	NDE 5.4-16	- - X - COMPLETE, INSIDE SURFACE GEOMETRY,
			UT 60	NDE 5.4-16	- - X - LIMITED EXAMINATION DUE TO BRANCH
					CONNECTION CONFIGURATION
					502979-PI-61

DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM LOOP B HOT LEG

ZONE NUMBER: 3-011

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SUMMARY EXAMINATION AREA

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NUMBER IDENTIFICATION

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CALIBRATION BLOCK

REF. DWG. NO. 5613-P-766-S SH. 2

047500 29"-RCS-1305-BC3
12" BRANCH CONNECTION

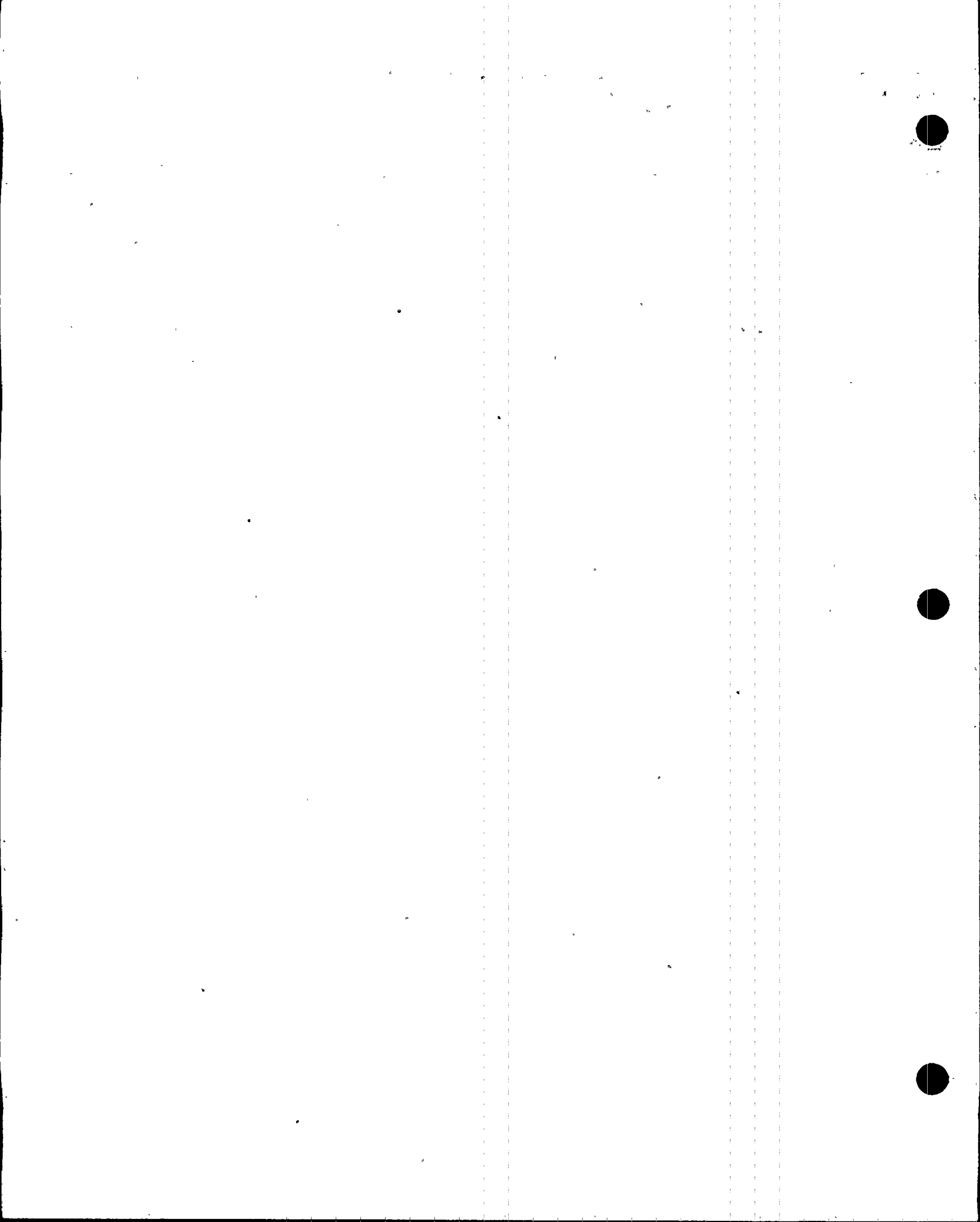
B-J'
B9.31

UT 45
UT 60

NDE 5.4-14
NDE 5.4-14

- - X -
- - X -

9/24/95 - UT COMPLETE, INNER RADIUS
GEOMETRY, SURFACE EXAMINATION PERFORMED
DURING THE PREVIOUS OUTAGE, LIMITED
EXAMINATION DUE TO BRANCH CONNECTION
CONFIGURATION
BV-12-2.91-SS



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM LOOP B COLD LEG

ZONE NUMBER: 3-012

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SUMMARY EXAMINATION AREA

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CALIBRATION BLOCK

REF. DWG. NO. 5613-P-766-S SH. 2

048400 27.5"-RCS-1306-4
10" BRANCH CONNECTION

B-J

UT 45

NDE 5.4-15

B9.31

UT 60

NDE 5.4-15

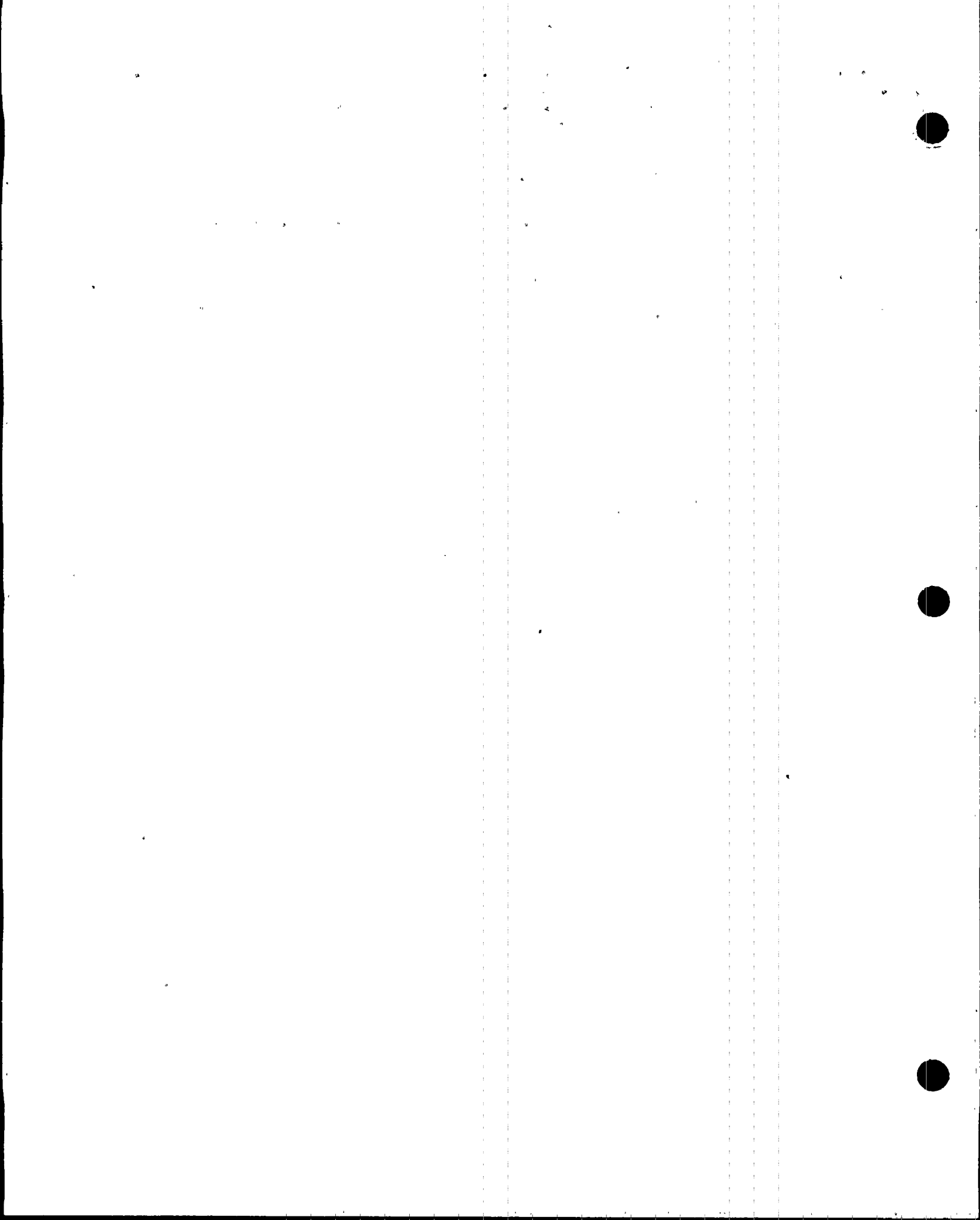
X - - -

9/24/95 - UT COMPLETE, INNER RADIUS

- - X -

GEOMETRY, SURFACE EXAMINATION PERFORMED
DURING THE PREVIOUS OUTAGE, LIMITED
EXAMINATION DUE TO BRANCH CONNECTION
CONFIGURATION

502979-PI-61



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REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM LOOP C HOT LEG

ZONE NUMBER: 3-014

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SUMMARY EXAMINATION AREA

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CALIBRATION BLOCK

REF. DWG. NO. 5613-P-766-S SH. 3

049900 29"-RCS-1308-BC-1
14" BRANCH CONNECTION

B-J

PT

NDE 3.3-22

X - - -

9/24/95 - PT AND UT COMPLETE, RTD PLUG

B9.31

UT 45

NDE 5.4-13

- - X -

IN EXAMINATION AREA, INSIDE SURFACE AND

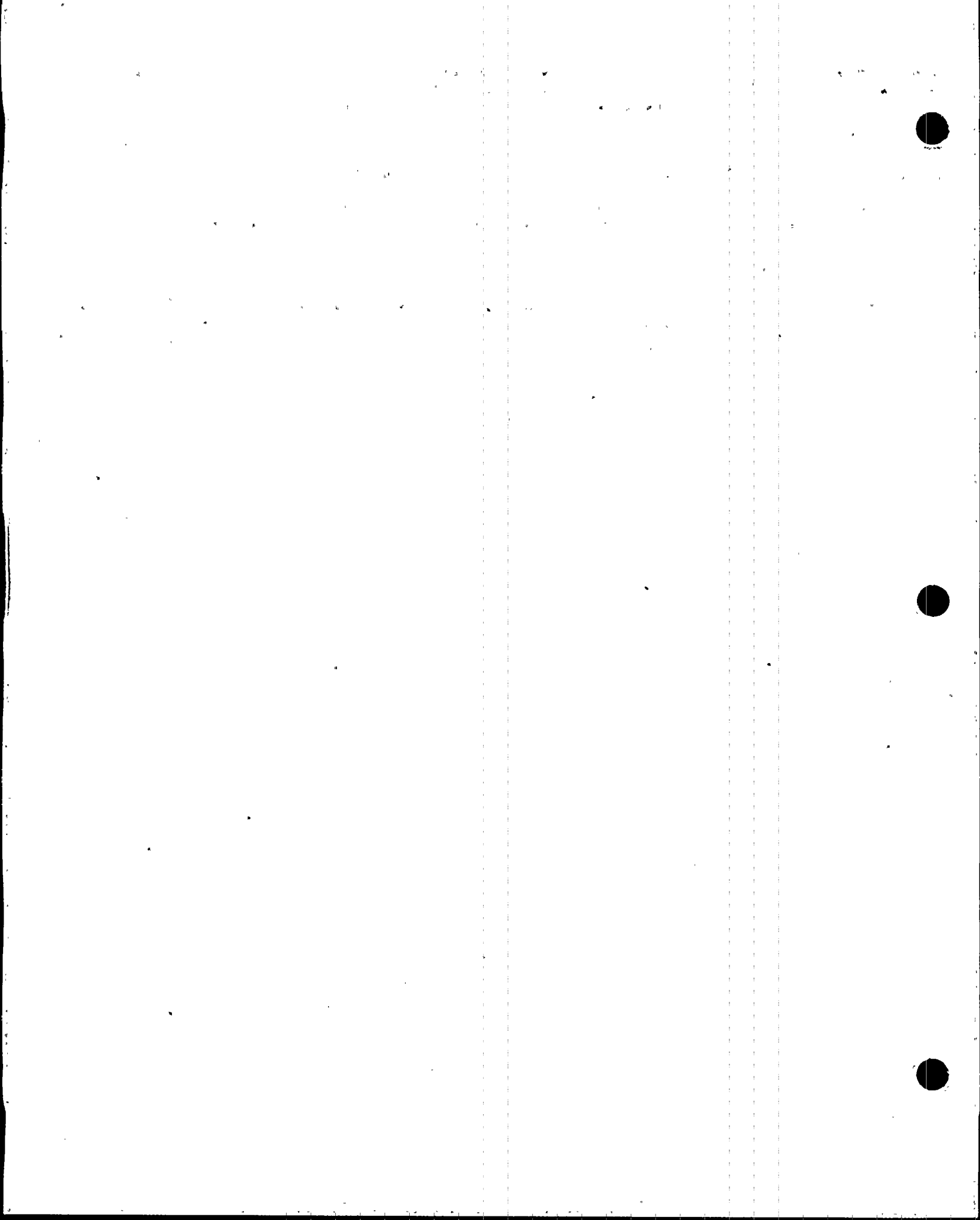
UT 60

NDE 5.4-13

- - X -

INNER RADIUS GEOMETRY, LIMITED
EXAMINATION DUE TO BRANCH CONNECTION
CONFIGURATION

BV-12-2.91-SS



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM LOOP C COLD LEG

ZONE NUMBER: 3-015

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CALIBRATION BLOCK

REF. DWG. NO. 5613-P-766-S SH. 3

050800 27.5"-RCS-1309-3
10" BRANCH CONNECTION

B-J

PT

NDE 3.3-23

X - - -

9/24/95 - PT AND UT COMPLETE, INNER

B9.31

UT 45

NDE 5.4-12

X - - -

RADIUS GEOMETRY, LIMITED EXAMINATION DUE

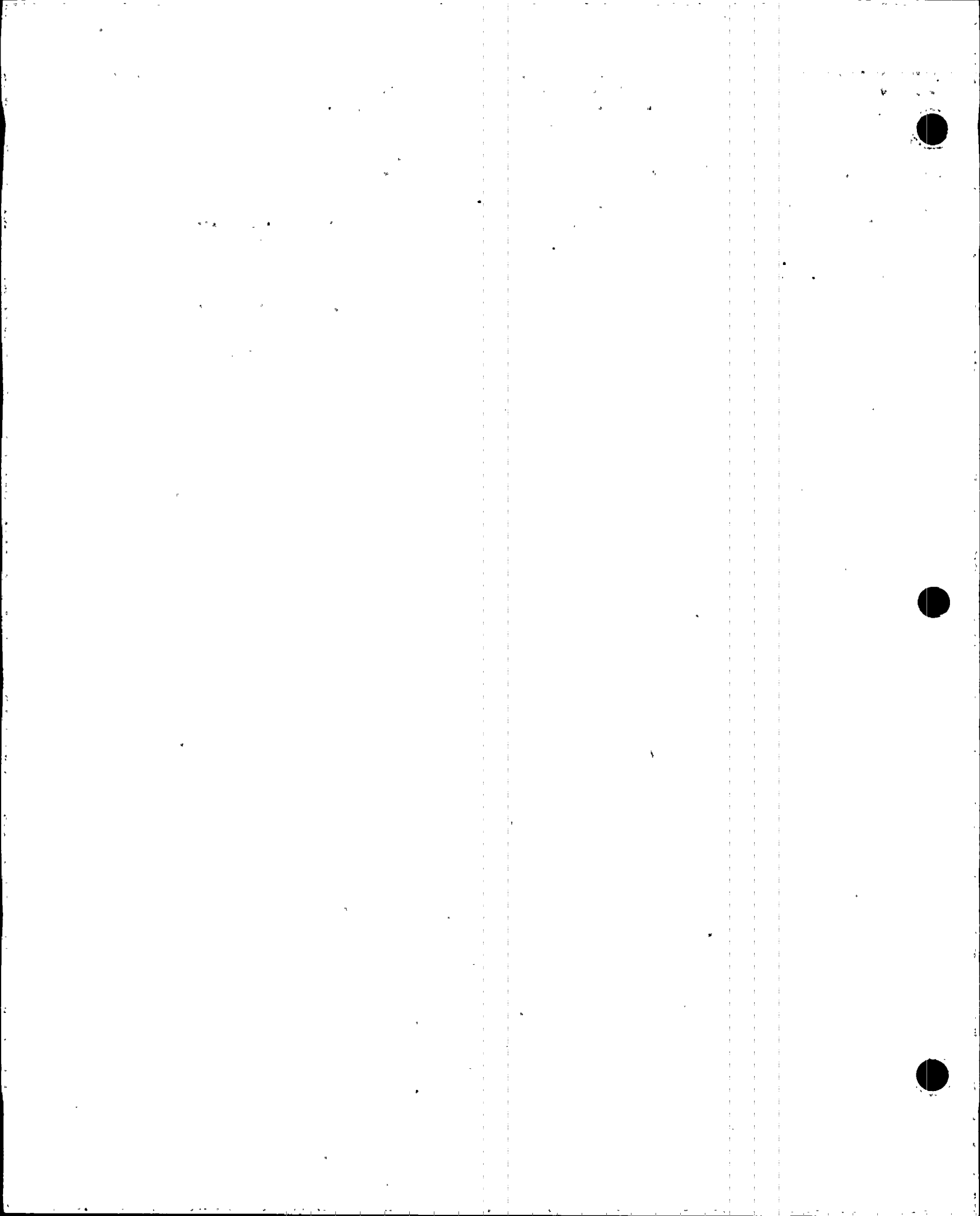
UT 60

NDE 5.4-12

- - X -

TO BRANCH CONNECTION CONFIGURATION

502979-PI-61



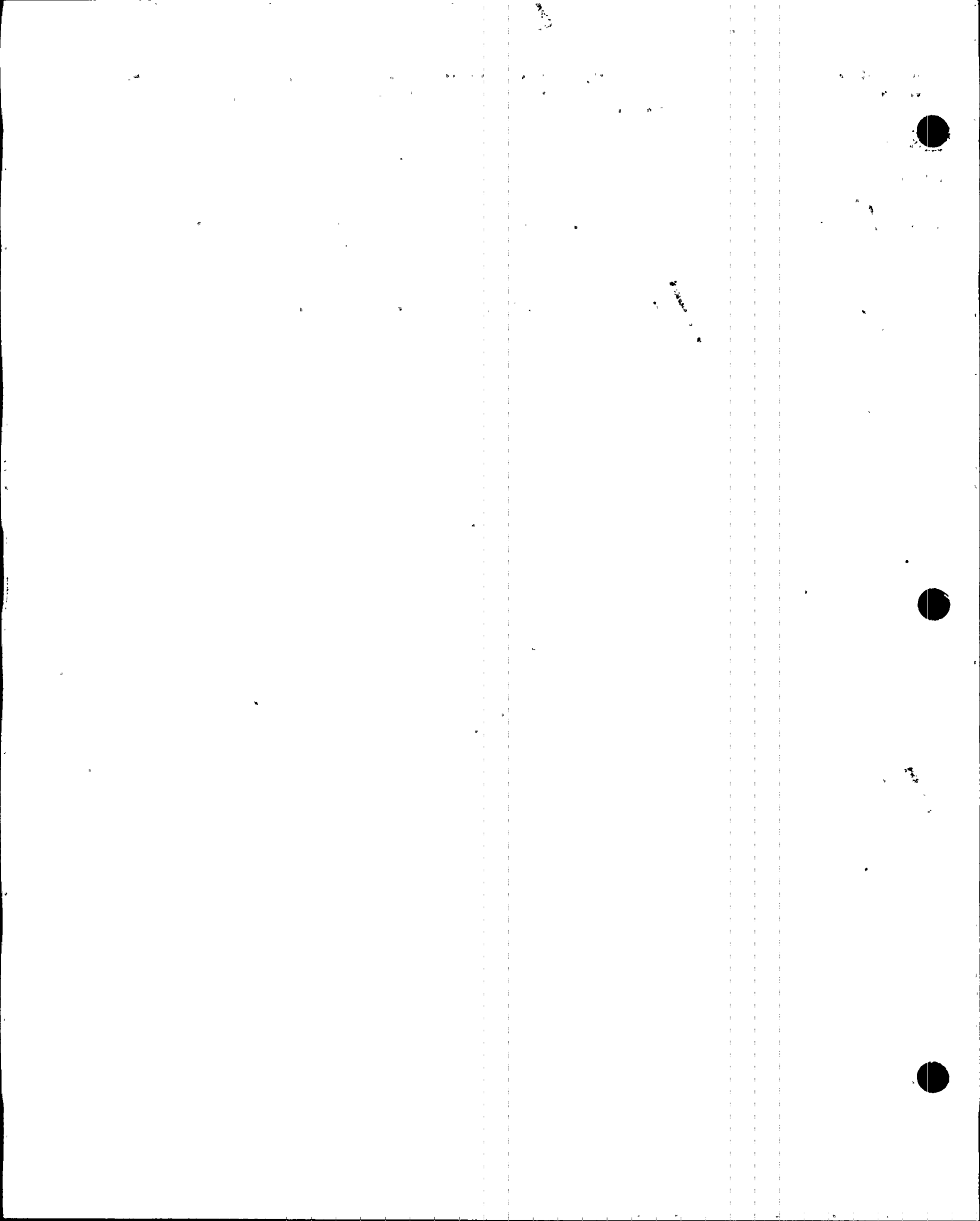
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM PRESSURIZER SAFETY LOOP A

ZONE NUMBER: 3-017		ASME			N I O	
		SEC. XI			O N G T	
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS
-----	-----	-----	-----	-----	C G M R	**CALIBRATION BLOCK**
-----	-----	-----	-----	-----	-----	-----
REF. DWG. NO. 5613-P-660-S SH. 3						
052700	4"-RC-1301-1A NOZZLE TO SAFE END	B-F B5.40	PT RT	NDE 3.3-9 TS 9.3-1	X - - - - - - X	9/15/95 - PT COMPLETE, 9/15/95 - RT COMPLETE, ACCEPTABLE SURFACE INDICATION
052800	4"-RC-1301-1 SAFE END TO ELBOW	B-J B9.11	PT UT 45 UT 60 UT 70	NDE 3.3-9 NDE 5.4-20 NDE 5.4-20 NDE 5.4-20	X - - - - - X - - - X - - - X -	9/15/95 - PT COMPLETE, 9/19/95 - UT COMPLETE, ROOT AND COUNTERBORE GEOMETRY **UT-53, UT-45**
053400	4"-RC-1301-7 PIPE TO 180 DEGREE RETURN	B-J B9.11	PT UT 45 UT 60	NDE 3.3-9 NDE 5.4-9 NDE 5.4-9	X - - - X - - - X - - -	9/15/95 - PT COMPLETE, 9/17/95 - UT COMPLETE **UT-45**
053500	4"-RC-1301-FB PIPING FLANGE BOLTING	B-G-2 B7.50	VT-1	NDE 4.1-4	X - - -	9/19/95 - VT-1 COMPLETE



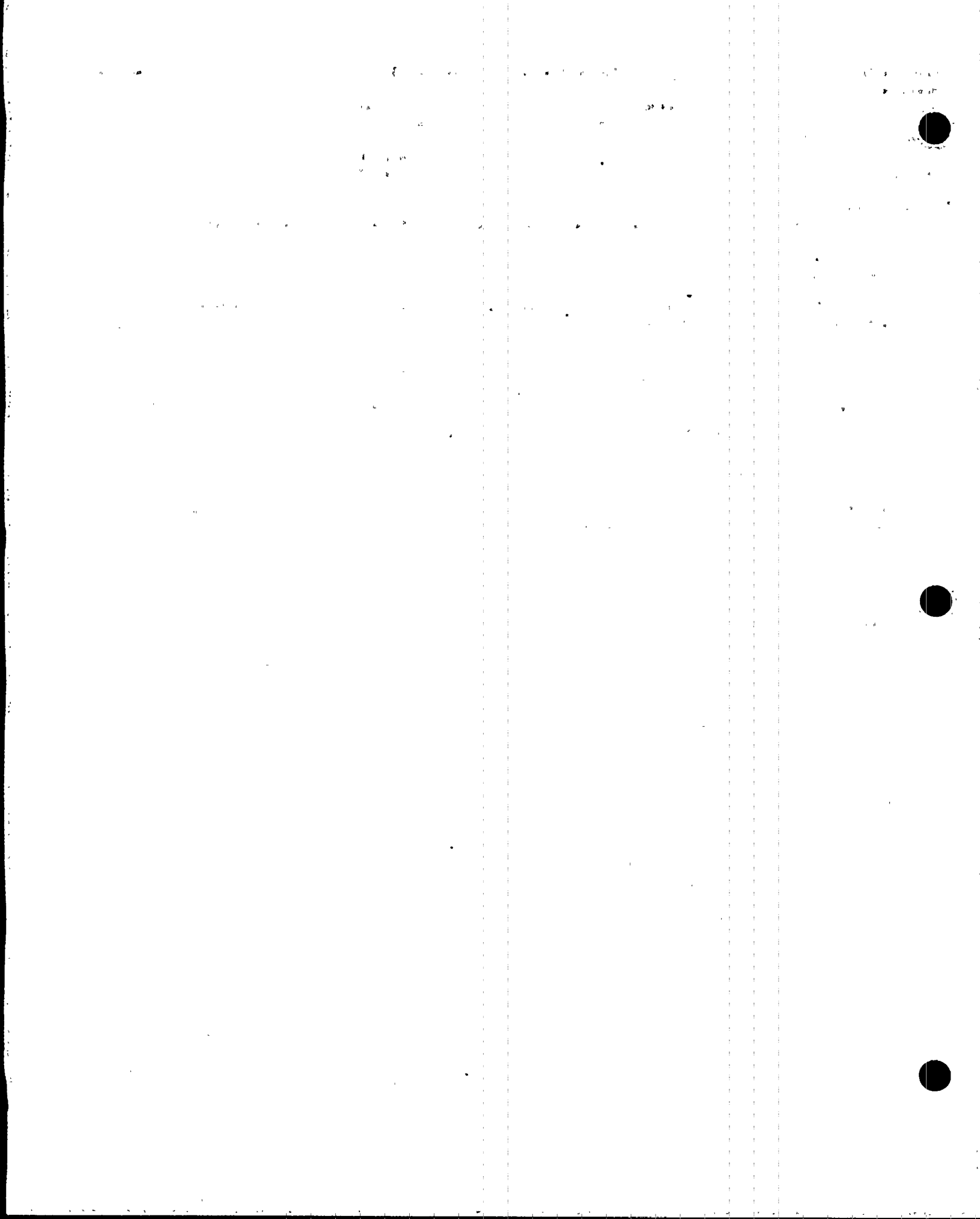
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM PRESSURIZER SAFETY LOOP B

ZONE NUMBER: 3-018		ASME			N I O	
		SEC. XI			O N G T	
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS
-----	-----	-----	-----	-----	C G H R	**CALIBRATION BLOCK**
-----	-----	-----	-----	-----	-----	-----
REF. DWG. NO. 5613-P-660-S SH. 3						
054100	4"-RC-1302-1A NOZZLE TO SAFE END	B-F B5.40	PT RT	NDE 3.3-10 TS 9.3	X - - - - - - X	9/15/95 - PT COMPLETE, 9/15/95 - RT COMPLETE, ACCEPTABLE POROSITY, SLAG, TUNGSTON, AND SURFACE INDICATIONS
054200	4"-RC-1302-1 SAFE END TO ELBOW	B-J B9.11	PT UT 45 UT 60 UT 70	NDE 3.3-10 NDE 5.4-21 NDE 5.4-21 NDE 5.4-21	X - - - - - X - - - X - - - X -	9/15/95 - PT COMPLETE, 9/19/95 - UT COMPLETE, ROOT AND COUNTERBORE GEOMETRY **UT-53, UT-45**
054500	4"-RC-1302-4 ELBOW TO PIPE	B-J B9.11	PT UT 45 UT 60	NDE 3.3-10 NDE 5.4-8 NDE 5.4-8	X - - - X - - - X - - -	9/15/95 - PT COMPLETE, 9/17/95 - UT COMPLETE **UT-45**
200	4"-RC-1302-FB PIPING FLANGE BOLTING	B-G-2 B7.50	VT-1	NDE 4.1-5	X - - -	9/19/95 - VT-1 COMPLETE



DATE: 12/15/95
REVISION: 0

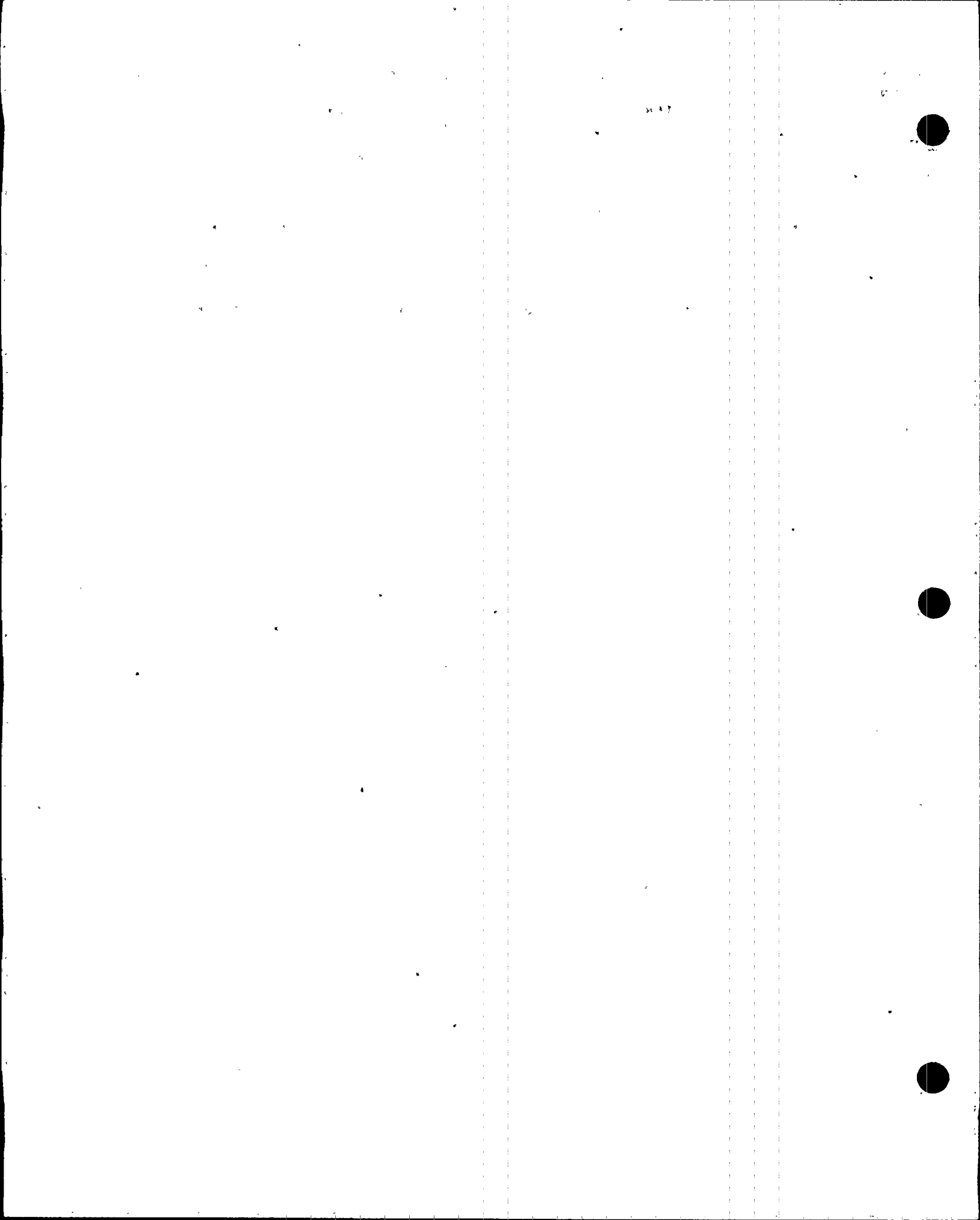
TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM PRESSURIZER SAFETY LOOP C

ZONE NUMBER: 3-019		ASME			N I O	
		SEC. XI			O N G T	
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS
					C G M R	**CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-660-S SH. 2						
055500	4"-RC-1303-1A NOZZLE TO SAFE END	B-F B5.40	PT RT	NDE 3.3-11 TS 9.3	X - - - - - - X	9/15/95 - PT COMPLETE, 9/16/95 - RT COMPLETE, ACCEPTABLE SLAG AND SURFACE INDICATIONS
055600	4"-RC-1303-1 SAFE END TO ELBOW	B-J B9.11	PT UT 45 UT 60 UT 70	NDE 3.3-11 NDE 5.4-11 NDE 5.4-11 NDE 5.4-11	X - - - - - X - - - X - - - X -	9/15/95 - PT COMPLETE, 9/19/95 - UT COMPLETE, ROOT AND COUNTERBORE GEOMETRY **UT-53, UT-45**
056000	4"-RC-1303-5 PIPE TO ELBOW	B-J B9.11	PT UT 45 UT 60	NDE 3.3-12 NDE 5.4-10 NDE 5.4-10	X - - - X - - - X - - -	9/16/95 - PT COMPLETE, 9/17/95 - UT COMPLETE **UT-45**
200	4"-RC-1303-7 PIPE TO 180 DEGREE RETURN	B-J B9.11	PT UT 45 UT 60	NDE 3.3-11 NDE 5.4-10 NDE 5.4-10	X - - - X - - - X - - -	9/15/95 - PT COMPLETE, 9/17/95 - UT COMPLETE **UT-45**
056600	4"-RC-1303-FB PIPING FLANGE BOLTING	B-G-2 B7.50	VT-1	NDE 4.1-9	X - - -	9/19/95 - VT-1 COMPLETE, THREE DAMAGED THREADS OUTSIDE THREAD ENGAGEMENT AREA



DATE: 12/15/95
REVISION: 0

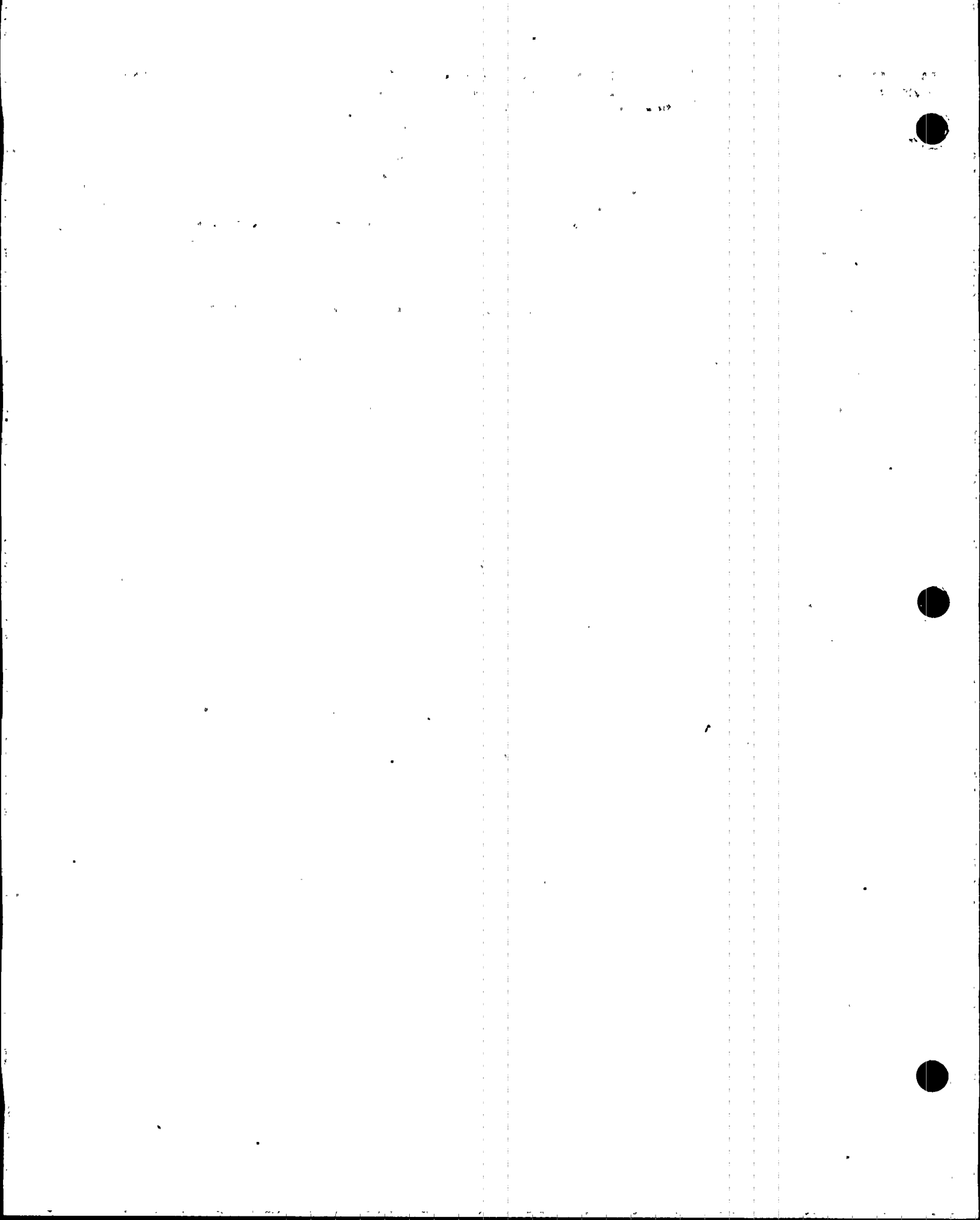
TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

PAGE: 15

REACTOR COOLANT SYSTEM PRESSURIZER SPRAY TO PRZ.

ZONE NUMBER: 3-020		ASME				N I O	
		SEC. XI				O N G T	
		CATGY	EXAM				R S E H
SUMMARY	EXAMINATION AREA					E I O E	REMARKS
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE		C-G-M-R	**CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-661-S SH. 4							
061100	4"-RC-1304-18 ELBOW TO TEE	B-J B9.11	PT UT 45 UT 60	NDE 3.3-13 NDE 5.4-18 NDE 5.4-18	X - - - X - - - X - - -		9/16/95 - PT AND UT COMPLETE **UT-45**
061300	4"-RC-1304-20 TEE TO TEE	B-J B9.11	PT UT 45 UT 60	NDE 3.3-13 NDE 5.4-18 NDE 5.4-18	X - - - X - - - X - - -		9/16/95 - PT AND UT COMPLETE **UT-45**
061500	4"-RC-1304-22 TEE TO ELBOW	B-J B9.11	PT UT 45 UT 60	NDE 3.3-13 NDE 5.4-18 NDE 5.4-18	X - - - X - - - X - - -		9/16/95 - PT AND UT COMPLETE **UT-45**
061700	4"-RC-1304-23 ELBOW TO 180 DEGREE RETURN	B-J B9.11	PT UT 45 UT 60	NDE 3.3-13 NDE 5.4-18 NDE 5.4-18	X - - - X - - - - - X -		9/16/95 - PT AND UT COMPLETE, ROOT GEOMETRY **UT-45**
062000	4"-RC-1304-26 PIPE TO SAFE-END	B-J B9.11	PT UT 45 UT 60 UT 70	NDE 3.3-14 NDE 5.4-17 NDE 5.4-17 NDE 5.4-17	X - - - - - X - - - X - - - X -		9/15/95 - PT COMPLETE, 9/19/95 - UT COMPLETE, ROOT AND COUNTERBORE GEOMETRY **UT-45, UT-53**
062100	4"-RC-1304-1A SAFE-END TO NOZZLE	B-F B5.40	PT RT	NDE 3.3-14 TS 9.3	X - - - - - - X		9/15/95 - PT COMPLETE, 9/16/95 - RT COMPLETE, ACCEPTABLE POROSITY, SLAG, AND SURFACE INDICATIONS



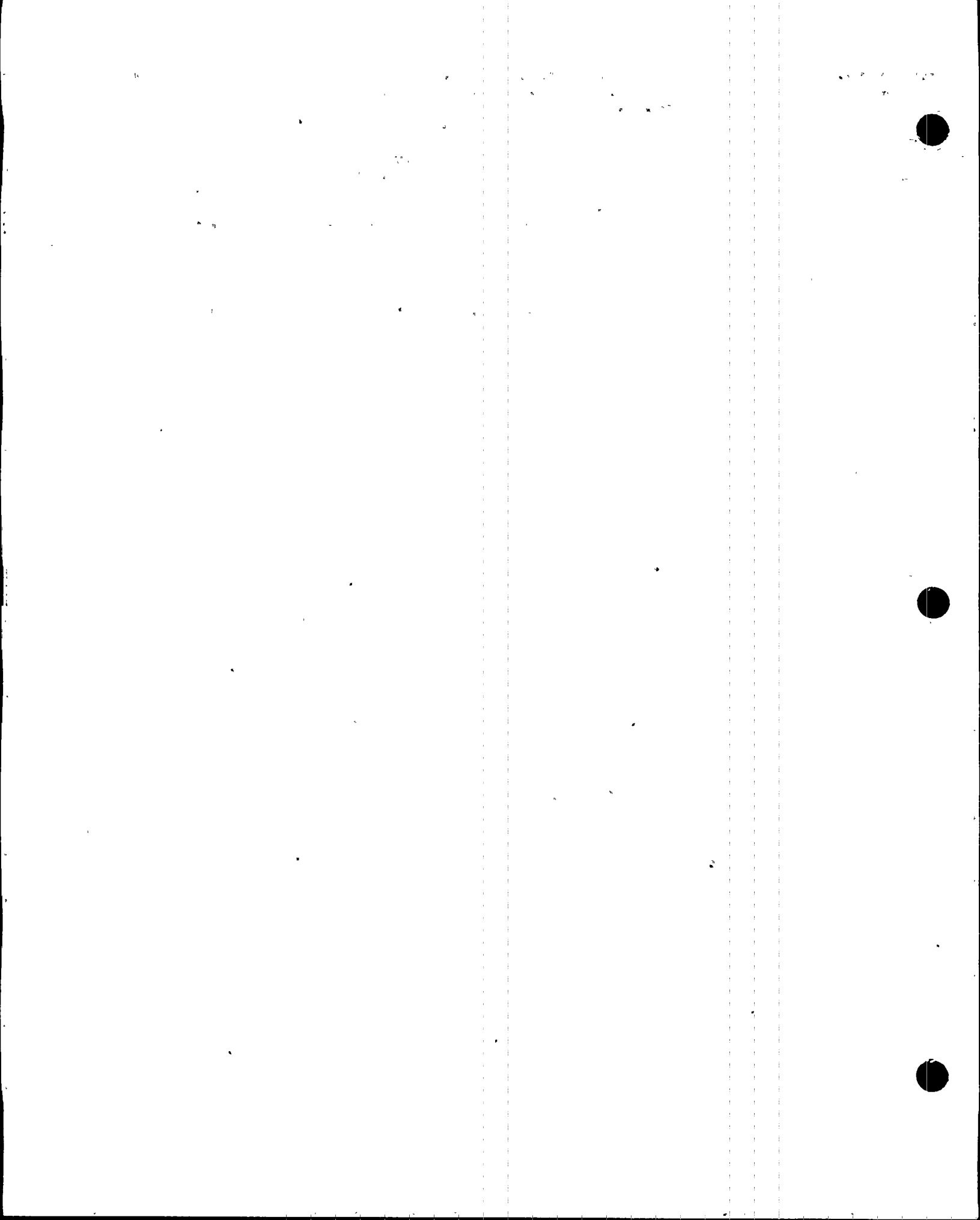
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM PRESSURIZER RELIEF LINE

ZONE NUMBER: 3-022		ASME			N I O
		SEC. XI			O N G T
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E REMARKS
					C G H R **CALIBRATION BLOCK**
<hr/>					
REF. DWG. NO. 5613-P-660-S SH. 1					
068700	4"-RC-1306-1A NOZZLE TO SAFE-END	B-F B5.40	PT RT	NDE 3.3-20 TS 9.3	X - - - 9/15/95 - PT AND RT COMPLETE, ACCEPTABLE - - - X SLAG, INDICATION FOUND ON ADJACENT WELD, VERIFIED TO BE A SURFACE IRREGULARITY BY VISUAL EXAMINATION
068800	4"-RC-1306-1 SAFE-END TO ELBOW	B-J B9.11	PT UT 45 UT 60 UT 70	NDE 3.3-20 NDE 5.4-19 NDE 5.4-19 NDE 5.4-19	X - - - 9/15/95 - PT COMPLETE, 9/19/95 - UT - - X - COMPLETE, ROOT AND COUNTERBORE GEOMETRY - - X - - - X - **UT-53, UT-45**
069000	4"-RC-1306-3 ELBOW TO ELBOW	B-J B9.11	PT UT 45 UT 60	NDE 3.3-20 NDE 5.4-6 NDE 5.4-6	X - - - 9/15/95 - PT COMPLETE, 9/17/95 - UT X - - - COMPLETE X - - - **UT-45**
069100	4"-RC-1306-4 ELBOW TO PIPE	B-J B9.11	PT UT 45 UT 60	NDE 3.3-20 NDE 5.4-22 NDE 5.4-22	X - - - 9/15/95 - PT COMPLETE, 9/16/95 - UT X - - - COMPLETE X - - - **UT-45**
069400	4"-RC-1306-7 TEE TO REDUCER	B-J B9.11	PT UT 45 UT 60 UT 70	NDE 3.3-17 NDE 5.4-6 NDE 5.4-6 NDE 5.4-6	X - - - 9/15/95 - PT COMPLETE, 9/17/95 - UT X - - - COMPLETE X - - - X - - - **UT-45**
069500	3-RCH-27 SPRING HANGER	F-A F1.10C	VT-3	NDE 4.3-15	X - - - 9/29/95 - VT-3 COMPLETE
070700	3"-RC-1304-1 REDUCER TO ELBOW	B-J B9.21	PT	NDE 3.3-17	X - - - 9/15/95 - PT COMPLETE



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

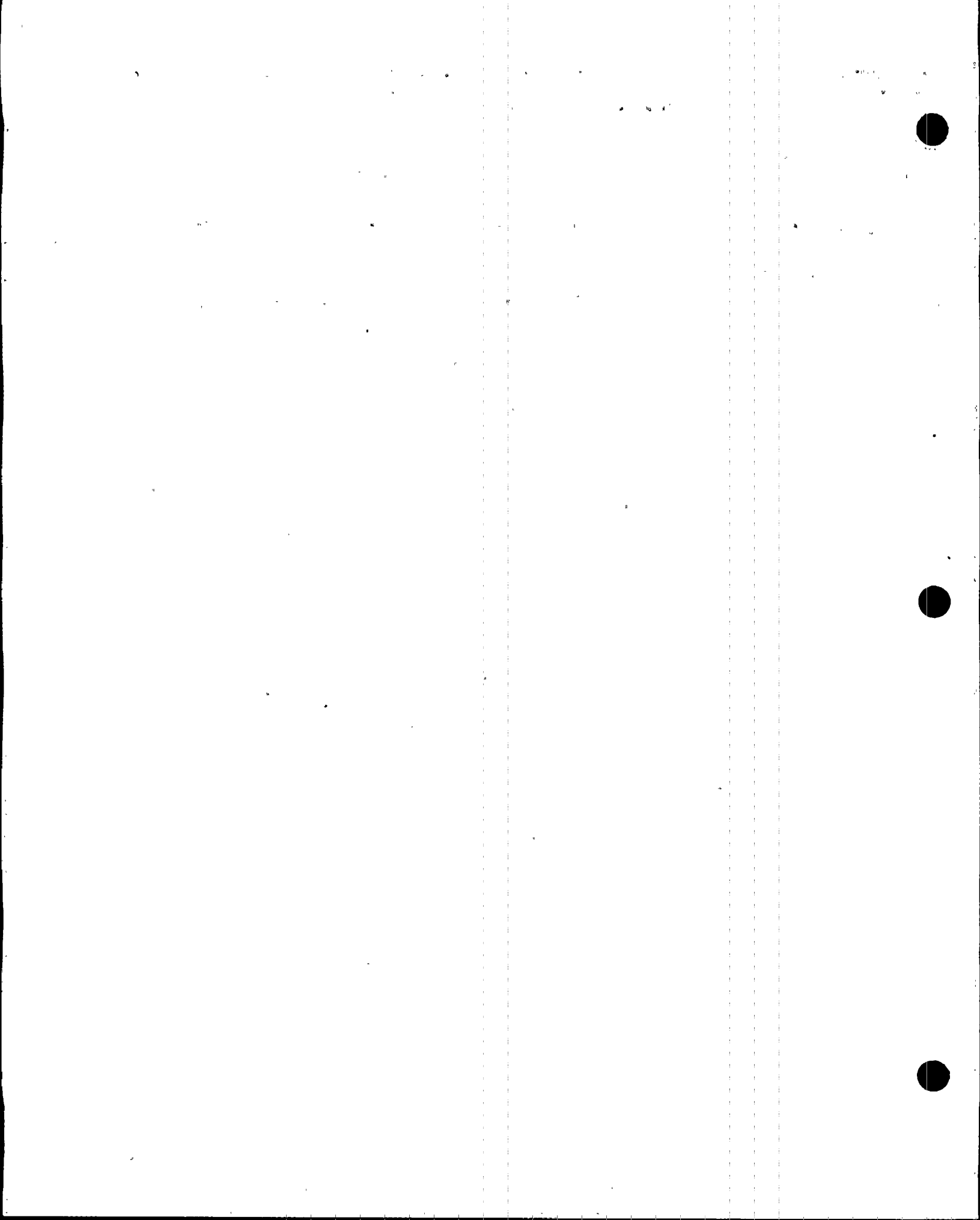
PAGE: 17

REACTOR COOLANT SYSTEM PRESSURIZER RELIEF LINE

ZONE NUMBER: 3-022	ASME				N I O
	SEC. XI				O N G T
SUMMARY EXAMINATION AREA	CATGY	EXAM			R S E H
NUMBER IDENTIFICATION	ITEM NO	METHOD	PROCEDURE		E I O E REMARKS
					C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-660-S SH. 1

071240	3"-RC-1304-6 ELBOW TO REDUCER	B-J B9.21	PT	NDE 3.3-15	X - - - 9/16/95 - PT COMPLETE
071280	3"-RC-1304-7 REDUCER TO VALVE PCV-3-456	B-J B9.40	PT	NDE 3.3-17	X - - - 9/15/95 - PT COMPLETE
071700	3"-RC-1305-3 ELBOW TO ELBOW	B-J B9.21	PT CR PT UT THICK	NDE 3.3-8 95-851 NDE 3.3-18 NDE 5.18-1	- - - X 9/16/95 - PT COMPLETE, ONE UNACCEPTABLE LINEAR INDICATION, REMOVED BY FLAPPING; X - - - 9/18/95 - PT COMPLETE, THICKNESS MEASUREMENT PERFORMED TO VERIFY ACCEPTABLE WALL THICKNESS



DATE: 12/15/95
REVISION: 0

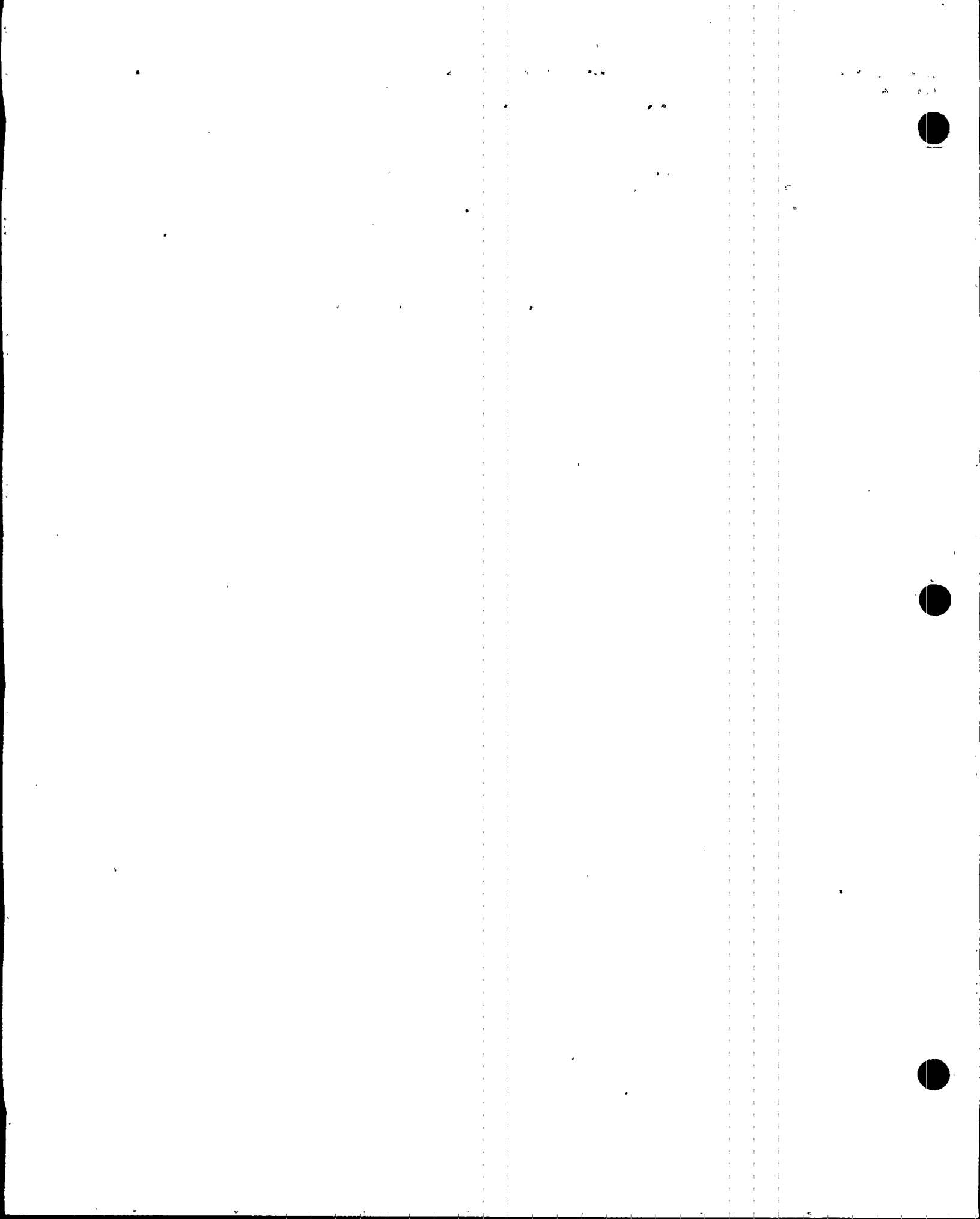
TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT SYSTEM AUXILIARY SPRAY LINE

ZONE NUMBER: 3-035		ASME				N I O
		SEC. XI				O N G T
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E REMARKS	
					C G M R **CALIBRATION BLOCK**	

REF. DWG. NO. 5613-P-661-S SH. 2						
114300	2"-RC-1310-1 PIPE TO SOCKOLET	B-J B9.40	PT	NDE 3.3-7	X - - - 9/17/95 - PT COMPLETE	
114400	2"-RC-1310-2 VALVE 3-313 TO PIPE	B-J B9.40	PT	NDE 3.3-7	X - - - 9/17/95 - PT COMPLETE	
114600	2"-RC-1310-3 PIPE TO VALVE 3-313	B-J B9.40	PT	NDE 3.3-7	X - - - 9/17/95 - PT COMPLETE	
114900	2"-RC-1310-4 ELBOW TO PIPE	B-J B9.40	PT	NDE 3.3-7	X - - - 9/17/95 - PT COMPLETE	



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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MECHANICAL & VOLUME CONTROL FROM THE REGENERATIVE HX

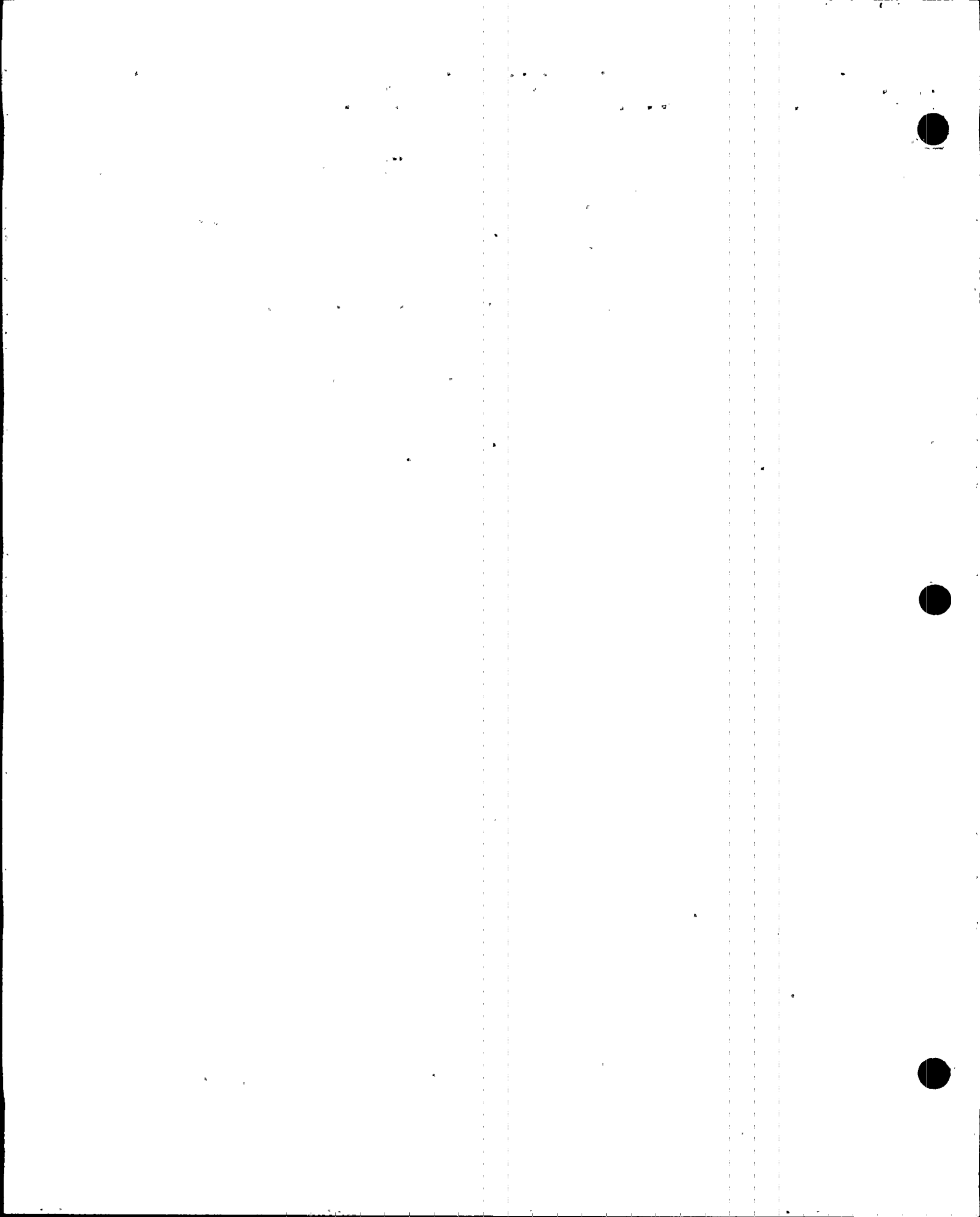
ZONE NUMBER: 3-049		ASME		N.I O	
		SEC. XI		O N G T	
SUMMARY EXAMINATION AREA		CATGY EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO.	METHOD	PROCEDURE	E I O E REMARKS
					C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-644-S SH. 3

177900	422-A	F-A	VT-3	NDE 4.3-13	X - - - 9/13/95 - VT-3 COMPLETE
	DOUBLE ACTING RESTRAINT	F1.10B			

REF. DWG. NO. 5613-P-644-S SH. 2

179600	423-C	F-A	VT-3	NDE 4.3-12	X - - - 9/13/95 - VT-3 COMPLETE
	DOUBLE ACTING RESTRAINT	F1.10B			



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3:
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

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REACTOR COOLANT PUMP C

ZONE NUMBER: 3-058

ASME
SEC. XI

N I O
O N G T
R S E H

SUMMARY EXAMINATION AREA
NUMBER IDENTIFICATION

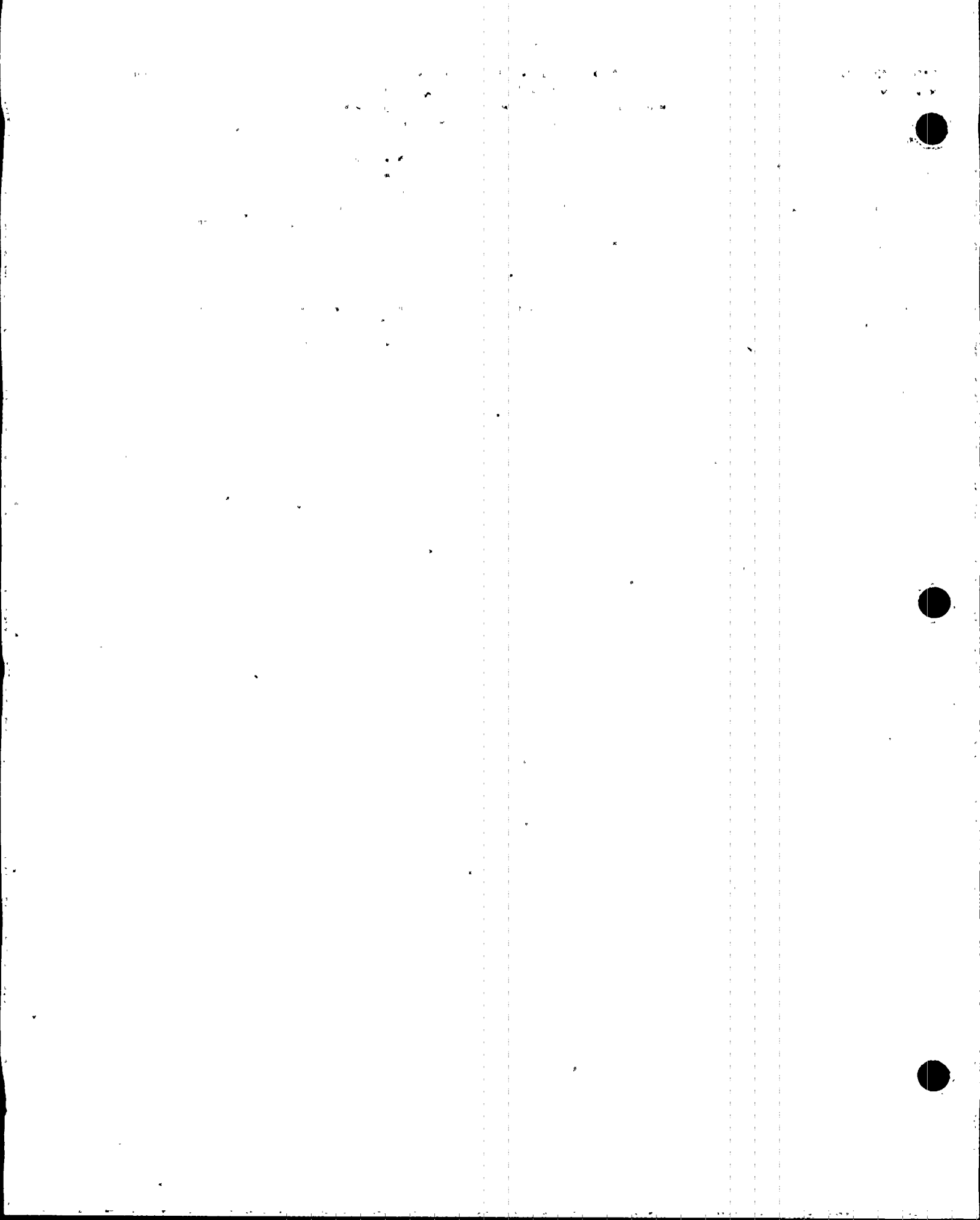
CATGY EXAM
ITEM NO METHOD PROCEDURE

E I O E REMARKS
C G H R **CALIBRATION BLOCK**

203800 3-RCP-C-FLYWHEEL
FLYWHEEL

RG 1.14 UT 10 NDE 5.15-1
UT NDE 5.15

X - - - 9/20/95 - UT COMPLETE, EXAMINED FROM THE
OUTER EDGE OF THE FLYWHEEL, SURFACE
EXAMINATION NOT REQUIRED THIS OUTAGE
FLYWHEEL



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REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 1 CAEPOBL STATUS COMPONENTS

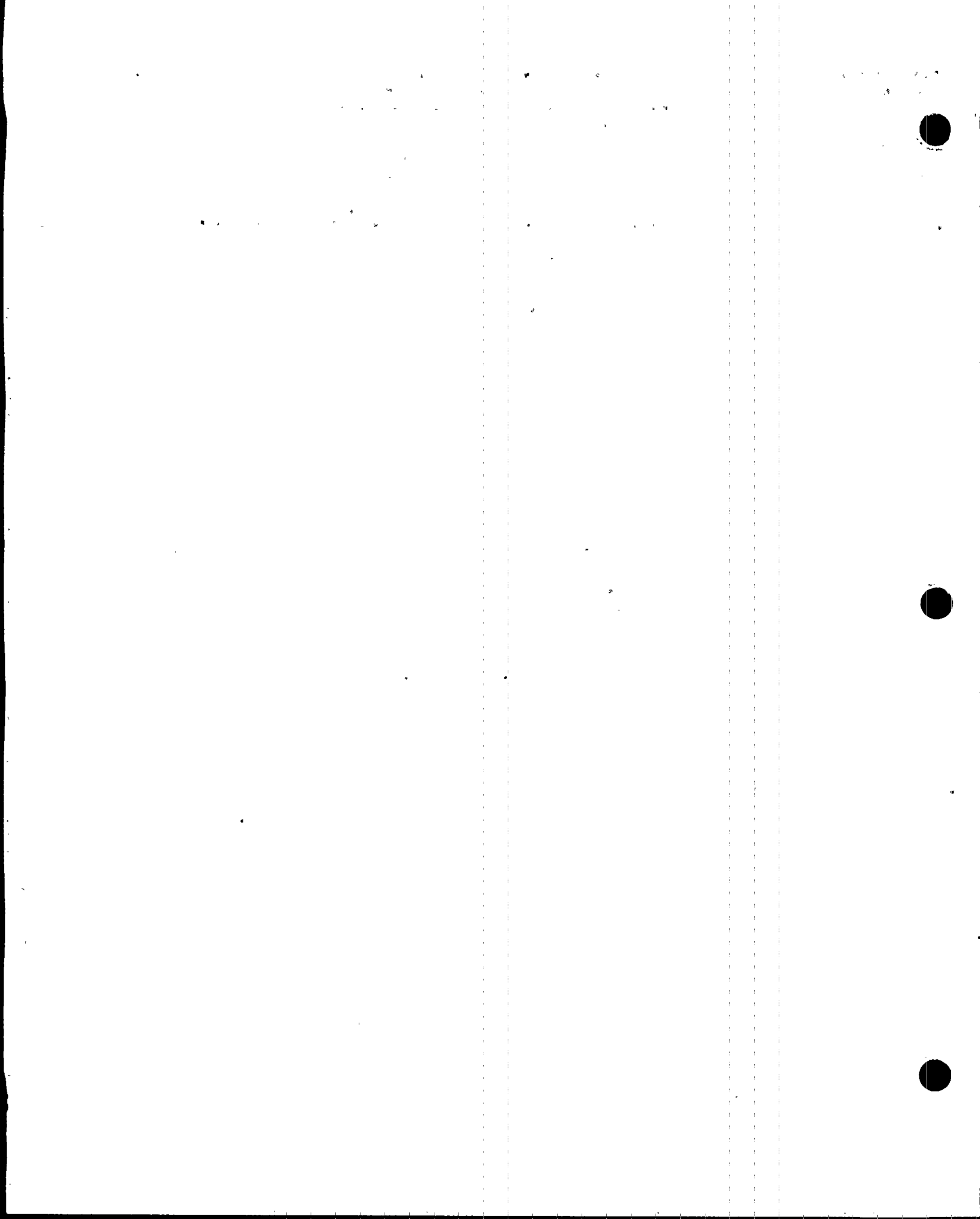
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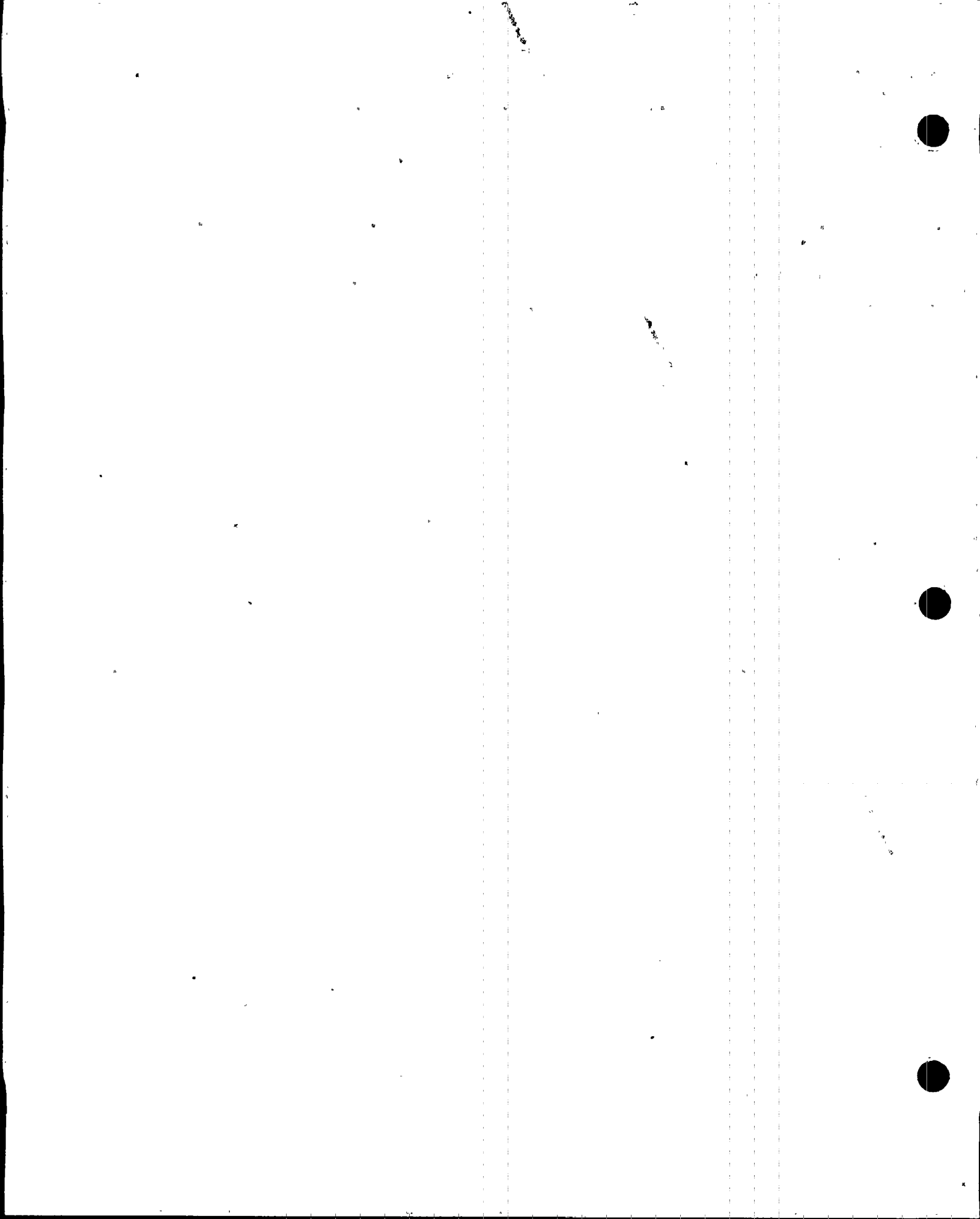
CHEMICAL & VOLUME CONTROL, REGENERATIVE HEAT EXCH

ZONE NUMBER: 3-059		ASME	N I O		
		SEC. XI	O N G T		
SUMMARY EXAMINATION AREA		CATGY	EXAM	R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E REMARKS
					C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-H-4009

204100	RGX 3E200	VT-2	NDE 4.2-1	X - - -	9/15/95 - VT-3 COMPLETE, 10/5/95 - VT-2
	VISUALS FOR LEAKAGE	VT-3	NDE 4.3-10	X - - -	COMPLETE





DATE: 12/15/95
REVISION: 0

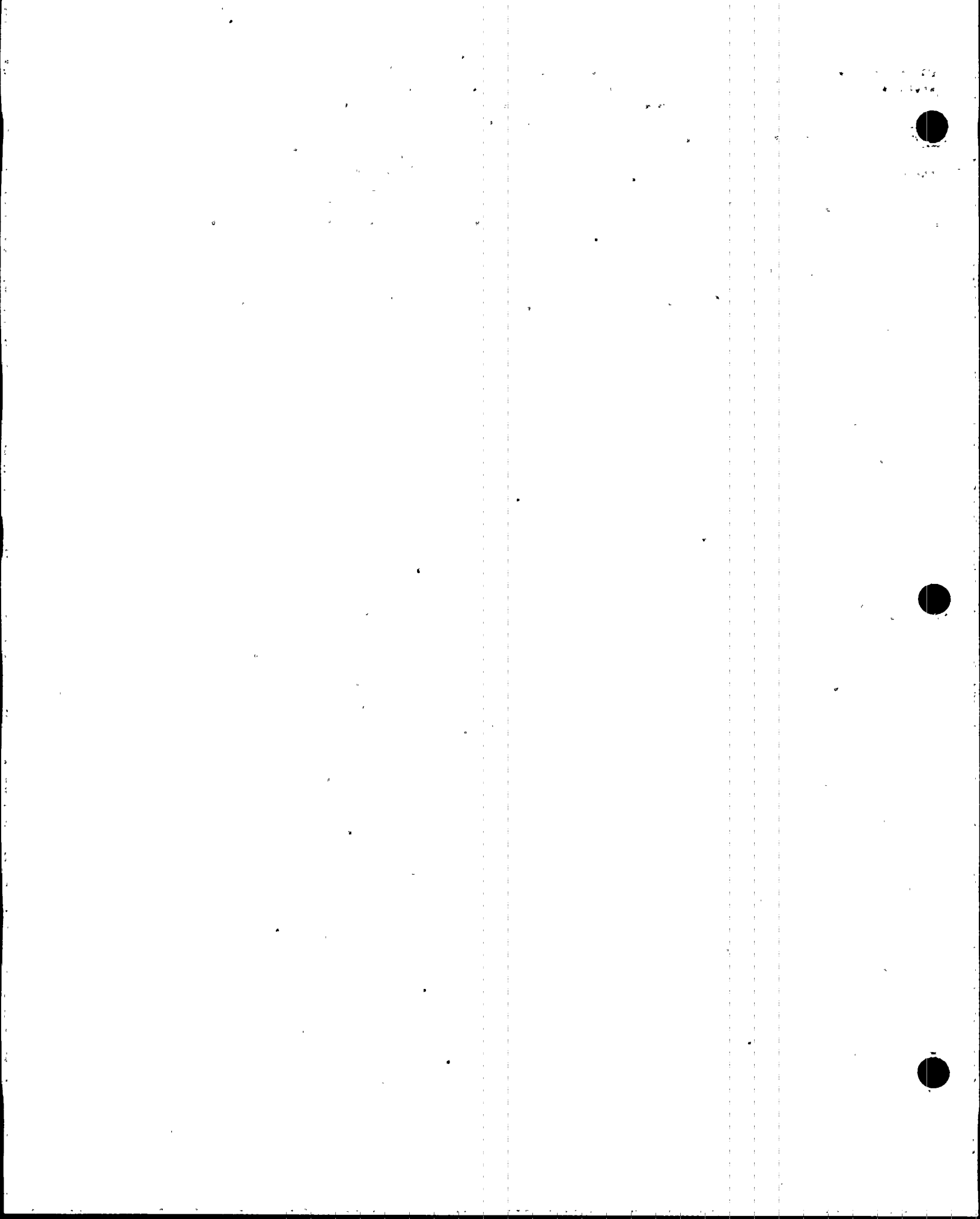
TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 23

RESIDUAL HEAT REMOVAL TO RESID. HEAT REMOVAL PUMP A

ZONE NUMBER: 3-063		ASME			N I O			
		SEC. XI			O N G T			
SUMMARY EXAMINATION AREA		CATGY	EXAM			R S E H		
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS		
					C G M R	**CALIBRATION BLOCK**		

REF. DWG. NO. 5613-P-669-S SH. 1								
212800	14"-RHR-2301-1 VALVE 3-751 TO ELBOW	C-F-1 C5.11	PT UT 45 UT 60 UT 70	NDE 3.3-5 NDE 5.4-4 NDE 5.4-4 NDE 5.4-4	X - - - X - - - X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE, LIMITED EXAMINATION DUE TO VALVE CONFIGURATION		
						UT-33		
212900	14"-RHR-2301-1LS1 LONG SEAM DOWNSTREAM INSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE		
						UT-33		
213000	14"-RHR-2301-1LS2 LONG SEAM DOWNSTREAM OUTSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE		
						UT-33		
213080	14"-RHR-2301-2LS1 ELBOW LONG SEAM, UPSTREAM INSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE		
						UT-33		
213090	14"-RHR-2301-2LS2 ELBOW LONG SEAM UPSTREAM OUTSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE		
						UT-33		
213100	14"-RHR-2301-2 ELBOW TO PIPE	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-5 NDE 5.4-4 NDE 5.4-4	X - - - X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE		
						UT-33		



DATE: 12/15/95
REVISION: 0

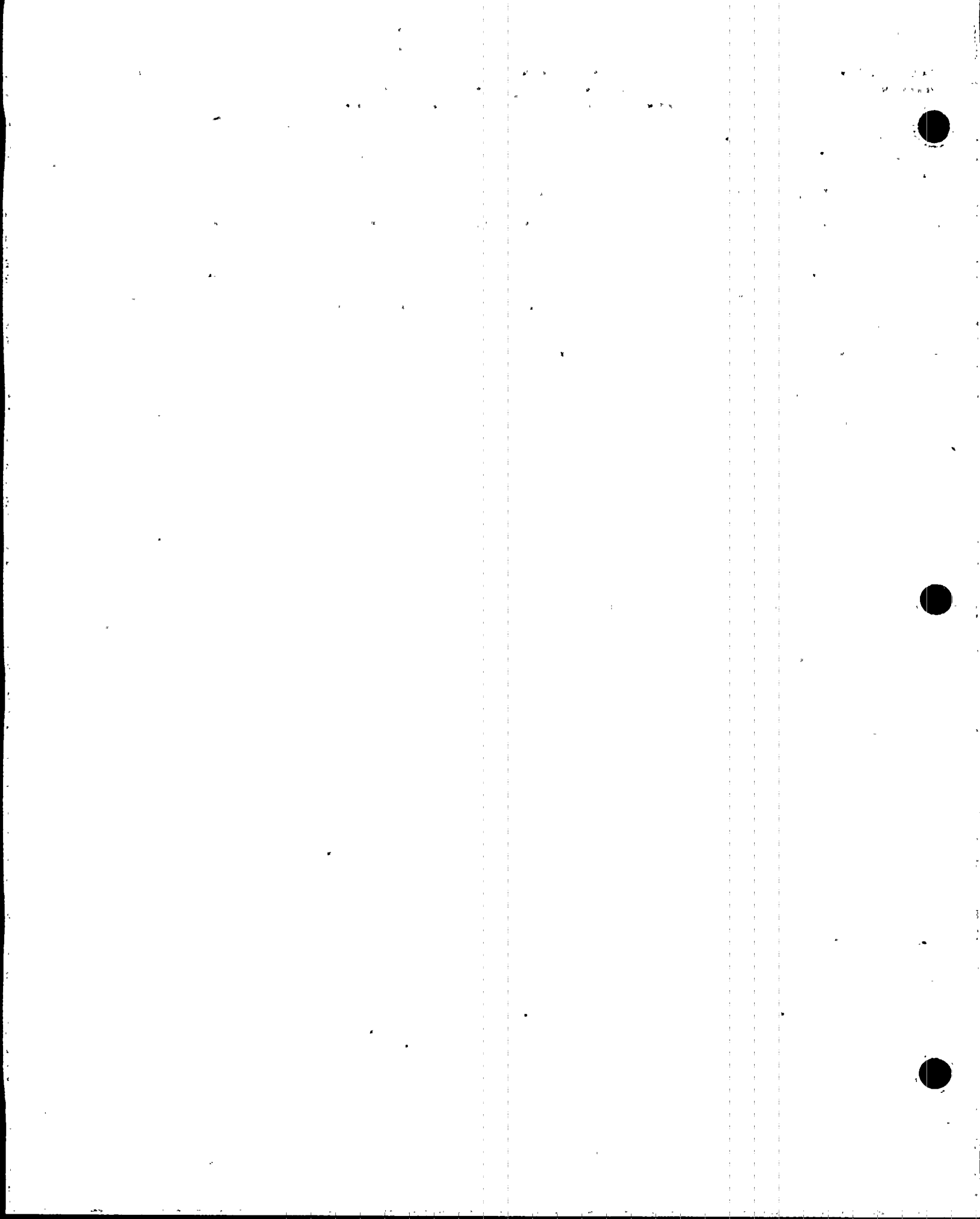
TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 24

INDIVIDUAL HEAT REMOVAL TO RESID. HEAT REMOVAL PUMP A

ZONE NUMBER: 3-063		ASME			N I O	
		SEC. XI			O N G T	
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS
					C G H R	**CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-669-S SH. 1						
213400	14"-RHR-2301-3 PIPE TO ELBOW	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-5 NDE 5.4-4 NDE 5.4-4	X - - - X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**
213500	14"-RHR-2301-3LS1 ELBOW LONG SEAM INSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**
213600	14"-RHR-2301-3LS2 ELBOW LONG SEAM OUTSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**
213680	14"-RHR-2301-4LUI LONG SEAM UPSTREAM INSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**
213690	14"-RHR-2301-4LUO LONG SEAM UPSTREAM OUTSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**
213700	14"-RHR-2301-4 ELBOW TO ELBOW	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-5 NDE 5.4-4 NDE 5.4-4	X - - - X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**
213750	14"-RHR-2301-4LD1 LONG SEAM DOWNSTREAM INSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE **UT-33**



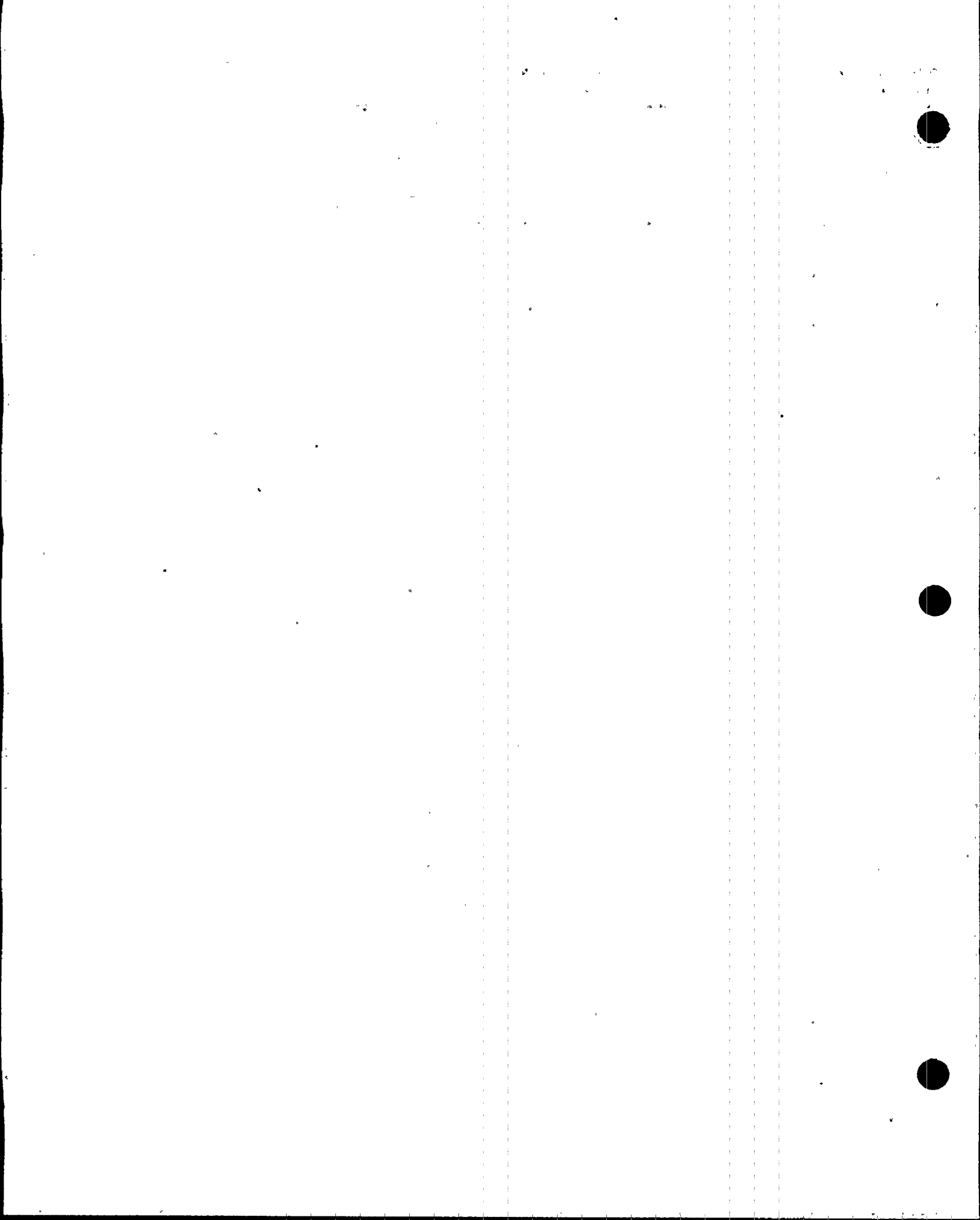
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 25

RESIDUAL HEAT REMOVAL TO RESID. HEAT REMOVAL PUMP A

ZONE NUMBER: 3-063		ASME				N I O
		SEC. XI				O N G T
		CATGY	EXAM	R S E H		
SUMMARY	EXAMINATION AREA				E I O E	REMARKS
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	C G H R	**CALIBRATION BLOCK**
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REF. DWG. NO. 5613-P-669-S SH. 1						
213800	14"-RHR-2301-4LDO LONG SEAM DOWNSTREAM OUTSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-4	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
UT-33						
214000	14"-RHR-2301-5LUI ELBOW LONG SEAM INSIDE RADIUS UPSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-5	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
UT-33						
214100	14"-RHR-2301-5LUO LONG SEAM OUTSIDE RADIUS UPSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-5	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
UT-33						
214200	14"-RHR-2301-5 ELBOW TO PIPE	C-F-1 C5.11	PT UT 45 UT 60 UT 70	NDE 3.3-5 NDE 5.4-5 NDE 5.4-5 NDE 5.4-5	X - - - - - X - - - X - - - X -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE, COUNTERBORE GEOMETRY
UT-33						
214500	14"-RHR-2301-6 PIPE TO ELBOW	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-5 NDE 5.4-5 NDE 5.4-5	X - - - X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
UT-33						
214540	14"-RHR-2301-6LDI LONG SEAM INSIDE RADIUS DOWNSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-5	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
UT-33						



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

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INDIVIDUAL HEAT REMOVAL TO RESID. HEAT REMOVAL PUMP A

ZONE NUMBER: 3-063	ASME SEC. XI				N I O O N G T R S E H E I O E C G M R	REMARKS
SUMMARY EXAMINATION AREA NUMBER IDENTIFICATION	CATGY ITEM NO	EXAM METHOD		PROCEDURE		**CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-669-S SH. 1

214560	14"-RHR-2301-6LDO LONG SEAM OUTSIDE RADIUS DOWNSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-5	X - - - X - - -	9/9/95 - PT COMPLETE, 9/9/95 - UT COMPLETE
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UT-33

214580	14"-RHR-2301-7LUI LONG SEAM INSIDE RADIUS UPSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-5	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
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UT-33

214590	14"-RHR-2301-7LUO LONG SEAM OUTSIDE RADIUS UPSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-5 NDE 5.4-5	X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
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UT-33

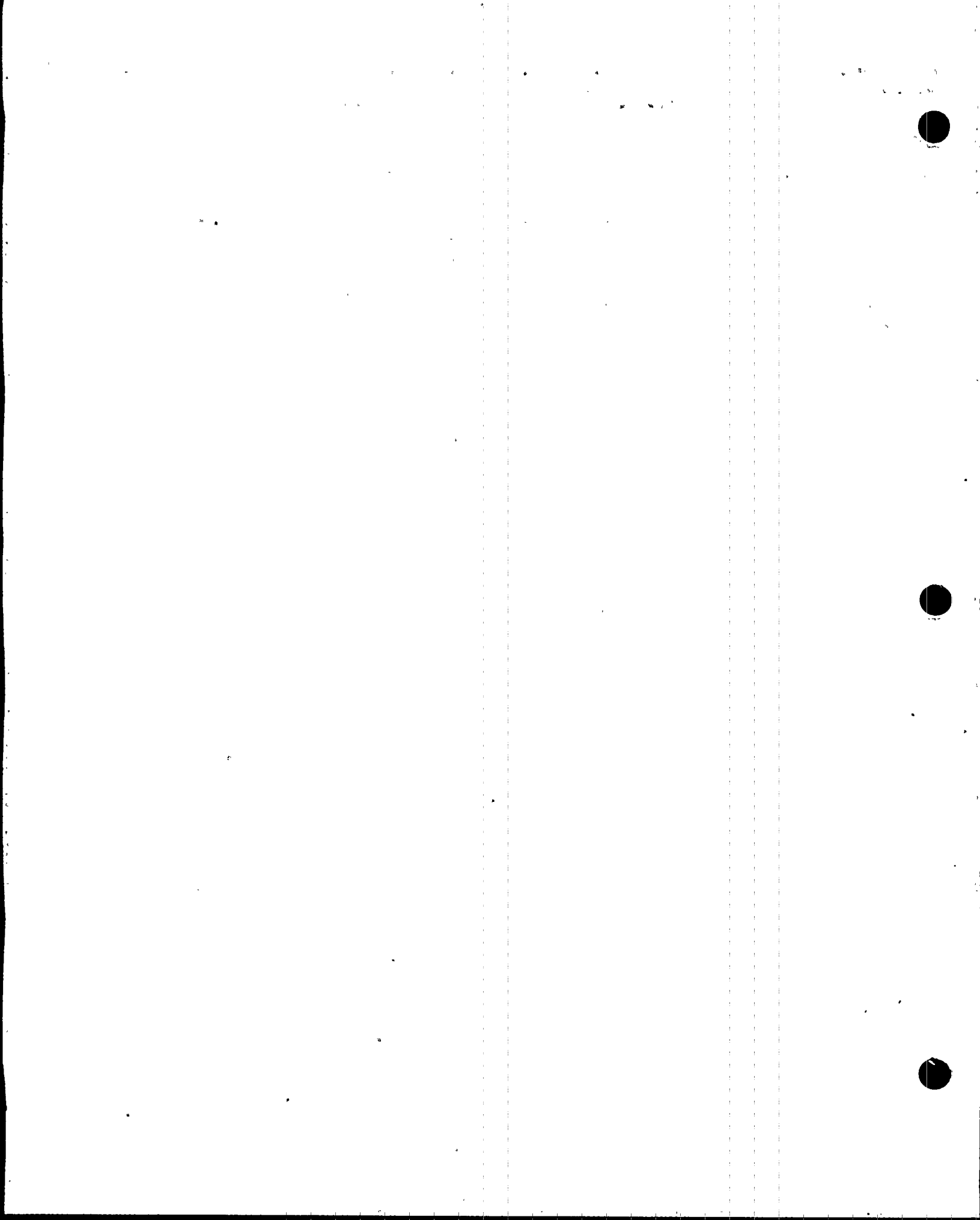
214600	14"-RHR-2301-7 ELBOW TO PIPE	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-5 NDE 5.4-5 NDE 5.4-5	X - - - X - - - X - - -	9/9/95 - PT COMPLETE, 9/10/95 - UT COMPLETE
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UT-33

214700	CONT. PENETRATION P-1 1A INTEGRAL ATTACHMENT	C-C C3.20	PT	NDE 3.3-5	X - - -	9/9/95 - PT COMPLETE
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REF. DWG. NO. 5613-P-600-S SH. 1

215700	SR-251 SPRING HANGER	F-A F1.20C	VT-3	NDE 4.3-1	X - - -	8/25/95 - VT-3 COMPLETE
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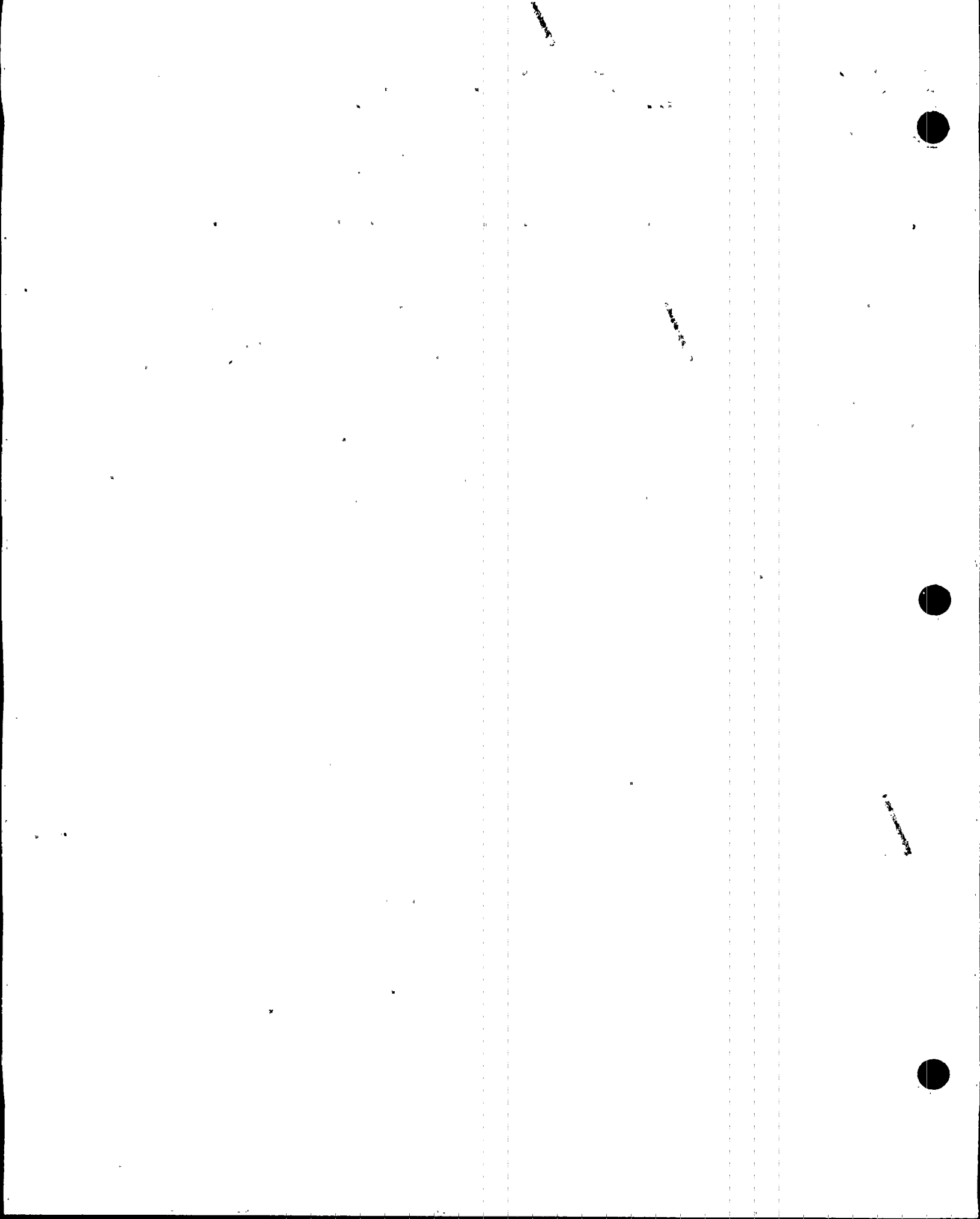
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 27

RESIDUAL HEAT REMOVAL FROM CONTAINMENT SUMP-B

ZONE NUMBER: 3-067		ASME			N I O	
		SEC. XI			O N G T	
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E	REMARKS
-----	-----	-----	-----	-----	C G H R	**CALIBRATION BLOCK**
-----	-----	-----	-----	-----	-----	-----
REF. DWG. NO. 5613-P-600-S SH. 2						
223400	14"-RHR-2306-1LU LONGITUDINAL SEAM UPSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-1 NDE 5.4-2	X - - X - -	8/25/95 - PT AND UT COMPLETE **UT-33**
223500	14"-RHR-2306-1 PIPE TO ELBOW	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-1 NDE 5.4-2 NDE 5.4-2	X - - X - - - - X	8/25/95 - PT AND UT COMPLETE, ROOT GEOMETRY **UT-33**
223520	14"-RHR-2306-1LDO LONG SEAM DOWNSTREAM OUTSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-1 NDE 5.4-2	X - - X - -	8/25/95 - PT AND UT COMPLETE **UT-33**
223540	14"-RHR-2306-1LDI LONG SEAM DOWNSTREAM INSIDE RADIUS	C-F-1 C5.12	PT UT 45	NDE 3.3-1 NDE 5.4-2	X - - X - -	8/25/95 - PT AND UT COMPLETE **UT-33**
223680	14"-RHR-2306-3LU LONGITUDINAL SEAM WELD UPSTREAM	C-F-1 C5.12	PT UT 45	NDE 3.3-2 NDE 5.4-3	X - - X - -	8/24/95 - PT AND UT COMPLETE **UT-33**
223700	14"-RHR-2306-3 PIPE TO VALVE MOV-3-8608	C-F-1 C5.11	PT UT 45 UT 60 UT 70	NDE 3.3-2 NDE 5.4-3 NDE 5.4-3 NDE 5.4-3	- - - X X - - - - X X - -	8/24/95 - PT AND UT COMPLETE, ONE ACCEPTABLE ROUND INDICATION, ROOT GEOMETRY, LIMITED EXAMINATION DUE TO VALVE CONFIGURATION **UT-33**



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 28

RESIDUAL HEAT REMOVAL FROM CONTAINMENT SUMP B

ZONE NUMBER: 3-067

ASME
SEC. XI

SUMMARY EXAMINATION AREA
NUMBER IDENTIFICATION

CATGY EXAM
ITEM NO METHOD PROCEDURE

N I O
O N G T
R S E H
E I O E
C G H R

REMARKS
CALIBRATION BLOCK

REF. DWG. NO. 5613-P-600-S SH. 2

223800	14"-RHR-2306-4 VALVE MOV-3-860B TO PIPE	C-F-1 C5.11	PT UT 45 UT 60 UT 70	NDE 3.3-3 NDE 5.4-3 NDE 5.4-3 NDE 5.4-3	- - - X X - - - - - X - X - - -	8/24/95 - PT AND UT COMPLETE, ONE ACCEPTABLE ROUND INDICATION, ROOT GEOMETRY, LIMITED EXAMINATION DUE TO VALVE CONFIGURATION. **UT-33**
223820	14"-RHR-2306-4LD LONGITUDINAL SEAM WELD DOWNSTREAM.	C-F-1 C5.12	PT UT 45	NDE 3.3-3 NDE 5.4-3	X - - - X - - -	8/24/95 - PT AND UT COMPLETE **UT-33**
224200	SR-256 DOUBLE ACTING RESTRAINT	F-A F1.20B	VT-3 CR	NDE 4.3-2 95-780	- - - X	8/24/95 - VT-3 COMPLETE, INADEQUATE THREAD ENGAGEMENT, ACCEPTED AS-IS BY ENGINEERING EVALUATION.

DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

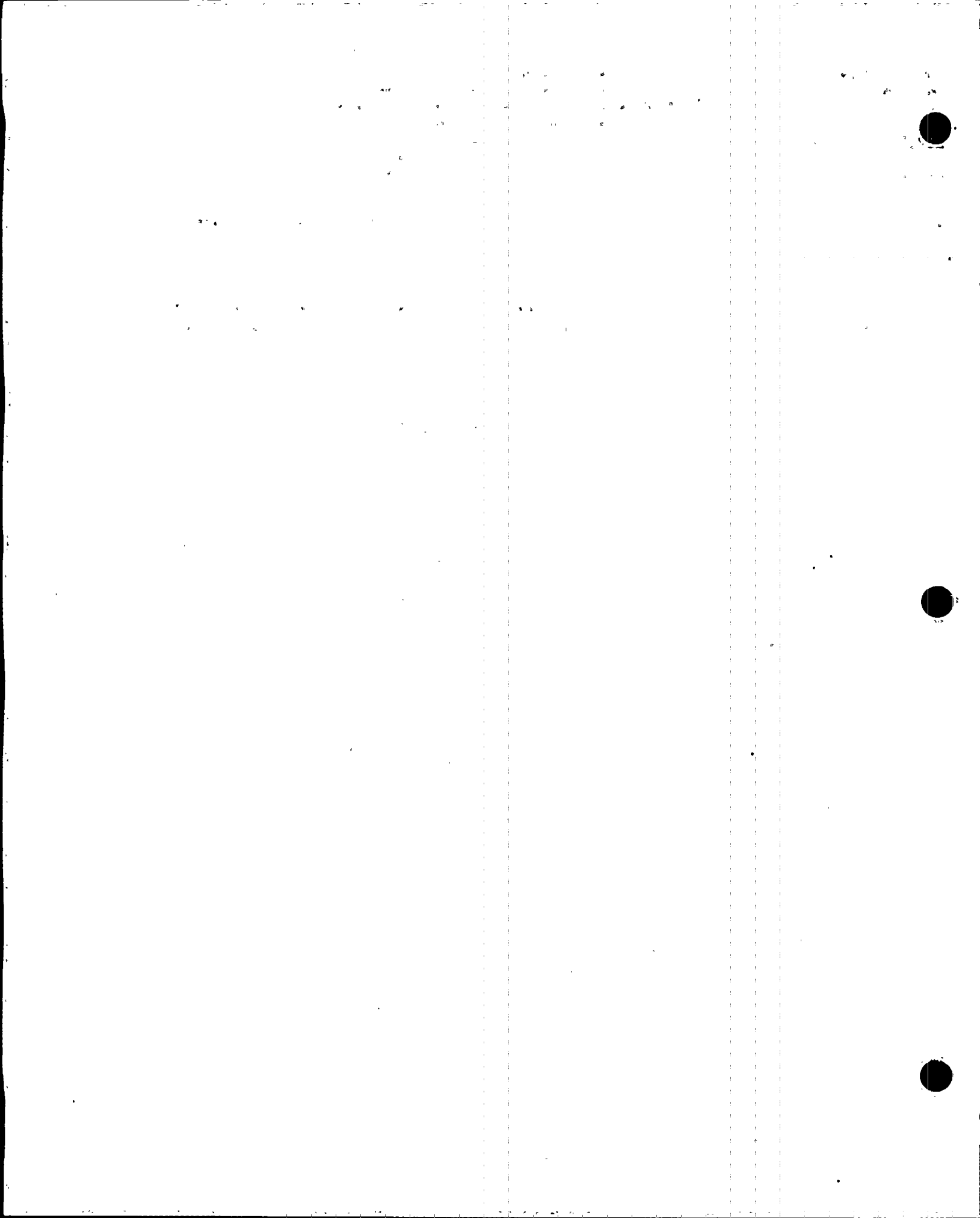
PAGE: 29

RESIDUAL HEAT REMOVAL INSIDE & OUTSIDE CONTAINMENT

ZONE NUMBER: 3-069		ASME		N I O	
		SEC. XI		O N G T	
SUMMARY EXAMINATION AREA		CATGY EXAM		R S E H	
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E REMARKS
					C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-602-S SH. 1

228400	12"-RHR-2302-1 REDUCER TO PIPE	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-4 NDE 5.4-1 NDE 5.4-1	X - - - X - - - X - - -	8/31/95 - PT AND UT COMPLETE **UT-35**
228800	12"-RHR-2302-4 TEE TO PIPE	C-F-1 C5.11	PT UT 45 UT 60	NDE 3.3-4 NDE 5.4-2 NDE 5.4-2	X - - - X - - - - - X -	8/31/95 - PT AND UT COMPLETE, INSIDE SURFACE GEOMETRY **UT-35**
229200	12"-RHR-2302-8 FLANGE TO PIPE	C-F-1 C5.11	PT UT 45 UT 60 UT 70	NDE 3.3-16 NDE 5.4-7 NDE 5.4-7 NDE 5.4-7	X - - - X - - - X - - - - - X -	9/18/95 - PT COMPLETE, 9/18/95 - UT COMPLETE, ROOT GEOMETRY **UT-35**



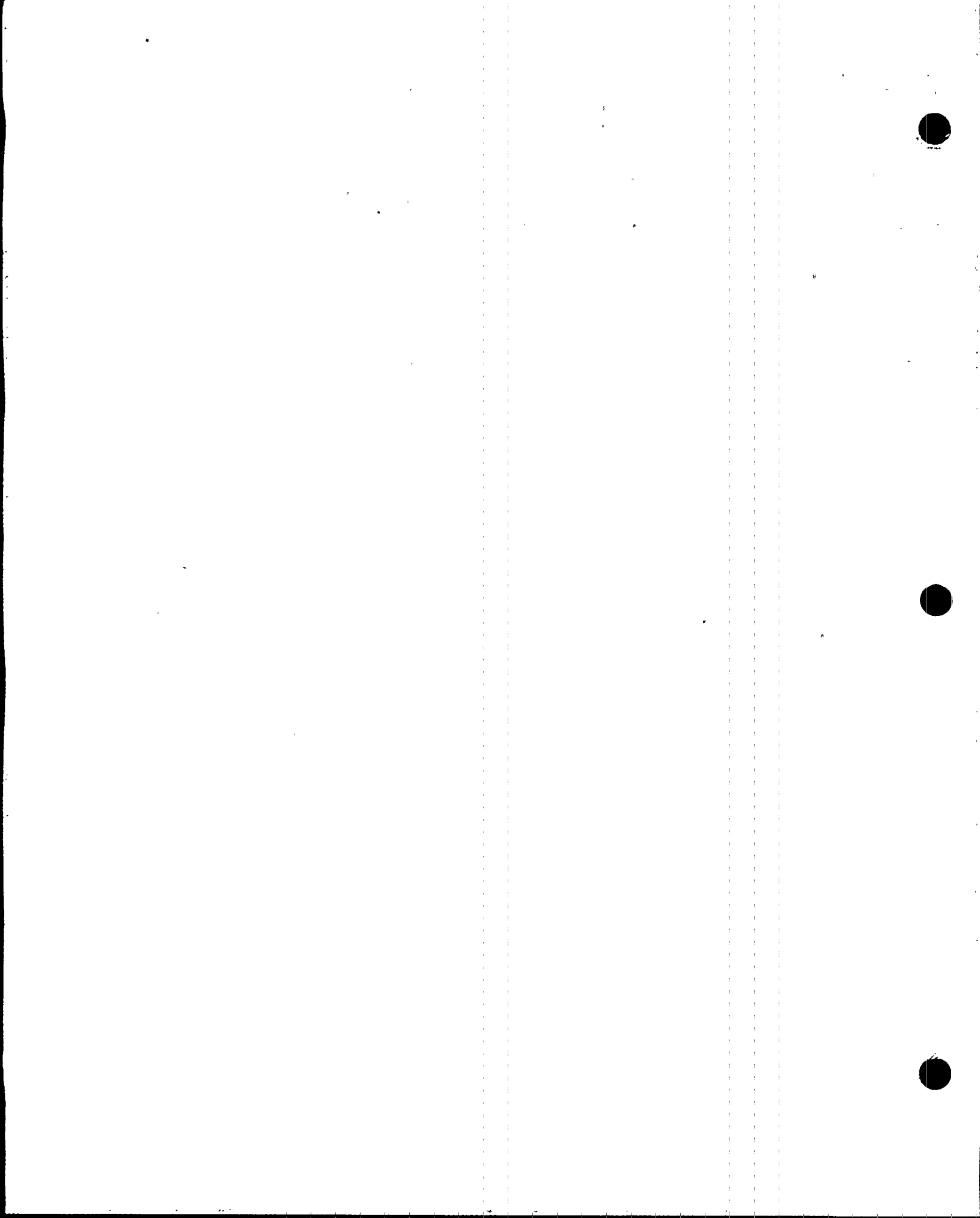
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS.

PAGE: 30

WASH HEAD SAFETY INJECTION OUTSIDE CONTAINMENT

ZONE NUMBER: 3-095		ASME			N I O
		SEC. XI			O N G T
SUMMARY EXAMINATION AREA		CATGY	EXAM		R S E H
NUMBER	IDENTIFICATION	ITEM NO	METHOD	PROCEDURE	E I O E REMARKS
-----	-----	-----	-----	-----	C G H R **CALIBRATION BLOCK**
-----	-----	-----	-----	-----	-----
REF. DWG. NO. 5613-P-597-S SH. 2					
288594	BORON INJECTION TANK TANK SUPPORT	F-A F1.40T	VT-3	NDE 4.3-8	X - - - 8/24/95 - VT-3 COMPLETE
REF. DWG. NO. 5613-P-823-S SH. 2					
288723	8080-R-006-01 IA INTEGRAL ATTACHMENTS	C-C C3.20	PT	NDE 3.3-19	X - - - 9/19/95 - PT COMPLETE, ADDITIONAL EXAMINATION PERFORMED DUE TO INDICATIONS FOUND ON 8080-R-007-09
288787	8080-H-007-09 DOUBLE ACTING RESTRAINT	F-A F1.20B	VT-3 CR VT-3	NDE 4.3-3 95-688 TS 9.9-95024592	- - - X 9/5/95 - VT-3 COMPLETE, BENT INTEGRAL ATTACHMENT, INTEGRAL ATTACHMENT WAS X - - - REMOVED FROM THE PIPE AND THE SUPPORT REDESIGNED, 9/25/95 - VT-3 COMPLETE, NRI ON REDESIGNED SUPPORT
288790	8080-H-007-09 IA INTEGRAL ATTACHMENTS	C-C C3.20	PT CR PT	NDE 3.3-12 95-688 TS 9.5-95024592	- - - X 9/12/95 - PT COMPLETE, 9 UNACCEPTABLE AND 3 ACCEPTABLE INDICATIONS, ADDITIONAL X - - - EXAMINATIONS REQUIRED, INTEGRAL ATTACHMENT WAS REMOVED FROM PIPE, 9/25/95 - PT COMPLETE, NRI ON AREA WHERE INTEGRAL ATTACHMENT WAS REMOVED



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

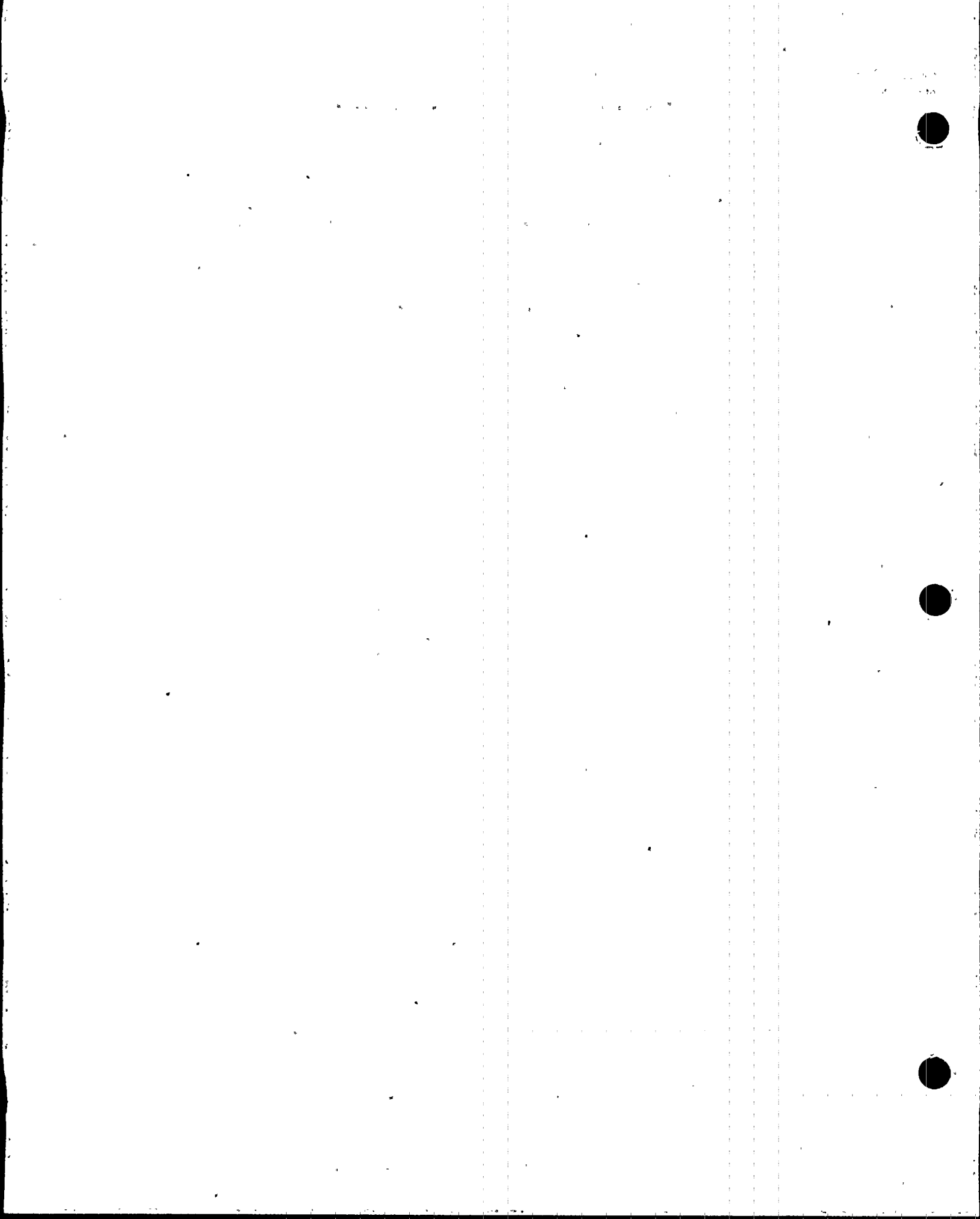
PAGE: 31

HIGH PRESSURE SAFETY INJECTION OUTSIDE CONTAINMENT

SUMMARY EXAMINATION AREA		ASME			N I O
NUMBER	IDENTIFICATION	SEC. XI	CATGY	EXAM	O N G T
		ITEM NO	METHOD	PROCEDURE	R S E H
					E I O E
					C G M R
					REMARKS
					CALIBRATION BLOCK

REF. DWG. NO. 5613-P-597-S SH. 3

289063	C	F-A	VT-3	NDE 4.3-9	X - - -	8/24/95 - VT-3 COMPLETE
	SINGLE ACTING RESTRAINT	F1.20A				



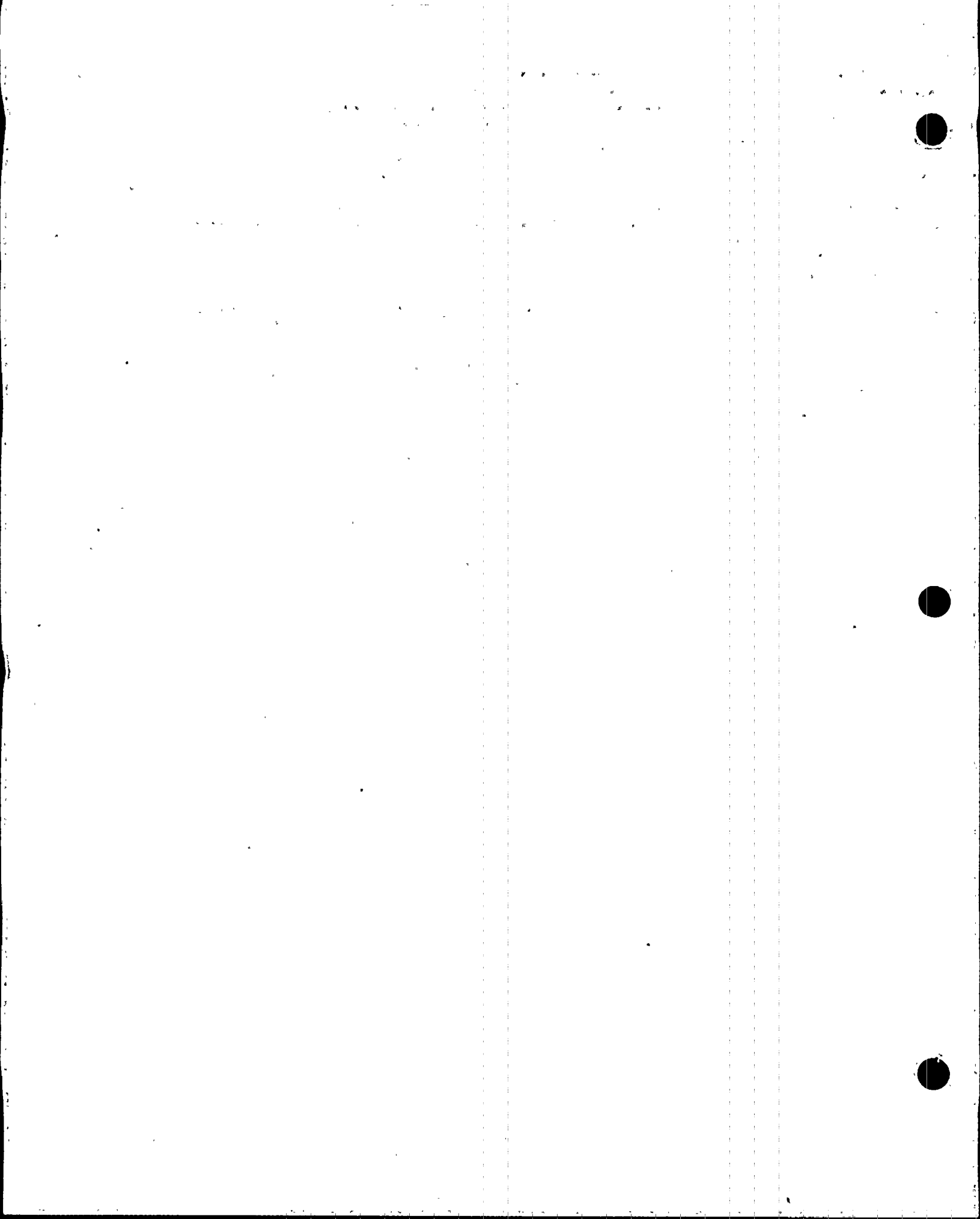
DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 32

STEAM SYSTEM LOOP B OUTSIDE CONTAINMENT

ZONE NUMBER: 3-101		ASME	N I O		
		SEC. XI	O N G T		
		CATGY	EXAM	R S E H	
SUMMARY	EXAMINATION AREA	CATGY	EXAM	E I O E	REMARKS
NUMBER	IDENTIFICATION	ITEM NO	METHOD	C-G M R	**CALIBRATION BLOCK**
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REF. DWG. NO. 5613-P-654-S SH. 2					
305500	26"-MSB-2305-12 6" WELDOLET	C-F-2 C5.81	MT	NDE 2.2-7	X - - - 9/29/95 - MT COMPLETE
305900	26"-MSB-2305-14 12" WELDOLET	C-F-2 C5.81	MT	NDE 2.2-6	- - - X 9/29/95 - MT COMPLETE, 2 ACCEPTABLE LINEAR INDICATIONS



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 33

MAIN FEEDWATER SYSTEM LOOP A

ZONE NUMBER: 3-109

ASME
SEC. XI

N I O
O N G T
R S E H

SUMMARY EXAMINATION AREA
NUMBER IDENTIFICATION

CATGY EXAM
ITEM NO METHOD PROCEDURE

E I O E REMARKS
C G H R **CALIBRATION BLOCK**

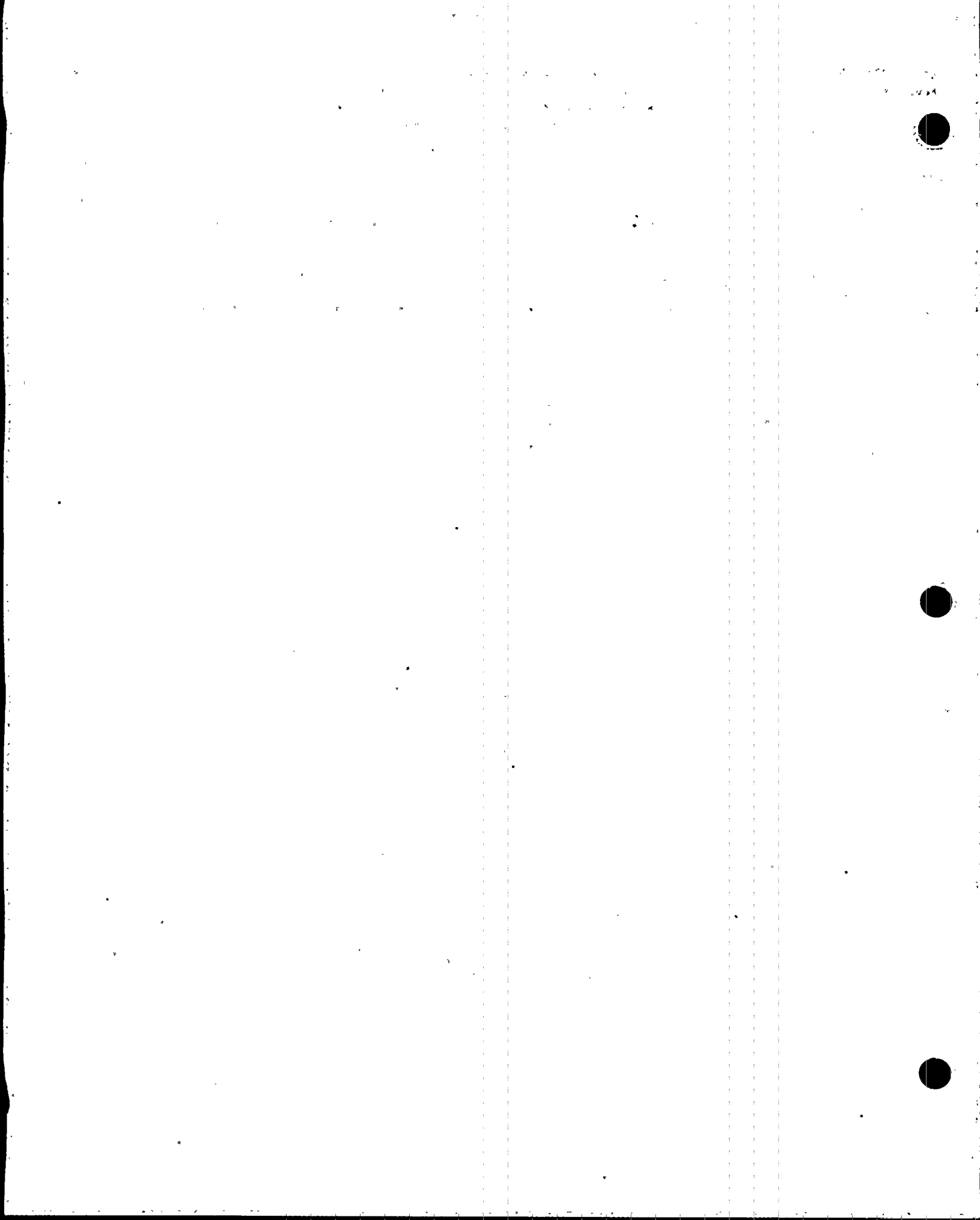
REF. DWG. NO. 5613-P-817-S SH. 4

327300	14"-FWA-2301-2A 6" WELDOLET	C-F-2 C5.81	MT	NDE 2.2-5	X - - -	9/27/95 - MT COMPLETE
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REF. DWG. NO. 5613-P-651-S SH. 1

330500	AUGMENTED EXAMINATION FROM NOZZLE RAMP TO 1 DIAMETER ON ELBOW	AUG	UT	NDE 5.16-1	- - X X	9/15/95 - UT COMPLETE, ROOT GEOMETRY AND ACCEPTABLE SLAG INDICATIONS
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UT-20, UT-29



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 34

FEEDWATER SYSTEM LOOP B

ZONE NUMBER: 3-110

ASME
SEC. XI

CATGY EXAM

ITEM NO METHOD

PROCEDURE

N I O

O N G T

R S E H

E I O E REMARKS

C G M R **CALIBRATION BLOCK**

SUMMARY EXAMINATION AREA

NUMBER IDENTIFICATION

REF. DWG. NO. 5613-P-652-S SH. 1

333800 AUGMENTED EXAMINATION AUG
FROM NOZZLE RAMP TO 1 DIAMETER
ON ELBOW

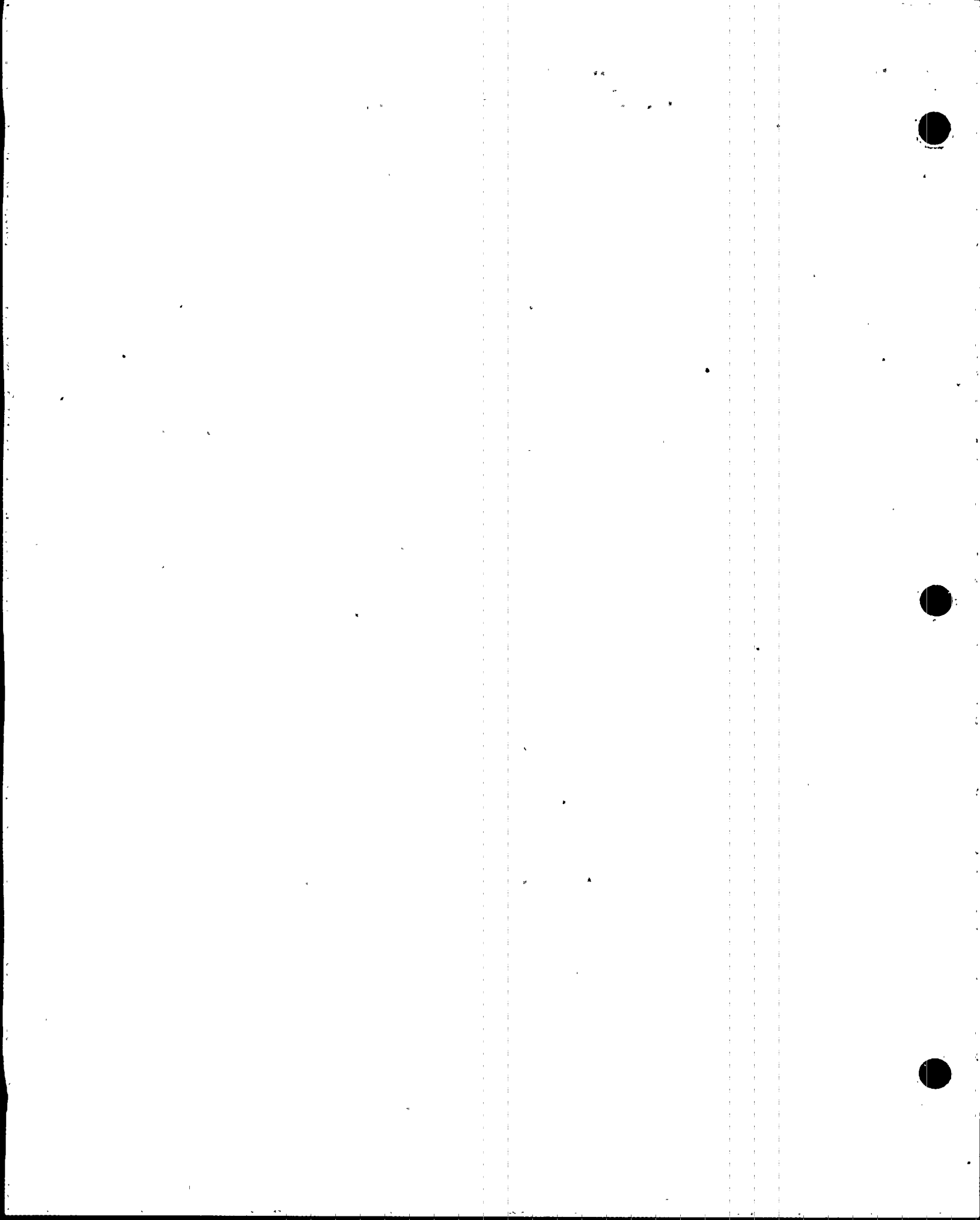
UT

NDE 5.16-2

- - X X

9/13/95 - UT COMPLETE, ROOT GEOMETRY AND
BACKING RING

UT-20, UT-29



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 35

FEEDWATER SYSTEM LOOP C

ZONE NUMBER: 3-111

ASME

N I O

SEC. XI

O N G T

SUMMARY EXAMINATION AREA

CATGY

EXAM

R S E H

E I O E

REMARKS

NUMBER IDENTIFICATION

ITEM NO

METHOD

PROCEDURE

C G M R

CALIBRATION BLOCK

REF. DWG. NO. 5613-P-178-S SH. 1

338200 AUGMENTED EXAMINATION
FROM NOZZLE RAMP TO 1 DIAMETER
ON ELBOW

AUG

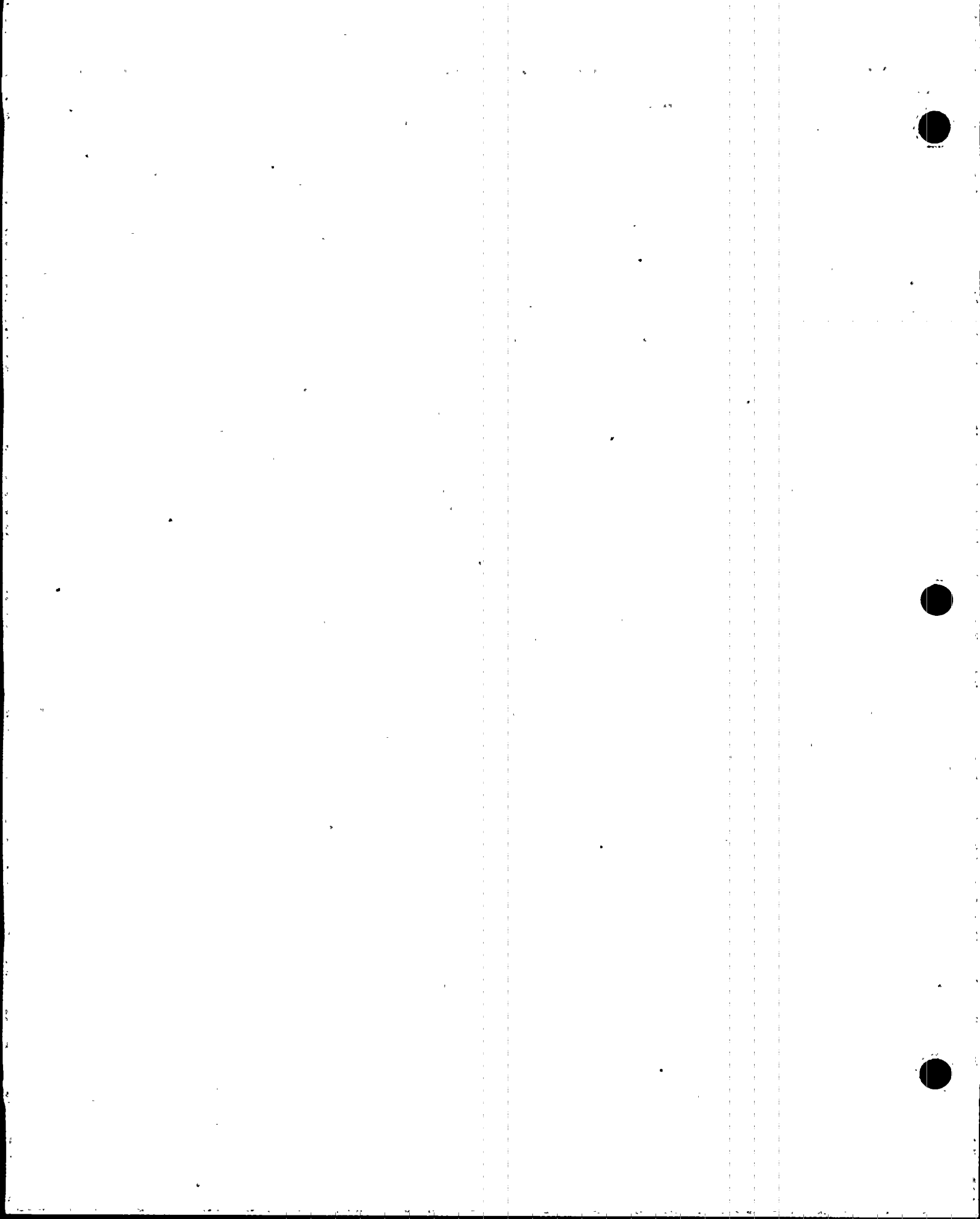
UT

NDE 5.16-3

- - X X

9/13/95 - UT COMPLETE, ROOT GEOMETRY AND
BACKING RING

UT-20, UT-29



DATE: 12/15/95
REVISION: 0

TURKEY POINT NUCLEAR PLANT UNIT 3
INSERVICE INSPECTION RESULTS FOR THE
THIRD INTERVAL, FIRST PERIOD, SECOND OUTAGE (95RF)
CLASS 2 CAEPOBL STATUS COMPONENTS

PAGE: 36

FW FEEDWATER BYPASS LOOP A

ZONE NUMBER: 3-112

ASME
SEC. XI

N I O
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R S E H

SUMMARY EXAMINATION AREA
NUMBER IDENTIFICATION

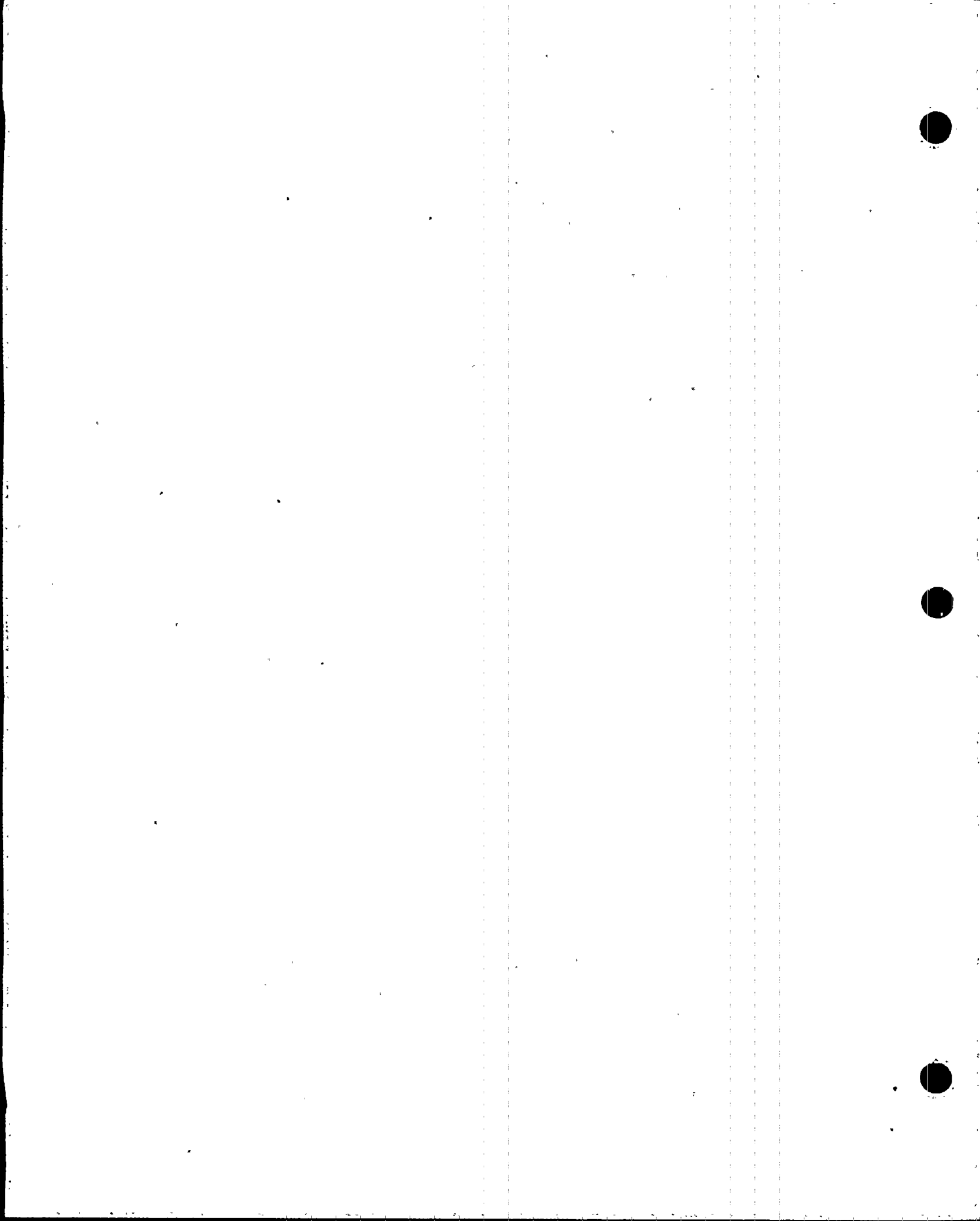
CATGY EXAM
ITEM NO METHOD PROCEDURE

E I O E REMARKS
C G H R **CALIBRATION BLOCK**

REF. DWG. NO. 5613-P-817-S SH. 4

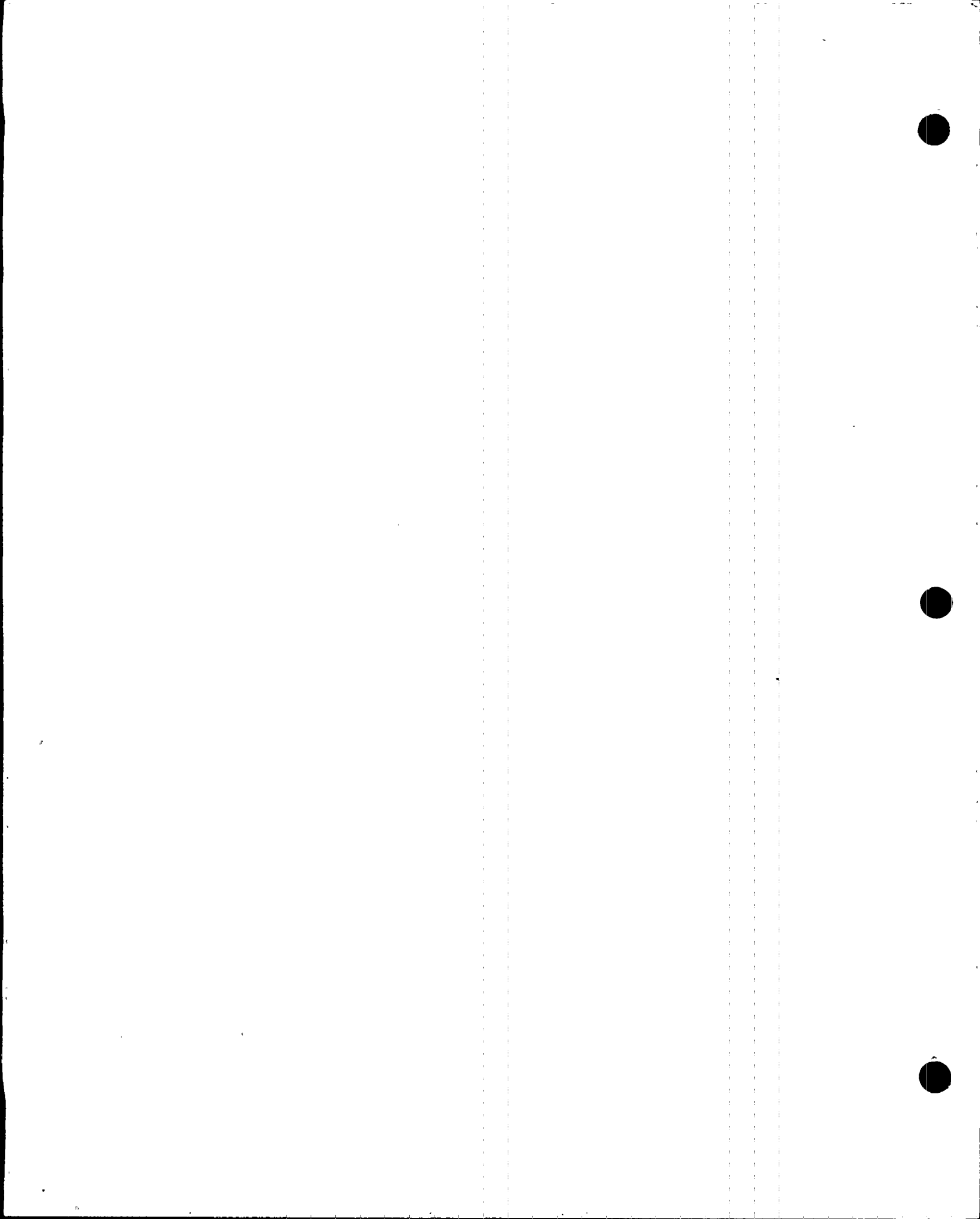
338500	6"-FWA-2301-2	C-F-2	MT	NDE 2.2-3	X - - -	9/22/95 - UT COMPLETE, ROOT GEOMETRY,
	REDUCER TO VALVE 3-20-131	C5.51	UT 45	NDE 5.2-1	X - - -	9/25/95 - MT COMPLETE
			UT 60	NDE 5.2-1	- - X -	
			UT 70	NDE 5.2-1	- - X -	

UT-23



**TURKEY POINT UNIT 3
1995 REFUELING OUTAGE**

Form NIS-BB Owners' Data Report for Eddy Current Examinations



FORM NIS-BB OWNERS' DATA REPORT FOR EDDY CURRENT EXAMINATION RESULTS

As required by the provisions of the ASME CODE RULES

EDDY CURRENT EXAMINATION RESULTS

PLANT : Turkey Point Unit 3

EXAMINATION DATE: SEPTEMBER 14, 1995 thru SEPTEMBER 19, 1995

STEAM GENERATOR	TOTAL TUBES INSPECTED	TOTAL TUBES		TUBES PLUGGED AS PREVENTIVE MAINTENANCE	TUBES PLUGGED THIS OUTAGE	TOTAL PLUGGED TUBES IN S/G
		20% - 39%	40% - 100%			
3E210A	3197	20	NONE	NONE	NONE	17
3E210B	3198	35	2	NONE	2	18
3E210C	3181	30	NONE	NONE	NONE	33

LOCATION OF INDICATIONS

(20% - 100%)

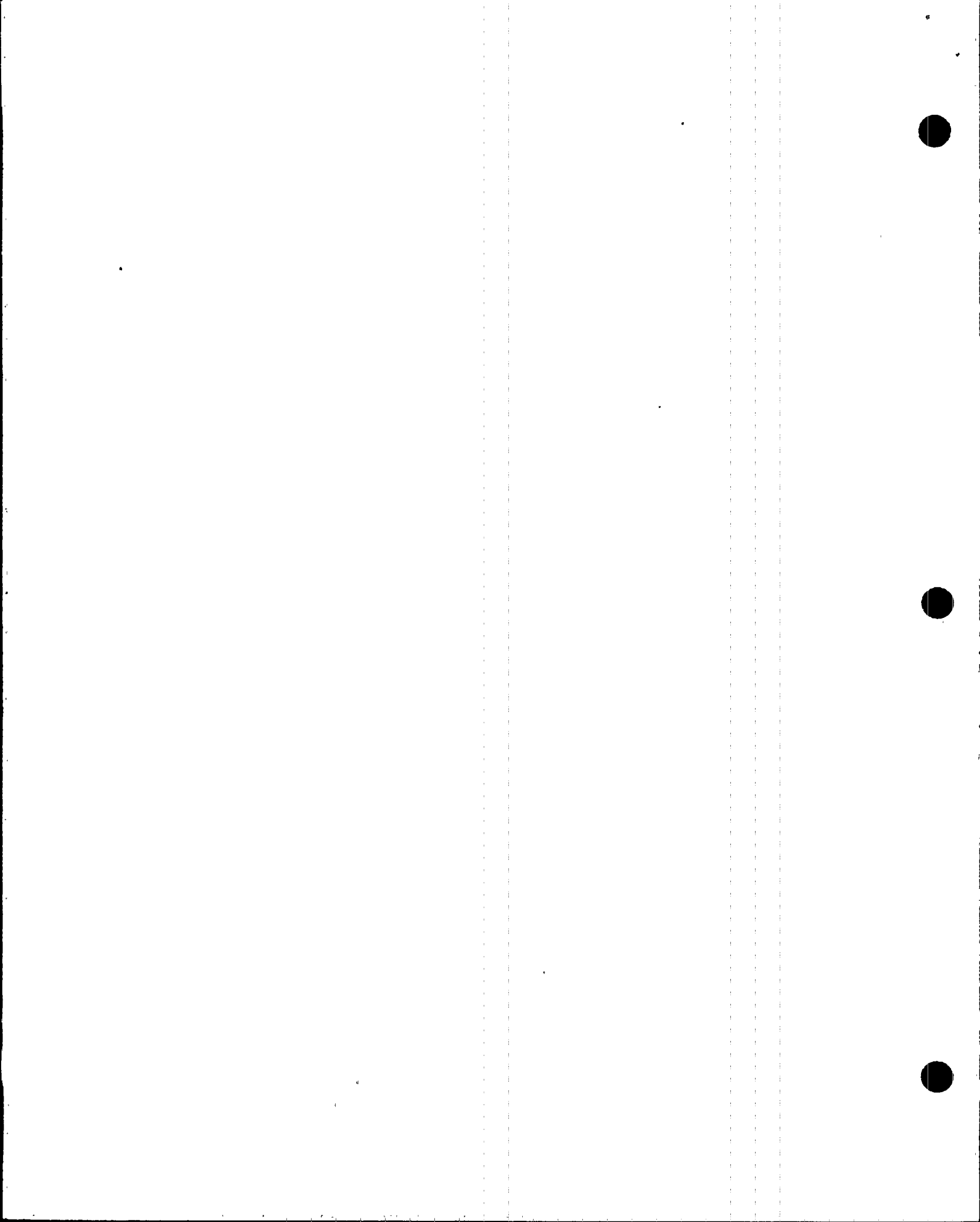
STEAM GENERATOR	AVB BARS	SUPPORT LOCATIONS 1 THROUGH 6		FREESPAN 6H thru 6C	TOP OF TUBE SHEET TO #1 SUPPORT		TOTAL INDICATIONS	
		COLD LEG	HOT LEG		C/L	H/L	20% - 39%	40% TO 100%
3E210A	5	4	6	1	NONE	5	21	NONE
3E210B	8	10	8	6	3	8	41	2
3E210C	33	3	1	9	1	NONE	47	NONE

Remarks:

DATE: 11/15/95 PREPARED BY: Miguel Montalbano R.
S/G EDDY CURRENT COORDINATOR

DATE: 11/15/95 REVIEWED BY: [Signature]
INSPECTIONS SUPERVISOR

DATE: 11/16/95 REVIEWED BY: [Signature]
S/G TECHNICAL SPECIALIST



CUMULATIVE DISTRIBUTION SUMMARY
TURKEY POINT UNIT # 3
09/95

COMPONENT : S/G A

Page : 1
Date : 11/15/95

Examination Dates : 09/14/95 thru 09/19/95

Total Number of Tubes Inspected: 3197

Total Indications

Between 20% and 39%: 21
Greater than or equal to 40%: 0

Total Tubes Plugged as Preventive Maint : 0
Total Tubes Plugged: 0

Location Of Indications 20% to 100%

Hot Leg

TSH -.5 to 01H -2.1 : 5
01H -2.0 to 06H +2.0 : 6
06H +2.1 to AV1 -3.1 : 1
AV1 -3.0 to AV4 -3.0 : 5

Cold Leg

TSC -.5 to 01C -2.1 : 0
01C -2.0 to 06C +2.0 : 4
06C +2.1 to AV4 -3.1 : 0

INDICATIONS/TRENDING REPORT

PTN-3

OUTAGE : 09/95

COMPONENT : S/G A

DESCRIPTION : 20% to 39%

Page : 1

Date : 10/ 3/95

Time : 15:02:59

													09/95				N/A			
		Extent																		
Row	Col	Leg	Req	Tst/Note	Reel	Probe	Location	Volts	Deg	Ch	%	Diff	Location	Volts	Deg	Ch	%			
13	5	C	TEH	TEH	AC008	A-720-M/ULC	TSH 3.8	.8	151	1	27									
14	7	C	TEH	TEH	PS AC007	A-720-M/ULC	TSH 3.9	.3	152	1	27									
12	9	C	TEH	TEH	SS AC008	A-720-M/ULC	04C 47.9	.3	153	1	22									
33	15	C	TEH	TEH	SS AC016	A-720-M/ULC	TSH .6	.5	94	1	29									
4	20	C	TEH	TEH	SS AC011	A-720-M/ULC	01C 32.4	.3	149	1	29									
40	27	C	TEH	TEH	PS AC023	A-720-M/ULC	04H 6.1	.3	151	1	28									
33	40	C	TEH	TEH GNPL	AC020	A-720-M/ULC	05C 2.4	.4	139	1	34									
33	41	C	TEH	TEH	PS AC020	A-720-M/ULC	AV1 .0	.8		P 2	25									
38	45	C	TEH	TEH	PS AC019	A-720-M/ULC	AV2 .0	1.5		P 2	33									
		C	TEH	TEH	PS AC019	A-720-M/ULC	AV3 .0	.7		P 2	25									
37	47	C	TEH	TEH	PS AC045	A-720-M/ULC	AV3 .0	.6		P 2	24									
22	52	C	TEH	TEH	AC038	A-720-M/ULC	04H 40.6	1.3	139	1	37									
28	59	C	TEH	TEH	PS AC044	A-720-M/ULC	AV2 .0	.6		P 2	22									
38	65	C	TEH	TEH	AC047	A-720-M/ULC	AV3 .0	.4		P 2	20									
20	68	C	TEH	TEH	AC041	A-720-M/ULC	04H 42.2	.4	151	1	29									
30	69	C	TEH	TEH	PS AC044	A-720-M/ULC	03H 1.4	.5	146	1	28									
10	75	C	TEH	TEH	PS AC053	A-720-M/ULC	04H 44.7	.4	139	1	35									
9	76	C	TEH	TEH	PS AC052	A-720-M/ULC	02C 16.4	1.4	146	1	27									
33	78	C	TEH	TEH	PC AC047	A-720-M/ULC	TSH .7	.6	151	1	28									
18	81	C	TEH	TEH	PS AC049	A-720-M/ULC	01H 4.9	.2	135	1	39									
22	86	C	TEH	TEH	PS AC049	A-720-M/ULC	BAH 12.2	.3	145	1	30									

Number of RECORDS Selected from Current Outage : 21

Number of TUBES Selected from Current Outage : 20

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CUMULATIVE DISTRIBUTION SUMMARY
TURKEY POINT UNIT # 3
09/95

COMPONENT : S/G B

Page : 1
Date : 11/15/95

Examination Dates : 09/14/95 thru 09/19/95

Total Number of Tubes Inspected: 3198

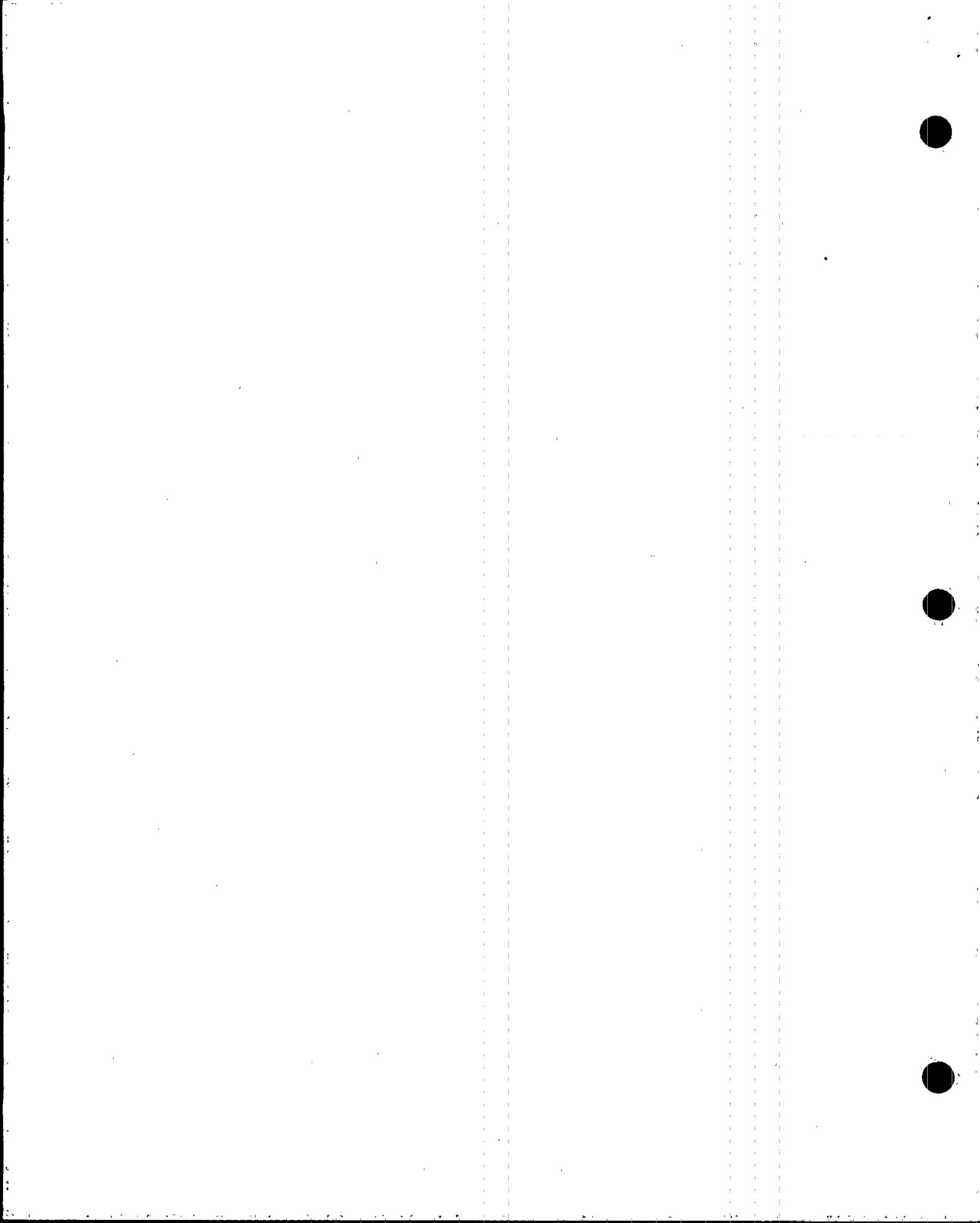
Total Indications

Between 20% and 39%	41
Greater than or equal to 40%	2

Total Tubes Plugged as Preventive Maint :	0
Total Tubes Plugged	2

Location Of Indications 20% to 100%

Hot Leg		Cold Leg	
TSH -.5 to 01H -2.1 :	8	TSC -.5 to 01C -2.1 :	3
01H -2.0 to 06H +2.0 :	8	01C -2.0 to 06C +2.0 :	10
06H +2.1 to AV1 -3.1 :	4	06C +2.1 to AV4 -3.1 :	2
AV1 -3.0 to AV4 -3.0 :	8		



INDICATIONS/TRENDING REPORT

PTN-3

OUTAGE : 09/95

COMPONENT : S/G B

DESCRIPTION : 20% to 39%

Page : 1

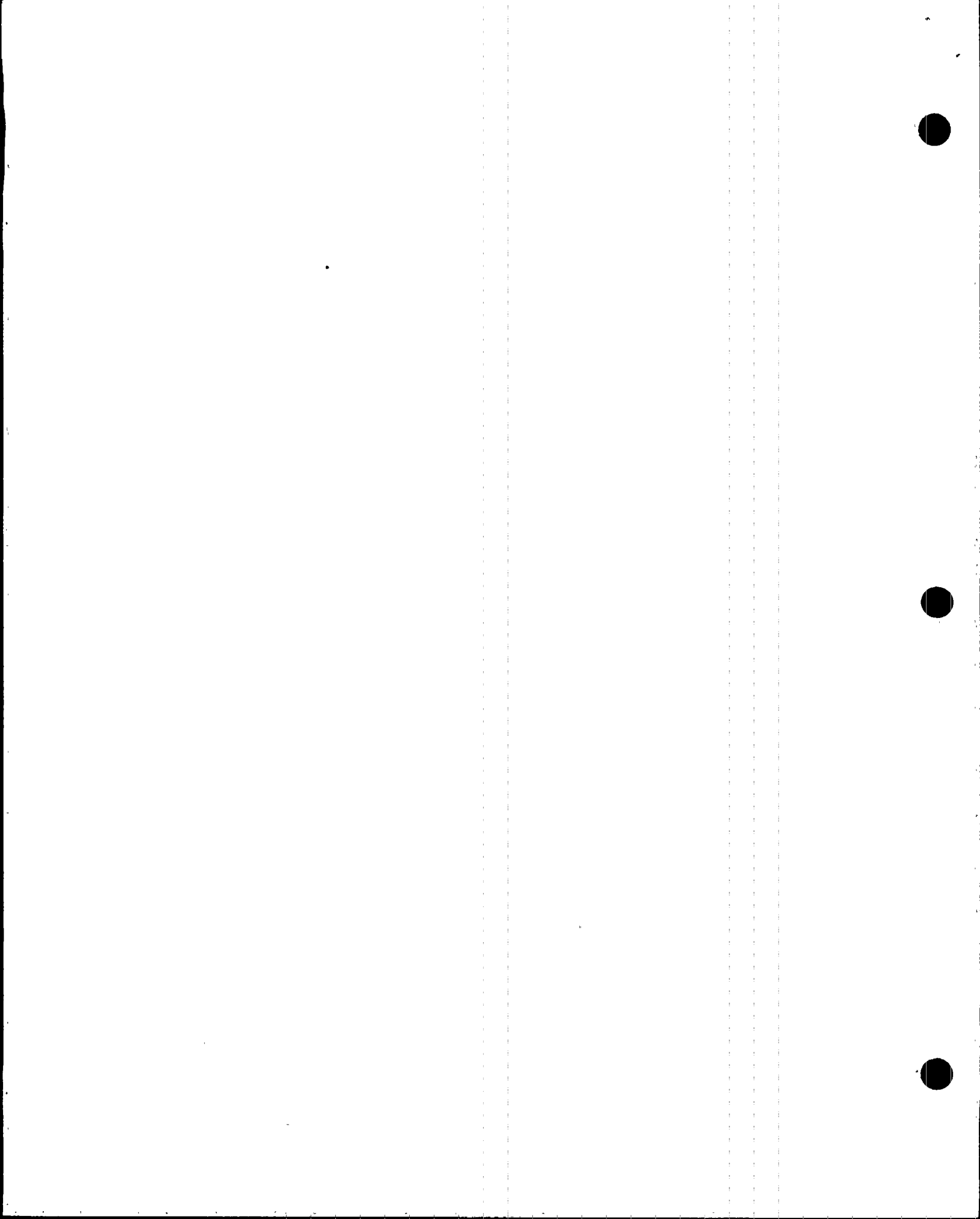
Date : 10/ 3/95

Time : 15:17:24

													09/95				N/A			
Row	Col	Leg	Req	Tst/Note	Reel	Probe	Location	Volts	Deg	Ch	%	Diff	Location	Volts	Deg	Ch	%			
11	3	H	TEC	TEC GNPL	BH017	A-720-M/ULC	02C 36.1	.4	150	1	36									
10	4	H	TEC	TEC PS	BH012	A-720-M/ULC	02C 32.0	.3	148	1	34									
10	7	H	TEC	TEC	BH012	A-720-M/ULC	02C 31.8	.7	157	1	27									
5	8	H	TEC	TEC	BH012	A-720-M/ULC	04H 15.0	2.0	148	1	34									
23	9	C	TEH	TEH	BC042	A-720-M/ULC	05C 31.1	.6	144	1	35									
		C	TEH	TEH SS	BC042	A-720-M/ULC	05C 7.7	.3	148	1	31									
11	10	H	TEC	TEC	BH018	A-720-M/ULC	02C 36.6	.6	151	1	30									
23	10	C	TEH	TEH PC	BC037	A-720-M/ULC	06H 4.0	1.3	150	1	31									
10	11	H	TEC	TEC PL	BH012	A-720-M/ULC	02C 32.0	.4	152	1	31									
11	11	H	TEC	TEC PS	BH018	A-720-M/ULC	02C 36.8	.5	155	1	26									
18	12	H	TEC	TEC PS	BH018	A-720-M/ULC	05H 20.0	.5	158	1	24									
26	20	C	TEH	TEH PS	BC037	A-720-M/ULC	AV4 .0	.4		P 2	23									
40	25	H	TEC	TEC	BH020	A-720-M/ULC	05C 38.8	.6	159	1	28									
32	34	H	TEC	TEH PS	BC004	A-720-M/ULC	AV1 .0	.5		P 2	27									
		H	TEC	TEH PS	BC004	A-720-M/ULC	AV3 .0	.9		P 2	30									
		H	TEC	TEH PS	BC004	A-720-M/ULC	AV4 .0	.5		P 2	27									
11	38	C	TEH	TEH SC	BC030	A-720-M/ULC	01H 12.2	.4	145	1	29									
34	38	H	TEC	TEC SC	BH019	A-720-M/ULC	AV1 .0	.4		P 2	22									
		H	TEC	TEC	BH019	A-720-M/ULC	AV2 .0	2.6		P 2	38									
42	38	C	TEH	TEH PS	BC004	A-720-M/ULC	TSH 1.5	1.2	142	1	36									
		C	TEH	TEH PS	BC004	A-720-M/ULC	TSH 3.5	.6	151	1	25									
11	39	C	TEH	TEH	BC029	A-720-M/ULC	01H 12.2	.7	156	1	26									
30	42	C	TEH	TEH PS	BC029	A-720-M/ULC	AV3 .0	.4		P 2	21									
21	43	C	TEH	TEH PS	BC030	A-720-M/ULC	04C 49.5	.8	142	1	33									
6	44	C	TEH	TSH PS	BC031	A-720-M/ULC	TSH 39.3	1.6	148	1	31									
34	46	H	TEC	TEC	BH020	A-720-M/ULC	AV2 .0	1.2		P 2	29									
		H	TEC	TEC	BH020	A-720-M/ULC	AV3 .0	2.0		P 2	36									
34	51	H	TEC	TEC PS	BH021	A-720-M/ULC	AV2 .0	1.7		P 2	31									
45	52	H	TEC	TEC	BH021	A-720-M/ULC	TSH .7	1.7	162	1	24									
42	55	H	TEC	TEC PC	BH020a	A-720-M/ULC	AV3 .0	1.9		P 2	35									
44	57	H	TEC	05H PS	BH020a	A-720-M/ULC	TSH .7	2.0	166	1	21									
37	59	H	TEC	TEH PC	BC013	A-720-M/ULC	05H 7.0	.4	159	1	24									
43	60	H	TEC	05H PS	BH021	A-720-M/ULC	TSH .7	1.5	158	1	28									
27	70	C	TEH	TEH PS	BC035	A-720-M/ULC	06H 4.4	.6	151	1	30									
20	81	C	TEH	TEH RS	BC035	A-720-M/ULC	BAC .7	.7	134	P 1	25									
29	81	C	TEH	TEH SS	BC036	A-720-M/ULC	05H 15.8	.5	144	1	30									
23	86	C	TEH	TEH SS	BC036	A-720-M/ULC	TSC .7	1.8	80	1	35									
11	89	C	TEH	TEH PS	BC035	A-720-M/ULC	02H 36.4	.6	150	1	30									
16	89	C	TEH	TEH PS	BC035	A-720-M/ULC	TSC .7	1.0	128	P 1	25									
11	90	C	TEH	TEH PS	BC036	A-720-M/ULC	02H 36.5	.4	146	1	32									
7	92	H	TEC	TEC PL	BH015	A-720-M/ULC	TSH .7	.9	152	1	31									

Number of RECORDS Selected from Current Outage : 41

Number of TUBES Selected from Current Outage : 35



INDICATIONS/TRENDING REPORT

PTN-3

OUTAGE : 09/95

COMPONENT : S/G B

DESCRIPTION : 40% to 100%

Page : 1

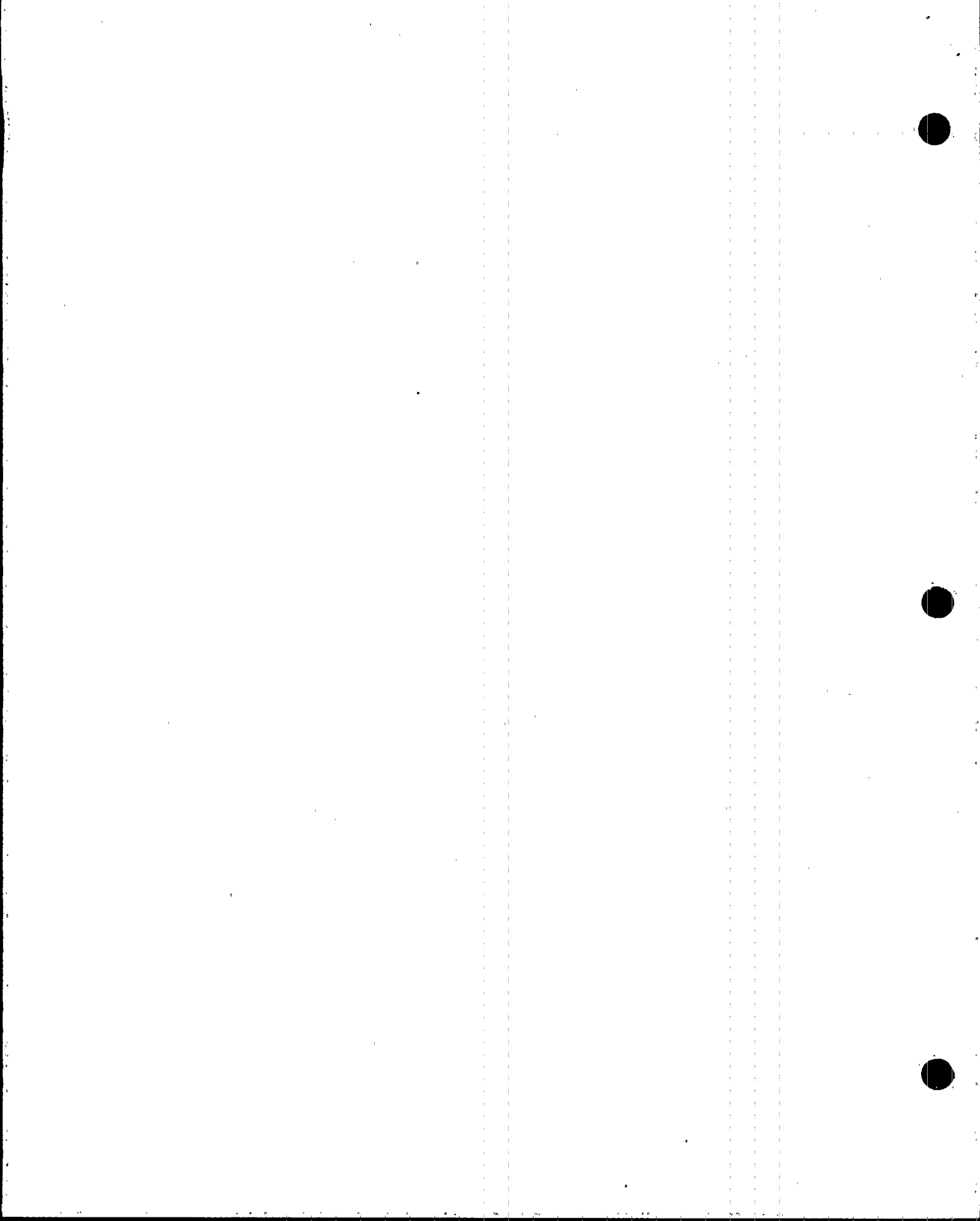
Date : 10/ 3/95

Time : 15:17:56

09/95													N/A					
Row	Col	Leg	Extent		Reel	Probe	Location		Volts	Deg	Ch	%	Diff	Location	Volts	Deg	Ch	%
42	37	C	TEH	TEH	BH026	MRPC680-3C	TSH	.7	1.1	134	CHR	44						
34	38	H	TEC	TEC PL	BH019	A-720-M/ULC	AV3	.0	3.3		P 2	42						

Number of RECORDS Selected from Current Outage : 2

Number of TUBES Selected from Current Outage : 2



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

Page 1 of 2

As Required by the Provisions of the ASME Code Section XI

1. Owner FLORIDA POWER & LIGHT
Name
700 Universe Blvd. Juno Beach, FL 33408
Address

Date Aug. 31, 1994

Sheet 1 of 1

2. Plant TURKEY POINT
Name
P.O. BOX 3088, FLORIDA CITY, FL 33034
Address

Unit 3

PWO: 5031 WO#94019490

Repair Organization P.O. No., Job No. etc.

3. Work Performed by FLORIDA POWER & LIGHT
Name
P.O. BOX 3088, FLORIDA CITY, FL 33034
Address

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System Component Cooling Water System Quality Group C

5. (a) Applicable Construction Code ANSI B31.1 19 55 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
3/4"-10 allthread (6)	N/A	N/A	N/A	3E207B R1J0043	N/A	Replacement	No
3/4"-10 Nuts (6)	N/A	N/A	N/A	3E207B R1J0019	N/A	Replacement	No

7. Description of Work Replaced two (2) bolts with allthread and six (6) nuts on 3B CCW Heat Exchanger.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☒

Pressure _____ psi

Test Temp. _____ Degree's F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

94-053-3

FORM NIS-2 (Back)

Page 2 of 2

9. Remarks Mechanical connection, no welding performed.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Mark L. Smith Date 9/17 19 94
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Dade County, Florida and employed by Arkwright Mutual Insurance Company of Norwood, MA.

have inspected the components described in this Owner's Report during the period Aug. 4, 1994 to Aug. 31, 1994, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with the inspection.

Bernie K. Smith
Inspector's Signature

Commissions Factory Mutual Eng. Assoc.
8230 (N) (I)
National Board, State, Province, and Endorsements

94-013-4

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

Page 1 of 2

1. Owner FLORIDA POWER & LIGHT
Name
700 Universe Blvd. Juno Beach, FL 33408
Address

Date Aug. 17, 1994

Sheet 1 of 1

2. Plant TURKEY POINT
Name
P.O. BOX 3088, FLORIDA CITY, FL 33034
Address

Unit 3

PWO: 5093 WO#94020073
Repair Organization P.O. No., Job No. etc.

3. Work Performed by FLORIDA POWER & LIGHT
Name
P.O. BOX 3088, FLORIDA CITY, FL 33034
Address

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System Intake Cooling Water System Quality Group C

5. (a) Applicable Construction Code ANSI B31.1 1955 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Nut (1)	N/A	N/A	N/A	BS-4-1402	N/A	Replacement	No
Stud (1)	N/A	N/A	N/A	BS-4-1402	N/A	Replacement	No

7. Description of Work Replaced one (1) worn nuts and one (1) stud on basket strainer BS-3-1402 cover.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☐

Pressure _____ psi Test Temp. _____ Degree's F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

94-054-3

FORM NIS-2 (Back)

Page 2 of 2

9. Remarks Mechanical connection, no welding required.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.
repair or replacement

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Date 8/22 1994
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Dade County, Florida and employed by Arkwright Mutual Insurance Company of Norwood, MA. have inspected the components described in this Owner's Report during the period Aug. 10, 1994 to Aug. 17, 1994 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with the inspection.

[Signature] Commissions Factory Mutual Eng. Assoc. 8230 (N) (I)
Inspector's Signature National Board, State, Province, and Endorsements
Date 9/2 1994 94-054-3

BB

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner FLORIDA POWER & LIGHT
Name
700 Universe Blvd. Juno Beach, FL 33408
Address

Date Sept. 29, 1994

Sheet 1 of 1

2. Plant TURKEY POINT
Name
P.O. BOX 3088, FLORIDA CITY, FL 33034
Address

Unit 3

PWO: 3498 WO#94011261

Repair Organization P.O. No., Job No. etc.

3. Work Performed by FLORIDA POWER & LIGHT
Name
P.O. BOX 3088, FLORIDA CITY, FL 33034
Address

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System Component Cooling Water System Quality Group C

5. (a) Applicable Construction Code ANSI B31.1 19 55 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Support	N/A	N/A	N/A	DET A	N/A	Repaired	No

7. Description of Work Removed and reinstalled CCW Support to facilitate Charging Pump crank case repair. Hanger drawing 5613-H-621 sht. 10J.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Other ☐

Pressure _____ psi Test Temp. _____ Degree's F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

Page 2 of 2

9. Remarks All welding performed in accordance with approved plant procedures.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct, and this repaired conforms to the rules of the ASME Code, Section XI.
repair or replacement

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Date 10/13 19 94
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Dade County, Florida and employed by Arkwright Mutual Insurance Company of Norwood, MA.

have inspected the components described in this Owner's Report during the period May 8, 1994 to Sept. 29, 1994 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with the inspection.

[Signature]
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
8230 (N) (I)

National Board, State, Province, and Endorsements

Date 10/13 19 94

94-055-3

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 12/20/94

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

WO #: 93016852

PCM #: 92-119

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: COMPONENT COOLING WATER System #: 30 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
Strut (2) on 3A RHR HX	Bergen Paterson	066499 & 066001	N/A	BP Part # 2252 R93-3011	N/A	Replacement	No
Strut (2) on 5B RHR HX	Bergen Paterson	066498 & 066002	N/A	BP Part # 2252 R93-3011	N/A	Replacement	No
Attachment (4)	Bergen Paterson	N/A	N/A	BP Part # 1000 R93-3011	N/A	Replacement	No

7. Description of Work: MODIFYING EXISTING UPPER SEISMIC RESTRAINTS ON RHR HEAT EXCHANGER A AND B.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM HIS-2 (Back)

9. Remarks: All welding performed in accordance with approved plant procedures.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed David R. Powell Date 12-22 19 94
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/01/93 to 12/19/94 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James H. Stewart
Inspectors Signature

Commissions Factory Mutual Eng. Assoc.
NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date 1/3 19 95

Wb

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 01/13/95

Sheet 1 of 2

Unit 3

PWO #:6510/63 WO #: 94031023

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System: COMPONENT COOLING WATER System #: 30 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp
ALL THREAD (31 STUDS)	N/A	N/A	N/A	3E207A CCW HX R94-4177	N/A	Replacement	No
NUTS (6 NUTS)	N/A	N/A	N/A	3E207A CCW HX R94-3949	N/A	Replacement	No

7. Description of Work: 31 STUDS AND 6 NUTS REPLACED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM HIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed David R. Powell Date 1-18 19 95
Owner or Owner's Designee, Title

HUB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 12/12/94 to 01/13/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Blum
Inspectors Signature

Commissions

 Factory Mutual Eng. Assoc.
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date 1/18 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 01/18/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:5946/63 WO #: 94018719 CR #: 94-850

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: SAFETY INJECTION SYSTEM System #: 62 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
SUPPORT 81152-A-002-1	N/A	N/A	N/A	3-899L - VALVE SUPPORT	N/A	Replacement	No

7. Description of Work: PIPE SUPPORT STANTION 81152-A-002-01 DOES NOT ALLOW VLV 3-899L TO FULLY OPEN.

SUPPORT MODIFIED TO ALLOW VLV TO FULLY OPEN.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: GROUND OFF TOP PORTION OF THE PLATE AND THE TUBE STEEL AT THE END OF THECANTILEVER TO ALLOW VALVE OPERATOR TO FULLY OPEN VALVE.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned D. Powell Date 1/18 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 12/07/94 to 01/18/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dennis B. Blum
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date 1/19 19 95

FORM HIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 01/18/95

Sheet 1 of 2

Unit 3
PWO #:3255/63 WO #: 94009907

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: INTAKE-COOLING WATER System #: 19 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (12)	N/A	N/A	N/A	BS-3-1402 ICW A BASKET STRAINER R90-6200	N/A	Replacement	No
NUTS (12)	N/A	N/A	N/A	BS-3-1402 ICW A BASKET STRAINER R93-2967/94-2602	N/A	Replacement	No

7. Description of Work: 12 STUDS AND NUTS REPLACED ON A ICW TO CCW BASKET STRAINER.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned D. L. Howell Date 1/15 19 95
Owner or Owner's Designee, Title

HWS

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 04/26/94 to 01/18/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James H. Blum
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date 1/19 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 01/19/95

700 Universe Blvd. Juno Beach FL. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #: 6265/63 WO #: 94028997 CR #: 94-1181
PCM #: 94-124
PS #: 94-215

9700 SW 344 Street, Florida City, FL. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

P.O. Box 4332, Princeton, FL. 33032
Address

4. Identification of System: CVCS System #: 47 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamp Yes/No
PIPING SUPPORT	N/A	N/A	N/A	MARK 3 DWG 5613-H-641 SHT. 6A	UKN	Replaced	No
PIPING SUPPORT	N/A	N/A	N/A	MARK 5 DWG 5613-H-641 SHT. 8A - 8C	1995	Replacement	No

7. Description of Work: INSTALLED NEW SUPPORT FOR CVCS VALVE LCV-3-115C PER PCM 94-124. SUPPORT

MARK 3 WAS REMOVED. MATERIAL REQUISITION NUMBERS: R91-5241, R91-4420,

R93-1222, R94-3166, R87-7223, R92-2125, R94-0095, R91-1182, R90-7180,

USED IN THE CONSTRUCTION OF SUPPORT MARK 5.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES PER PC/M94-124.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David R. Powell Date 1/20 19 95
Owner or Owner's Designee, Title

JWB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 11/22/94 to 01/19/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

David R. Powell
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date 1/20 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 02/21/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #: 6945/63 WO #: 95001289 CR #: 94-850

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: SAFETY INJECTION System #: 62 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
SUPPORT 81152-A-002-1	N/A	N/A	N/A	3-899L VALVE SUPPORT	UNK.	Replacement	No

7. Description of Work: PIPE SUPPORT NO. 81152-A-002-01 MODIFIED TO ALLOW VALVE 3-899L TO FULLY OPEN.

PREVIOUS MODIFICATION TO SUPPORT DONE UNDER PWO 94018719 WAS INADEQUATE REQUIRING

FURTHER MODIFICATION.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: GROUND OFF TOP PORTION OF THE PLATE AND THE TUBE STEEL AT THE END OF THE

CANTILEVER TO ALLOW VALVE OPERATOR TO FULLY OPEN VALVE.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date

N/A

Signed

Owner or Owner's Designee, Title

Date

2-21

19 95

MB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 01/13/95 to 02/21/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date

2/22

1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 03/06/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #: 8869/69 WO #: 95004254 CR #: 95-115

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPE 2" 304 SS	N/A	N/A	N/A	R94-1843 ASME SA-312 SCH 10S, NC-2	UNK.	Replacement	No
ELBOWS 2" 304 SS (4)	N/A	N/A	N/A	(3)R95-0403, (1)R95-0046 SA-182, GR 304F, NC-2	UNK.	Replacement	No

7. Description of Work: PIPING AND 4 ELBOWS REPLACED DUE TO THROUGH WALL LEAKAGE.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure

Other VT-2 Pressure 190 psig Test Temperature 83 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David R. Powell Date 3-7 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/11/95 to 03/06/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

David R. Powell
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date 3 / 7 19 95

CUMULATIVE DISTRIBUTION SUMMARY
TURKEY POINT UNIT # 3
09/95

COMPONENT : S/G C

Page : 1
Date : 11/15/95

Examination Dates : 09/14/95 thru 09/19/95

Total Number of Tubes Inspected 3181

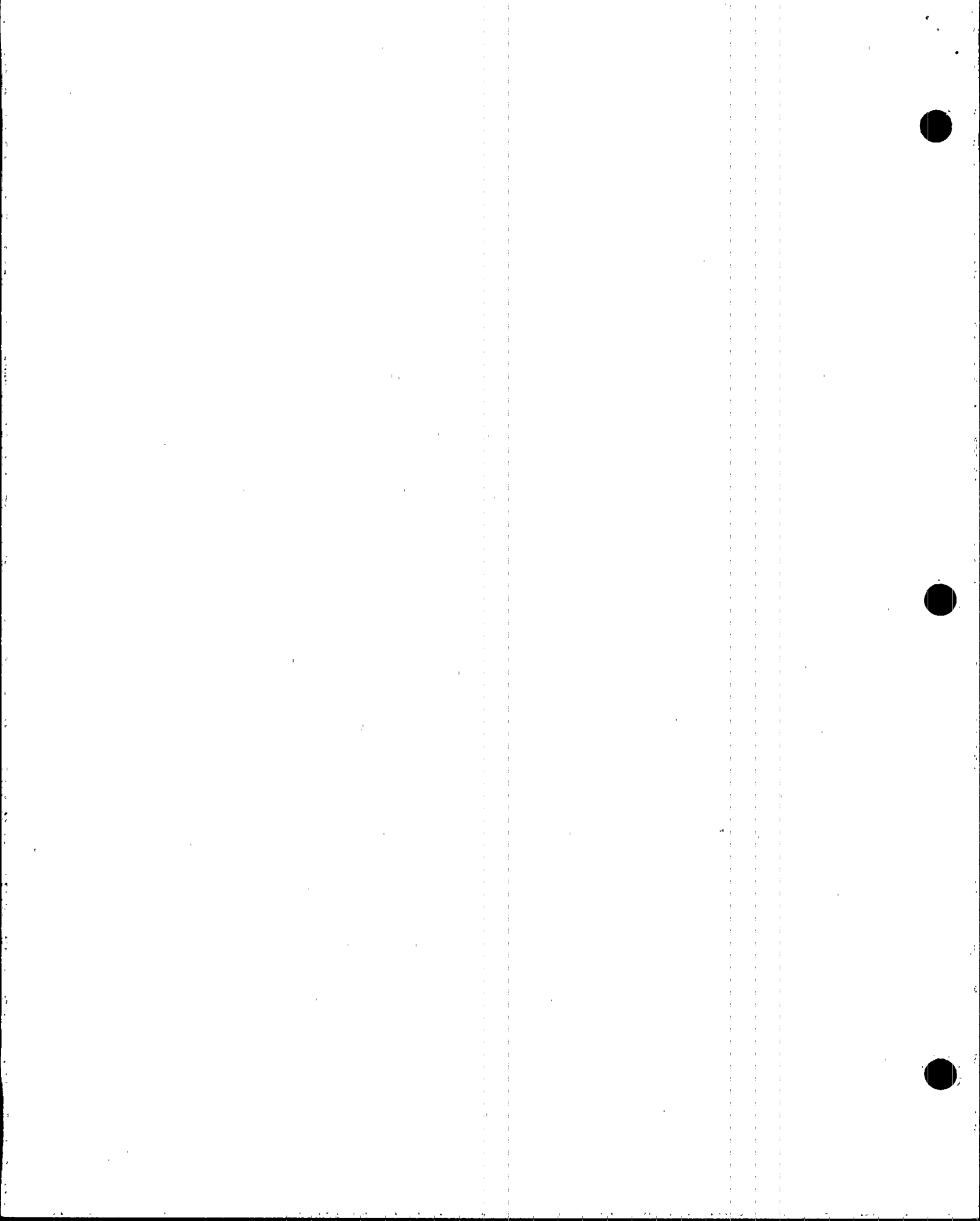
Total Indications

Between 20% and 39% 47
Greater than or equal to 40% 0

Total Tubes Plugged as Preventive Maint : 0
Total Tubes Plugged 0

Location Of Indications 20% to 100%

Hot Leg		Cold Leg	
TSH -.5 to 01H -2.1 :	0	TSC -.5 to 01C -2.1 :	1
01H -2.0 to 06H +2.0 :	1	01C -2.0 to 06C +2.0 :	3
06H +2.1 to AV1 -3.1 :	3	06C +2.1 to AV4 -3.1 :	6
AV1 -3.0 to AV4 -3.0 :	33		



INDICATIONS/TRENDING REPORT

PTN-3

OUTAGE : 09/95

COMPONENT : S/G C

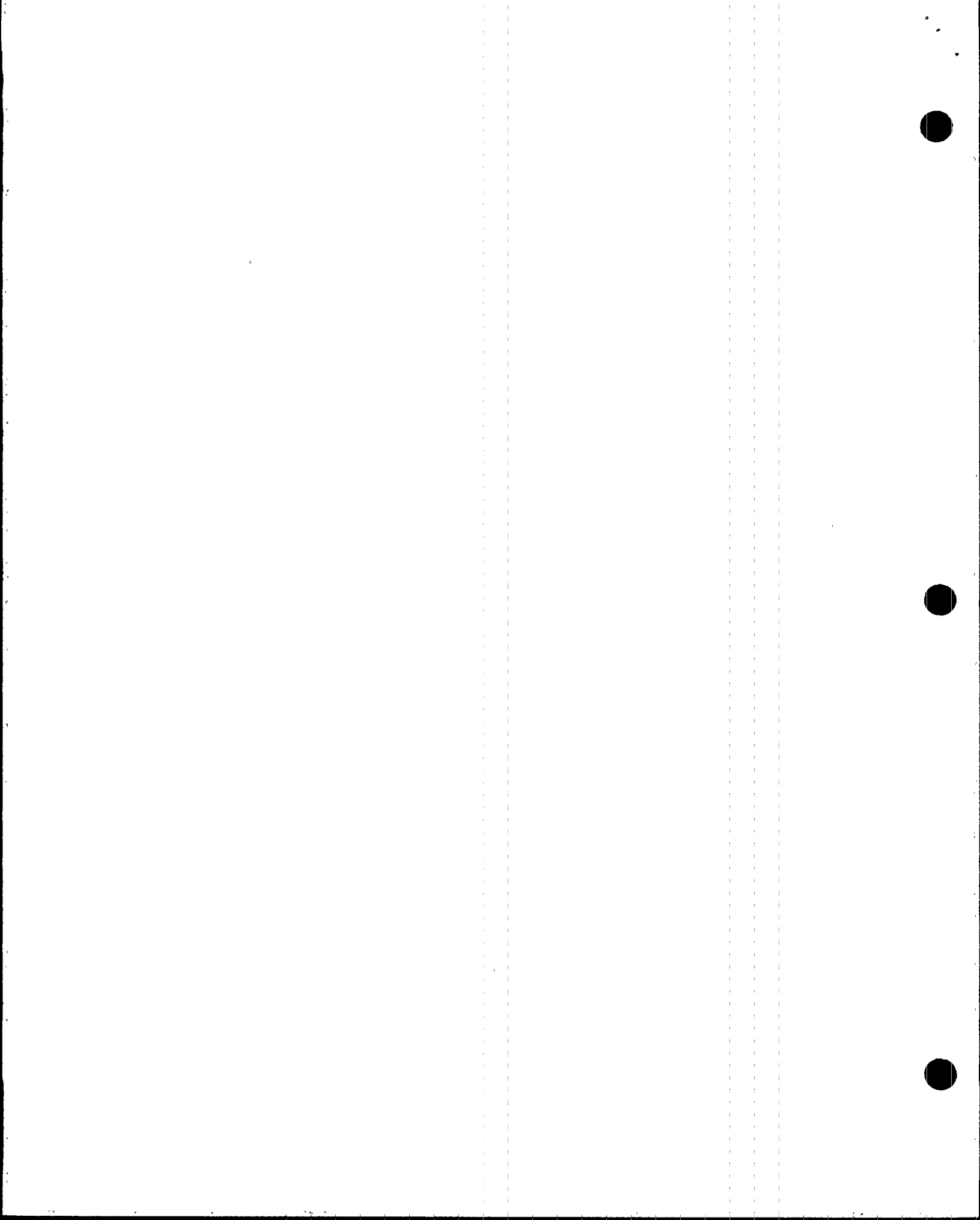
DESCRIPTION : 20% to 39%

Page : 1

Date : 10/ 3/95

Time : 15:20:51

										09/95				N/A			
Row	Col	Leg	Req	Tst/Note	Reel	Probe	Location	Volts	Deg	Ch	%	Diff	Location	Volts	Deg	Ch	%
3	10	H	06H	06H	CH004	A-720-M/ULC	02H 34.8	.9	146	1	35						
16	15	C	TEH	TEH	PC CC039	A-720-M/ULC	06C 1.6	.5	156	1	28						
31	15	C	TEH	TEH	PS CC036	A-720-M/ULC	AV1 .0	.3		P 2	20						
40	25	C	TEH	TEH	SS CC033	A-720-M/ULC	AV2 .0	.5		P 2	21						
		C	TEH	TEH	SS CC033	A-720-M/ULC	AV3 .0	.6		P 2	22						
37	28	C	TEH	TEH	PS CC034	A-720-M/ULC	AV4 .0	.4		P 2	20						
27	30	C	TEH	TEH	PS CC032	A-720-M/ULC	AV3 8.2	1.7	152	1	20						
30	31	C	TEH	TEH	PS CC029	A-720-M/ULC	AV2 .0	.3		P 2	20						
		C	TEH	TEH	PS CC029	A-720-M/ULC	AV3 .0	.5		P 2	25						
33	31	C	TEH	TEH	PS CC031	A-720-M/ULC	AV3 .0	.5		P 2	26						
34	31	C	TEH	TEH	PL CC031	A-720-M/ULC	AV2 .0	.5		P 2	26						
		C	TEH	TEH	PL CC031	A-720-M/ULC	AV3 .0	.3		P 2	24						
4	33	C	TEH	TEH	SS CC030	A-720-M/ULC	TSC 28.5	.5	149	1	24						
43	33	C	TEH	TEH	PC CC036	A-720-M/ULC	AV3 .0	.3		P 2	20						
35	35	C	TEH	TEH	PS CC031	A-720-M/ULC	AV3 .0	.4		P 2	24						
35	36	C	TEH	TEH	PC CC034	A-720-M/ULC	AV3 .0	.2		P 2	20						
34	41	C	TEH	TEH	PS CC031	A-720-M/ULC	AV1 .0	.8		P 2	32						
		C	TEH	TEH	PS CC031	A-720-M/ULC	AV3 .0	.5		P 2	27						
		C	TEH	TEH	PS CC031	A-720-M/ULC	AV4 .0	.8		P 2	31						
33	43	C	TEH	TEH	PS CC033	A-720-M/ULC	AV2 .0	.4		P 2	22						
		C	TEH	TEH	PS CC033	A-720-M/ULC	AV3 .0	.4		P 2	22						
35	43	C	TEH	TEH	PS CC033	A-720-M/ULC	AV1 .0	.3		P 2	21						
		C	TEH	TEH	PS CC033	A-720-M/ULC	AV2 .0	.6		P 2	28						
		C	TEH	TEH	PS CC033	A-720-M/ULC	AV3 .0	1.0		P 2	34						
		C	TEH	TEH	PS CC033	A-720-M/ULC	AV4 .0	.7		P 2	29						
35	44	C	TEH	TEH	CC036	A-720-M/ULC	AV2 .0	1.1		P 2	31						
		C	TEH	TEH	CC036	A-720-M/ULC	AV3 .0	1.1		P 2	32						
		C	TEH	TEH	CC036	A-720-M/ULC	AV4 .0	.5		P 2	24						
30	48	C	TEH	TEH	PL CC018	A-720-M/ULC	AV2 .0	.8		P 2	28						
		C	TEH	TEH	PL CC018	A-720-M/ULC	AV3 -.1	1.4		P 2	36						
35	49	C	TEH	TEH	PS CC011	A-720-M/ULC	AV4 .1	.3	107	P 2	22						
35	52	C	TEH	TEH	PS CC012	A-720-M/ULC	AV3 .0	.3		P 2	21						
39	54	C	TEH	TEH	PS CC012	A-720-M/ULC	AV3 .0	.3		P 2	20						
26	58	C	TEH	TEH	PS CC015	A-720-M/ULC	AV2 .0	.5		P 2	26						
30	61	C	TEH	TEH	PS CC016	A-720-M/ULC	AV2 .0	.5		P 2	23						
38	61	C	TEH	TEH	PS CC011	A-720-M/ULC	AV2 -.1	.3	140	P 2	22						
21	62	C	TEH	TEH	PS CC015	A-720-M/ULC	AV2 .0	.3		P 2	21						
25	62	C	TEH	TEH	PS CC015	A-720-M/ULC	AV2 .0	.3		P 2	20						
		C	TEH	TEH	PS CC015	A-720-M/ULC	AV3 .0	.4		P 2	22						
24	63	C	TEH	TEH	PS CC016	A-720-M/ULC	AV2 .0	.3		P 2	20						
		C	TEH	TEH	PS CC016	A-720-M/ULC	AV3 .0	.5		P 2	23						
38	65	C	TEH	TEH	PC CC013	A-720-M/ULC	AV2 .0	.3		P 2	22						
		C	TEH	TEH	PC CC013	A-720-M/ULC	AV3 .0	.3		P 2	22						



INDICATIONS/TRENDING REPORT

PTN-3

OUTAGE : 09/95

COMPONENT : S/G C

DESCRIPTION : 20% to 39%

Page : 2

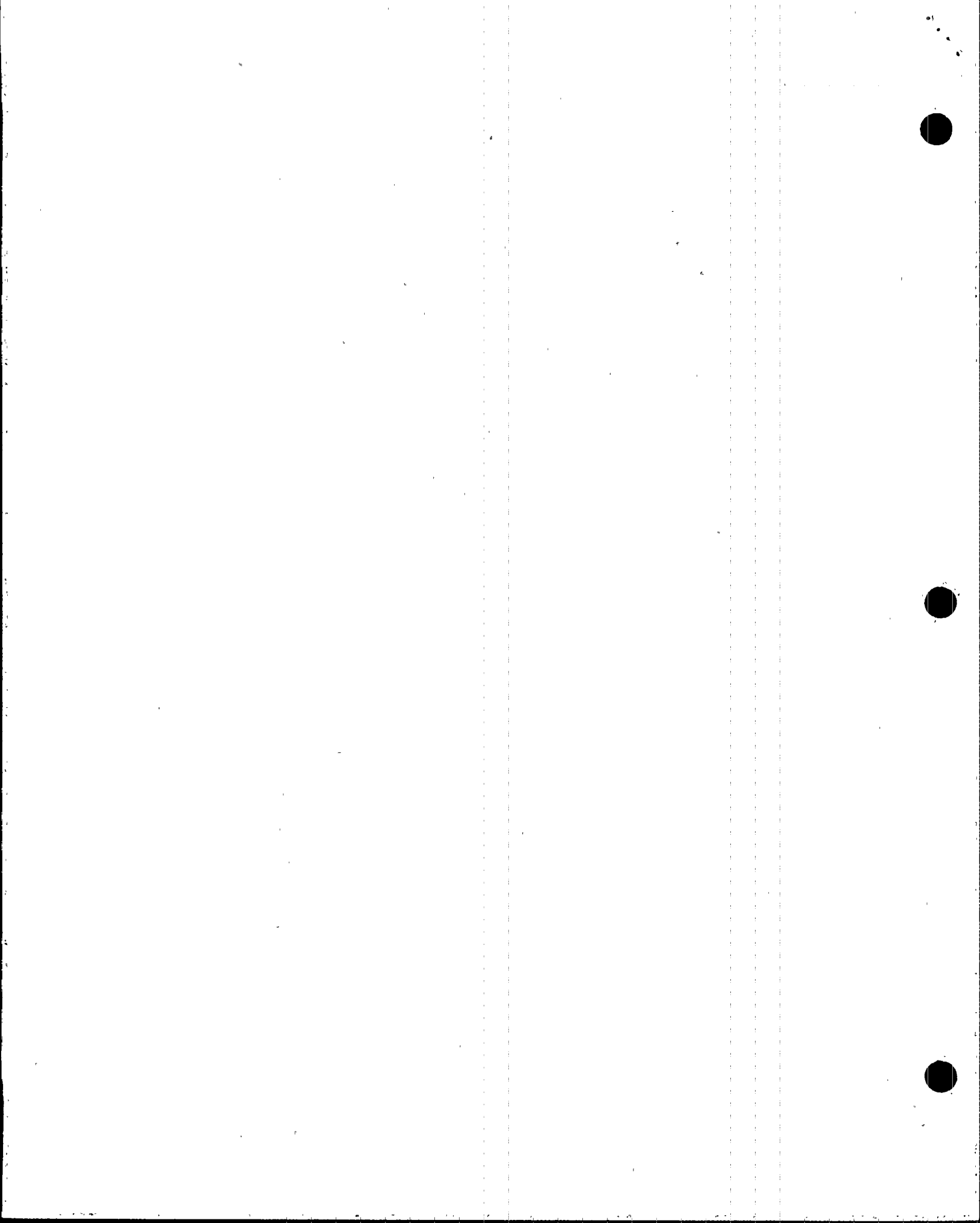
Date : 10/ 3/95

Time : 15:20:53

													09/95				N/A			
		Extent																		
Row	Col	Leg	Req	Tst/Note	Reel	Probe	Location		Volts	Deg	Ch	%	Diff	Location	Volts	Deg	Ch	%		
		C	TEH	TEH	PC	CC013	A-720-M/ULC	AV4	.0	.5	P 2	25								
38	71	C	TEH	TEH	PS	CC010	A-720-M/ULC	AV3	.0	.5	P 2	24								
1	76	C	06C	05C	PS	CC020	A-720-M/ULC	02C	4.6	1.4	142	1	38							
		C	06C	06C		CC038	A-720-M/ULC	02C	4.5	1.1	140	1	32							

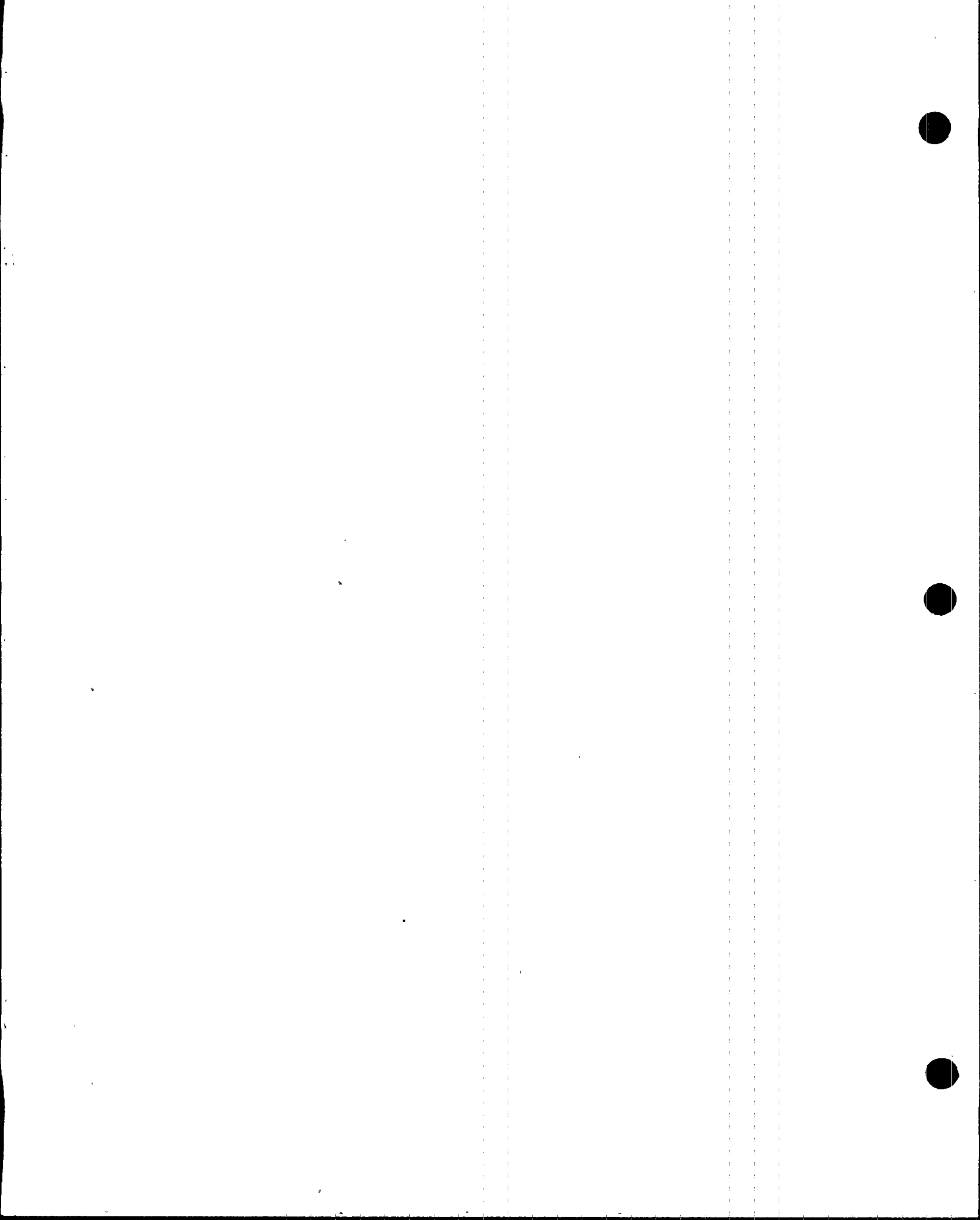
Number of RECORDS Selected from Current Outage : 47

Number of TUBES Selected from Current Outage : 30



**TURKEY POINT UNIT 3
1995 REFUELING OUTAGE**

Form NIS-2 Owners' Data Report of Repairs and Replacements



FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 04/10/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 0
PWO #:8866/69 WO #: 95004250 CR #: 95-115

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPE 2" 304 SS	N/A	N/A	N/A	R94-3934 ASME SA-312 SCH 10, NC-2	UNK.	Replacement	No
ELBOW 304 SS (1)	N/A	N/A	N/A	R95-0403 ASME SA-182 GR 304F, NC-2	UNK.	Replacement	No
TEE 304 SS	N/A	N/A	N/A	R95-0579 ASME SA-182 GR 304F	UNK.	Replacement	No
DIAPHRAM VALVE 2"	ITT GRINNELL	75-4104-30-29	N/A	R95-0435 ASME SA-351 GR CF8 VLV #342	1976	Replacement	Yes

7. Description of Work: PIPING, VALVE, TEE AND ELBOW REPLACED DUE TO THROUGH WALL LEAKAGE.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-2 Pressure 195 psig Test Temperature 85 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed Samuel J. Smith, Technical Manager Date April 11 19 95
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/11/95 to 04/06/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Samuel J. Smith
 Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date 4/12 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 04/06/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #:8517/63 WO #: 95008649

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: Component Cooling Water System #: 30 Quality Group: C

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
ALL THREAD (1 STUD)	N/A	N/A	N/A	3E207C CCW HX R93-2015	N/A	Replacement	No
NUTS (2 NUTS)	N/A	N/A	N/A	3E207C CCW HX R94-3949	N/A	Replacement	No

7. Description of Work: Bolting replacement, 1 stud & 2 nuts on the component cooling water heat exchanger.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed *W. J. [Signature]* Date April 6 1995
Owner or Owner's Designee, Title

11116

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 03/24/95 to 04/06/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date 4/6 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 04/10/95

Sheet 1 of 2

Unit 3
PWO #:8868/69 WO #: 95004252 CR #: 95-115

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPING 2" 304 SS	N/A	N/A	N/A	R94-3934, R95-0518 ASME SA-312 SCH 10, NC-2	UNK.	Replacement	No
ELBOWS 2" 304 SS (5)	N/A	N/A	N/A	(5)R95-0403 ASME SA-182 GR 304F, NC-2	UNK.	Replacement	No
TEE 2" 304 SS (1)	N/A	N/A	N/A	R95-0403 ASME SA-182 GR 304F	UNK.	Replacement	No
DIAPHRAM VALVE 2"	ITT GRINNELL	75-9104-30-33	N/A	R95-0459 ASME SA-351 GR CF8 VLV #341	1976	Replacement	No

7. Description of Work: PIPING, (5) ELBOWS, (1) TEE AND (1) VALVE REPLACED DUE TO THROUGH WALL LEAKAGE.

8. Tests Conducted: Hydrostatic: X Pneumatic: _____ Nominal Operating Pressure _____
Other VT-2 Pressure 195 psig Test Temperature 85 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *Shawn P. J. 1 Technical Manager* Date *Apr. 11* 19*95*
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/11/95 to 04/10/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Shawn P. J. 1
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date *4/12* 19*95*

FORM HIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 04/25/95

Sheet 1 of 2

Unit 3
PWO #:8719/63 WO #: 95009445

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: COMPONENT COOLING System #: 30 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
THREADED ROD 3/4"	N/A	N/A	N/A	1J-0091, SA-193, 3E207A	UNK.	Replacement	No
NUTS (14) 3/4"	N/A	N/A	N/A	(8)R94-3949, (6)1J0019 SA-194 GR 2H 3E207A	UNK.	Replacement	No

7. Description of Work: SEVEN STUDS AND FOURTEEN NUTS REPLACED ON CCM HX A ACCESS DOOR.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other: _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David J. Frazee, Technical Manager Date MAY 5 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 03/31/95 to 04/24/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

David J. Frazee
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date 5/5 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 04/28/95

Sheet 1 of 2

Unit 3
PWO #:9312/69 WO #: 95009307 CR #: 95-115

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPING 2" 304 SS	N/A	N/A	N/A	R95-0518 ASME SA-312 SCH 10, NC-2	UNK.	Replacement	No
ELBOW 2" 304 SS	N/A	N/A	N/A	R95-0637 ASME SA-182 GR 304F	UNK.	Replacement	No
TEE 2" 304 SS	N/A	N/A	N/A	R95-0637 ASME SA-182 GR 304F	UNK.	Replacement	No
U-BOLT 3"	BERGEN PATERSON	N/A	N/A	R92-2119 SUPPORT H-1 BP PART #283	UNK.	Replacement	No

7. Description of Work: REPLACEMENT OF PIPING, TEE (1), ELBOW (1) ON 3A BORIC ACID TRANSFER PUMP DISCH.

U-BOLT REPLACED ON BORIC ACID SUPPORT H-1.

8. Tests Conducted: Hydrostatic: X Pneumatic: _____ Nominal Operating Pressure _____

Other VT-2/3 Pressure 190 psig Test Temperature 82 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned *W. J. Smith, Technical Manager* Date MAY 5 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 04/04/95 to 04/28/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Blum
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date 5/5 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 05/04/95

Sheet 1 of 2

Unit 3
PWO #:8776/63 WO #: 95010012

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: COMPONENT COOLING System #: 30 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
THREADED ROD (2 STUDS)	N/A	N/A	N/A	1J0091 3E207C CCW HX	UNK.	Replacement	No
NUTS (4 NUTS)	N/A	N/A	N/A	R94-3949 3E207C CCW HX	UNK.	Replacement	No

7. Description of Work: TWO STUDS AND FOUR NUTS REPLACED ON CCW HEAT EXCHANGER C.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed DJ Fitzgerald Technical Manager Date May 5 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 04/07/95 to 05/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Bruno B. Blum
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date 5/5 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 05/17/95

Sheet 1 of 2

Unit 3
PWO #:0260/63 WO #: 95012487

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: COMPONENT COOLING WATER System #: 30 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
ALL THREAD (STUDS)	N/A	N/A	N/A	1J0091 3E207C CCW HX	UNK.	Replacement	No
NUTS (54 NUTS)	N/A	N/A	N/A	R94-3949 3E207C CCW HX	UNK.	Replacement	No

7. Description of Work: COMPONENT COOLING WATER HEAT EXCHANGER C BOLTING REPLACED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David H. Ponzel Date MAY 26 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 04/28/95 to 05/17/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

David H. Ponzel
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date May 29 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 06/14/95

Sheet 1 of 2

Unit 3
PWO #:7249/63 WO #: 95002452
PCM #: 94-093

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: COMPONENT COOLING System #: 30 Quality Group: C

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp
TUBE STEEL 3"X3"X1/4"	N/A	N/A	N/A	R95-0816 ASTM A-500-90 CCW SUPPORT MARK #A	UNK.	Replacement	No
PLATE 3/4"	N/A	N/A	N/A	R93-0659 ASTM A-36-91 CCW SUPPORT MARK #A	UNK.	Replacement	No
ANCHOR STUD (9) KWIK BOLT II	HILTI	N/A	N/A	R93-1222 KWIK BOLT II 58-6 PART #453720	UNK.	Replacement	No
ANCHOR STUD (3) KWIK BOLT II	HILTI	N/A	N/A	R90-0744 KWIK BOLT II 58-7 PART #453738	UNK.	Replacement	No

7. Description of Work: COMPONENT COOLING WATER SUPPORT IN THE CHARGING PUMP ROOM MODIFIED TO EASE THE
CHARGING PUMPS A, B AND C CASING REMOVAL PER PC/M 94-093. PLATE, TUBE STEEL AND
ANCHORS REPLACED ON COMPONENT COOLING WATER SUPPORT MARK # DETAIL A.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other VI-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed *Donald P. Fagan, Technical Manager* Date June 16 19 95
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 01/25/95 to 06/14/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Donald P. Fagan
 Inspectors Signature

Commissions Factory Mutual Eng. Assoc.
NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date 6/16 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, FL. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, FL. 33032
Address

Date 09/17/95

Sheet 1 of 2

Unit 3
PWO #:5896/63 WO #: 94012504

Repair Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: PRIMARY WATER MAKEUP System #: 20 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
GLOBE VLV 3 INCH	CRANE	UNKNOWN	N/A	MOV-3-832, ASTM A216 GRADE WCB	UNK.	Replaced	No
GLOBE VLV 3 INCH	CRANE	C5266	N/A	MOV-3-832, ASTM A216 GRADE WCB	UNK.	Replacement	No

7. Description of Work: MOV-3-832 REPLACED DUE TO SEAT LEAKAGE.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-2 Pressure 168 psig Test Temperature 86 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *David F. Mangel* Date Sept 24 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 10/06/94 to 09/16/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

David F. Mangel
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date Sept 23 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/22/95

Sheet 1 of 2

Unit 3
PWO #:1973/63 WO #: 95018723

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: INTAKE COOLING WATER System #: 19 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUD 5-1/2" X 1"	HAYWARD	N/A	N/A	BS-3-1402, ASTM A193-89 GRADE B7	UNK.	Replacement	No

7. Description of Work: REPLACED ONE (1) TOP COVER STUD FOR HAYWARD STRAINER MODEL B514FBB ON INTAKE

COOLING WATER SUPPLY FOR COMPONENT COOLING WATER HEAT EXCHANGER A BS-3-1402.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David J. Farnsworth, Acting Technical Manager Date Sept 24 19 95
Owner or Owner's Designee, Title

JWS

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/12/95 to 09/17/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Glen
Inspectors Signature

Commissions Factory Mutual Eng. Assoc.
NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date Sept 23 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/22/95

Sheet 1 of 2

Unit 3
PWO #:0697/63 WO. #: 95013796

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: AUXILIARY FEEDWATER System #: 75 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
VALVE BONNET 4" GATE	PACIFIC	0944-2	N/A	R93-1467 AFPD-3-008	UNK.	Replacement	No

7. Description of Work: BONNET AND BOLTING REPLACED AND FOUR (4) 3/8" HOLES DRILLED THROUGH VALVES BODY

TO ALLOW FOR SEGMENT RING INSTALLATION/REMOVAL.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-1/2 Pressure 1340 psig Test Temperature 83 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed Michael J. Emergenti Acting Technical Manager Date Sept 24 19 95
Owner or Owner's Designee, Title

HWS

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 05/10/95 to 09/17/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Glen
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date Sept 23 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/26/95

Sheet 1 of 2

Unit 3
WO #: 95024462

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: INTAKE COOLING WATER System #: 19 Quality Group: C

5. (a) Applicable Construction Code 831.1 1955 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
CHECK VALVE	MISSION VLV	W6726	N/A	3-50-311 DUO-CHEK	UNK.	Replaced	No
CHECK VALVE	MISSION VLV	75203	N/A	R95-0795 3-50-311 DUO-CHEK	UNK.	Replacement	No
STUDS (2)	N/A	N/A	N/A	R95-0154	UNK.	Replacement	No
NUTS (6)	N/A	N/A	N/A	R93-1956 ASTM A563	UNK.	Replacement	No

7. Description of Work: CHECK VALVE, TWO STUDS AND SIX NUTS REPLACED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X
Other VT-2 Pressure 27.5 psig Test Temperature 87 °F

FORM HIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Robert J. Fitzgerald, Acting Technical Manager Date Sept 27, 1995
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/07/95 to 09/20/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Lane
 Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (NY)(I)

National Board, State, Providence, and Endorsements

Date Sept 25 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/10/95

Sheet 1 of 2

Unit 3
PWO #:0069/63 WO #: 95011453

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: INTAKE COOLING System #: 19 Quality Group: C

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUD (1)	N/A	N/A	N/A	R95-0154 ICW PIPING SPOOL PIECE	UNK.	Replacement	No

7. Description of Work: ONE STUD REPLACED ON ICW SPOOL PIECE.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed Karl Banaszak for D.R. Powell Date 10/16 19 95
 Owner or Owner's Designee, Title
PAU - BANASZAK

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/04/95 to 09/20/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
 Inspectors Signature

Commissions NB 8230 (N)(I)
 National Board, State, Providence, and Endorsements

Date October 11 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/26/95

Sheet 1 of 2

Unit 3
PWO #:6261/63 WO #: 94027270 CR #: 94-1181
PCM #: 94-124

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: CVCS System #: 47 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPING 2" 304 SS	N/A	N/A	N/A	R95-0697 ASME SA-312 SA-376	UNK.	Replacement	No
ELBOWS 2" 304 SS (2)	N/A	N/A	N/A	R95-1170 ASME SA-182 GR 304F	UNK.	Replacement	No

7. Description of Work: PIPING AND TWO ELBOWS REPLACED DUE TO SUPPORT RUBBING ON PIPE.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-2 Pressure 168 psig Test Temperature 90 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed Robert J. Fungel, N/A Technical Manager Date Sept 27 19 95
Owner or Owner's Designee, title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 11/22/94 to 09/20/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Gunt
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date Sept. 28 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/21/95

Sheet 1 of 2

Unit 3
PWO #:2837/63 WO #: 95025701

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUD (1)	N/A	N/A	N/A	R94-1958 VLV 3-368 ASME SA-193 GR B7	UNK.	Replacement	No
NUT (1) HEAVY HEX	N/A	N/A	N/A	R91-2327 VLV 3-368 ASME SA-194	UNK.	Replacement	No

7. Description of Work: BOLTING WAS VT-1 EXAMINED FOLLOWING LEAK FOUND DURING ASME SECT. XI PRESSURE

TEST. ONE STUD AND ONE NUT WERE REPLACED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repêment conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *[Signature]* Acting Technical Manager Date Sept 21 1995
 Owner or Owner's Designee, Title

ms

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/19/95 to 09/21/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
 Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date Sept 21 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/22/95

Sheet 1 of 2

Unit 3
PWO #:0072/63 WO #: 95011460

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
BOLT (1) ON 3E210A	NOVA	N/A	N/A	R93-2977 COLD LEG MANWAY BOLTS (1)	UNK.	Replacement	No

7. Description of Work: PERFORMED VT-1 INSPECTION ON THIRTY TWO BOLTS. BOLT #4 ON THE COLD LEG REJECTED.

BOLT WAS REPLACED WITH SUBSEQUENT VT-1 PERFORMED. ALL WORK PERFORMED ON 3E210A

(STEAM GENERATOR A).

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Samuel J. Smith, Acting Technical Manager Date Sept 24 1995
Owner or Owner's Designee, Title

N/A

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/19/95 to 09/22/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Samuel J. Smith
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date Sept 23 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/22/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:0131/63 WO #: 95011902

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

Expiration Date N/A

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
BOLTS (4) ON 3E2108	NOVA	N/A	N/A	R93-2977 (2) COLD LEG & (2) HOT LEG MANWAY BOLTS	UNK.	Replacement	No

7. Description of Work: PERFORMED VT-1 INSPECTION ON THIRTY TWO BOLTS. BOLTS #8 AND #9 ON THE COLD LEG

AND BOLTS #2 AND #16 ON THE HOT LEG WERE REJECTED. PERFORMED VT-1 AND ACCEPTED

FOUR NEW BOLTS. ALL WORK PERFORMED ON 3E2108 (STEAM GENERATOR 8).

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed David H. Fitzgerald, Acting Technical Manager Date Sept 24 19 95
Owner or Owner's Designee, Title

11/57

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/19/95 to 09/22/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

David H. Fitzgerald
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date Sept 23 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/22/95

700 Universe Blvd. Juno Beach FL. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #: 0134/63 WO #: 95011905

9700 SW 344 Street, Florida City, FL. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, FL. 33032
Address

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: A

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
BOLTS (28) ON 3E210C	NOVA	N/A	N/A	R94-1953 (10), R94-0170 (9), R93-2977 (9)	UNK.	Replacement	No

7. Description of Work: PERFORMED VT-1 INSPECTION ON TWENTY EIGHT NEW BOLTS. PERFORMED VT-1 AND HT

INSPECTION ON FOUR EXISTING BOLTS. ALL WORK PERFORMED ON 3E210C (STEAM GENERATOR C).

8. Tests Conducted: Hydrostatic: Pneumatic: Nominal Operating Pressure X

Other VT-1 Pressure psig Test Temperature °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Donald P. Fitzgerald, Acting Technical Manager Date Sept 24 19 95
Owner or Owner's Designee, Title

WJ3

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/19/95 to 09/22/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Sumner B. Blum
Inspector's Signature

Commissions Factory Mutual Eng. Assoc.
NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date Sept 23 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/22/95

Sheet 1 of 2

Unit 3
PWO #:0070/63 WO #: 95011458

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
BOLTS (1) ON HANDHOLE D	WESTINGHOUSE	N/A	N/A	R88-2988 3E210A	UNK.	Replacement	No
BOLTS (8) INSPECTION PORT	WESTINGHOUSE	N/A	N/A	R94-94-0415 3E210A	UNK.	Replacement	No

7. Description of Work: EIGHT (8) INSPECTION PORT BOLTS REPLACED & ONE BOLT #2 ON HANDHOLE "D" REPLACED

ON 3E210A (STEAM GENERATOR A).

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed Robert H. Brown, Jr. ASME Technical Manager Date Sept 24 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/19/95 to 09/22/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James S. Clark
Inspector's Signature

Commissions Factory Mutual Eng. Assoc.
NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date Sept 23 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/22/95

Sheet 1 of 2

Unit 3
PWO #:0132 WO #: 95011903

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
BOLTS (8) INSPECTION PORT	WESTINGHOUSE	N/A	N/A	UTC000375410 3E210C	UNK.	Replacement	No

7. Description of Work: EIGHT (8) INSPECTION PORT BOLTS REPLACED ON 3E210C (STEAM GENERATOR C).

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned *Robert A. Angel, Jr.* Date *Sept 28* 19*95*
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/21/95 to 09/22/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert A. Angel, Jr.
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date *Sept 23* 19*95*

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/02/95

Sheet 1 of 2

Unit 3
PWO #:63/2658 WO #: 95024782 CR #: 95-743

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: CHEMICAL AND VOLUME CONT System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
2" PIPE SS SCH 10	N/A	N/A	N/A	R95-0882 SCH 10 SA-182 SA-312	UNK.	Replacement	No
3/4" SOCKOLET SS	N/A	N/A	N/A	UTC 377492 SA-182	UNK.	Replacement	No
2" ELBOWS (2) SS	N/A	N/A	N/A	R95-0530 SA-182	UNK.	Replacement	No

7. Description of Work: REPLACED PIPING AND FITTINGS DUE TO THRU WALL LEAK ON BORIC ACID SYSTEM NEAR

VALVES 3-3490 AND 3-347.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-2 Pressure 188 psig Test Temperature 91 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed *Robert J. M. [Signature]* Acting Technical Manager Date October 2 19 95
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/12/95 to 09/25/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. [Signature]
 Inspectors Signature

Commissions NB 8230 (N)(1)
 National Board, State, Providence, and Endorsements

Date October 3 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/26/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

WO #: 93025665

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by ABB/CE
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

911 WEST MAIN ST CHATTANOOGA, TENN 37401
Address

4. Identification of System: STEAM GENERATOR System #: 41 Quality Group: A

5. (a) Applicable Construction Code ASME III 1974 Edition, S'76 Addenda, 1484 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
S/G "C"	WESTINGHOUSE ELECTRIC CORP.	FSGT 3003	N/A	N/A	1980	Repaired	Yes
S/G "A"	WESTINGHOUSE ELECTRIC CORP.	FSGT 3001	N/A	N/A	1980	Repaired	Yes

7. Description of Work: REMOVED WESTINGHOUSE MECHANICAL S/G TUBE PLUGS FROM THE FOLLOWING LOCATIONS

S/G "C" HOT LEG ROW 41 COLUMN 30 - S/G "A" HOTLEG ROW 5 COLUMN 90. MACHINED

WELDED REPLACEMENTS USING INCONEL ALLOY 690 CONICAL PLUGS.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: QUALITY GROUP "A"THIS REPAIR WAS PERFORMED PER NRC BULLETIN 89-01

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed *Richard A. Star* Date 9-26- 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/18/95 to 09/25/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Murphy K. Blum
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date Sept 26 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/26/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 0
PWO #:0184/69 WO #: 95019076 CR #: 95-0543

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: 8

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
2" PIPE 304 SS	N/A	N/A	N/A	R95-0488 ASME SA-312 SCH 10	UNK.	Replacement	No
TEE 304 SS	N/A	N/A	N/A	R95-0637 ASME SA-182 GR 304F	UNK.	Replacement	No
ELBOW 304 SS	N/A	N/A	N/A	R95-1170 ASME SA-182 GR 304F	UNK.	Replacement	No
DIAPHRAM VALVE 2"	ITT GRINNELL	75-4104-30-12	N/A	R95-0459 ASME SA-351 GR CF8 VLV VLV 332	1976	Replacement	Yes

7. Description of Work: PIPING, VALVE, TEE AND ELBOW REPLACED DUE TO PREVIOUS HYDRO FAILURE.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure

Other VT-2 Pressure 188 psig Test Temperature 91 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed *Ed Forward* Acting Technical Manager Date Sept 27 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/14/95 to 09/26/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Samuel A. L.
Inspector's Signature

Commissions:

Factory Mutual Eng. Assoc.

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date Sept 30 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/27/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

WO #: 95025427

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: AUX STEAM TO AFW SYSTEM System #: 84 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PSA-3 LOAD PIN	PACIFIC SCIENTIFIC	N/A	N/A	R89-3493 SNUBBER TAG 3-1003	UNK.	Replacement	No
CAP SCREWS (4) FOR ITA	N/A	N/A	N/A	R92-0504 SNUBBER TAG 3-1003	UNK.	Replacement	No

7. Description of Work: TRANSITION TUBE TO SNUBBER BOLTS AND SNUBBER LOAD PIN REPLACED ON PSA-3 SNUBBER TAG NUMBER 3-1003. TRANSITION TUBE TO SNUBBER BOLTS REPLACED DUE TO INADEQUATE THREAD ENGAGEMENT PER CR95-826.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed RF Smith Acting Technical Manager Date Sept 27 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/16/95 to 09/27/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Samuel Blum
Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.

NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date Sept 28 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/29/95

Sheet 1 of 2

Unit 3
PWO #: 7506/63 WO #: 95003764

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System: COMPONENT COOLING WATER System #: 30 Quality Group: 8

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
RELIEF VALVE 1 1/2"	DRESSER INDUSTRIES	TH18074	N/A	RV-3-1425, A-479 TYPE 316 MODEL 1-1/2-1970-2	UNK.	Replaced	Yes
RELIEF VALVE 1 1/2"	DRESSER INDUSTRIES	TH18075	N/A	RV-3-1425, A-479 TYPE 316 MODEL 1-1/2-1970-2	UNK.	Replacement	Yes

7. Description of Work: REPLACED RELIEF VALVE RV-3-1425 WITH TESTED SPARE.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-2 Pressure 70 psig Test Temperature 89 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Donald L. Morgan, Jr. ASME Technical Manager Date 10-1-95 19 95
 Owner or Owner's Designee, Title

URS

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/07/95 to 09/29/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Donald L. Morgan, Jr.
 Inspector's Signature

Commissions

Factory Mutual Eng. Assoc.
 NB 8230 (N)(1)
 National Board, State, Providence, and Endorsements

Date Sept 29 19 95

FORM HIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/29/95

Sheet 1 of 2

Unit 3
PWO #:2887/63 WO #: 95026079

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUD (4)	N/A	N/A	N/A	FT-3-110 R94-2456	N/A	Replacement	No
HEAVY NUTS (8)	N/A	N/A	N/A	RT-3-110 R95-0123	N/A	Replacement	No

7. Description of Work: FLANGE BOLTING BEING REPLACED DUE TO BORIC ACID RESIDUE.

8. Tests Conducted: Hydrostatic: X Pneumatic: _____ Nominal Operating Pressure _____
Other VT-1/2 Pressure 188 psig Test Temperature 93 °F

FORM HIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION NO WELDING NEEDED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed *Robert H. Engel* Acting Technical Manager Date October 1 1995
 Owner or Owner's Designee, Title

MB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/21/95 to 09/29/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert H. Engel
 Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date October 1 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/30/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
WO #: 95026339

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: MAINSTEAM System #: 72 Quality Group: 8

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PSA-35 TTA BOLTS (6)	N/A	N/A	N/A	A 325 BOLTS STK CODE #019 7413 1 SHUB TAG 3-1084	UNK	Replaced	No

7. Description of Work: REPLACED TTA BOLTS.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: REPLACED BOLTS ON TTA - SNUBBER 3-1084

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Michael J. F. Jr. Asst. Technical Manager Date Oct 6 / 95 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/24/95 to 09/29/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Michael B. Blum
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date October 6 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/29/95

Sheet 1 of 2

Unit 3
PWO #:2888/63 WO #: 95026081

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
HEAVY HEX NUT (8)	N/A	N/A	N/A	FT-3-113 R93-2473	N/A	Replacement	No
STUDS (4)	N/A	N/A	N/A	FT-3-113 R94-3230	N/A	Replacement	No

7. Description of Work: FLOW TRANSMITTER FLANGE BOLTING BEING REPLACED DUE TO BORIC ACID RESIDUE.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-1/2 Pressure 188 psig Test Temperature 93 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION NO WELDING NEEDED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Donald R. [Signature] Date October 1 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/21/95 to 09/29/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspectors Signature

Commissions

~~Factory Mutual Eng. Assoc.~~
NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date October 2 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/02/95

Sheet 1 of 2

Unit 3
PWO #:2886/63 WO #: 95026078

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
HEAVY HEX NUT (12)	N/A	N/A	N/A	MOV-3-350 R91-1504 ASME SA-194	N/A	Replacement	No
BONNET STUD (6)	CRANE ALOYCO	N/A	N/A	MOV-3-350 R92-0699 ASME SA-193	N/A	Replacement	No

7. Description of Work: BOLTING WAS REPLACED DUE TO LEAK DURING ASME SECT. XI PRESSURE TEST. BOLTING WAS VISUALLY INSPECTED VT-1.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure

Other VT-1/2 Pressure 188 psig Test Temperature 93 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION NO WELDING NEEDED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed *Samuel P. Thompson* Date October 2 19 95
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/21/95 to 09/29/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Samuel P. Thompson
 Inspectors Signature

Commissions NB 8230 (N)(1)
 National Board, State, Providence, and Endorsements

Date October 2 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/30/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
WO #: 95024592

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: SAFETY INJECTION System #: 62 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPE SUPPORT	N/A	N/A	N/A	DWG 5613-H-823 SHT 14 MARK 8080-H-007-09	UNK	Repaired	No

7. Description of Work: MODIFY SUPPORT 8080-H-007-09 (5613-H-823 SHT 14) REMOVE WELDED LUGS TO PROCESS

PIPE.

8. Tests Conducted: Hydrostatic: Pneumatic: Nominal Operating Pressure

Other VT-3 Pressure psig. Test Temperature °F

FORM NIS-2 (Back)

9. Remarks: GROUND OFF WELD. WELDED PIECES OF ANGLE TO CHANNEL.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Robert A. Fong Acting Technical Manager Date October 1 19 95
Owner or Owner's Designee, Title

WMB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/09/95 to 09/30/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Blum
Inspectors Signature
Date October 2 19 95

Commissions

Factory Mutual Eng. Assoc.
NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 09/30/95

Sheet 1 of 2

Unit 3
PWO #:7361/63 WO #: 95003188

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: CHARGING System #: 47 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PISTON CHECK VALVE 2"	EDWARDS VALVES	570125458	N/A	R 77AHG, VALVE 3-303	UNK	Replacement	No
ELBOW 2"	N/A	N/A	N/A	R 95-0333 ASME SA-182, F304	UNK	Replacement	No
PIPE 2"	N/A	N/A	N/A	R 95-0882 304 SS ASME SA-312	UNK	Replacement	No

7. Description of Work: VALVE, PIPING AND 90 DEGREE ELBOW REPLACED. WELDED CONNECTION.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-2 Pressure 190 psig Test Temperature 63 °F

FORM NIS-2 (Back)

9. Remarks: _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed Robert H. King, Jr. Acting Technical Manager Date October 1 1995
Owner or Owner's Designee, Title

MB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/01/95 to 09/30/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James H. Blane
Inspectors Signature

Commissions

Factory Mutual Eng Assoc
NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date October 2 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 09/30/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

WO #: 95026659

CR #: 95-837

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: FEEDWATER System #: 74 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPE SUPPORT	N/A	N/A	N/A	3-1080 MARK # PS-1 5613-H-651 SHT. 4	N/A	Replacement	No

7. Description of Work: MODIFY REAR BRACKET IAW CR95-837 TO PROVIDE 1/8" CLEARANCE TO SNUBBER END CAP ON

SNUBBER TAG # 3-1080.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed *Donna M. Smith* Date October 1 19 95
Owner or Owner's Designee Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/26/95 to 09/30/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Ernie H. Blair
Inspector's Signature

Commissions

Factory Mutual-Eng. Assoc. BB

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date October 2 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/01/95

Sheet 1 of 2

Unit 3

WO #: 95018031

PCH #: 95-037

PS #: 95-018M

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System: MAINSTEAM System #: 72 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, 416-1 Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
VLV 3-10-107	ROCKWELL EDWARDS	N/A	N/A	3/4" GLOBE VALVE	UNK.	Replaced	No
VLV 3-10-207	ROCKWELL EDWARDS	N/A	N/A	3/4" GLOBE VALVE	UNK.	Replaced	No
VLV 3-10-307	ROCKWELL EDWARDS	N/A	N/A	3/4" GLOBE VALVE	UNK.	Replaced	No
1 1/4" CAPS (3)	N/A	N/A	N/A	UTC #377470 ASME A105	UNK.	Replacement	No

7. Description of Work: THE FOLLOWING VALVES WERE REMOVED AND PIPING WAS CAPPED: 3-10-107, 3-10-207 AND

3-10-307. PRIOR TO RETURN TO SERVICE AN INSERVICE LEAK TEST WILL BE PERFORMED PER W095027443.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM HIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Daniel H. Fitzgerald, Acting Technical Manager Date October 1 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 08/09/95 to 10/01/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Daniel H. Fitzgerald
Inspectors Signature

Commissions

Factory Mutual Eng. Assoc. SB

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date Oct 1 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/02/95

Sheet 1 of 2

Unit 3
PWO #:7351/63 WO #: 95003068

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: COMPONENT COOLING WATER System #: 30 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, N/A Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (10)	N/A	N/A	N/A	R94-3198, VLV 3-738 ASME SA-193	UNK.	Replacement	No
NUTS (33)	N/A	N/A	N/A	(1)R91-4032, (32)R93-2765 VLV 3-738, ASME SA-194	UNK.	Replacement	No

7. Description of Work: REPLACED BODY TO BONNETT BOLTING.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David G. Foy, Jr., Actg. Technical Manager Date October 2 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 01/31/95 to 10/01/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Blum
Inspector's Signature

Commissions NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date October 2 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/02/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:63/2890 WO #: 95026076

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: CVCS System #: 47 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUD (1) 1/4"-28 UNF-2A	N/A	N/A	N/A	R93-3760, VLV 3-367 ASME SA-193 GR B7	UNK.	Replacement	No

7. Description of Work: DIAPHRAM LEAKED DURING ASME SECT. XI PRESSURE TEST. BOLTING WAS VISUALLY INSP.

VT-1 AND ONE BONNET BOLT WAS BAD. BOLT WAS REPLACED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed Robert J. Smith, Acting Technical Manager Date October 2 1995
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/21/95 to 10/02/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Glend
 Inspector's Signature

Commissions NB 8230 (N)(I)
 National Board, State, Providence, and Endorsements

Date October 2 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/02/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

WO #: 95025850 CR #: 95-803

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: 74/FEEDWATER System #: 74 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
TRANSITION TUBE ASSEMBLY	N/A	N/A	N/A	FOR MSA TAG #3-1041	UNK.	Repaired	No
TRANSITION TUBE ASSEMBLY	N/A	N/A	N/A	FOR MSA TAG #3-1042	UNK.	Repaired	No

7. Description of Work: SNUBBER 3-1042 ADJUSTED TRANSITION TUBE ASSEMBLY TURNBUCKLE TO BRING "L"

DIMENSION WITHIN ACCEPTABLE RANGE.

SNUBBER 3-1041 ADJUSTED TRANSITION TUBE ASSEMBLY TURNBUCKLE TO ACHIEVE TURNBUCKLE

FULL THREAD ENGAGEMENT.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Robert J. Z... Date October 10 19 95
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/19/95 to 10/02/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert J. Z...
 Inspector's Signature

Commissions

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date October 2 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/03/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

9700 SW 344 Street, Florida City, Fl. 33034
Address

WO #: 95025026

3. Work Performed by Florida Power & Light
Name

Repair Organization P.O. No., Job No., etc

P.O. Box 4332, Princeton, Fl. 33032
Address

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System: VARIOUS System #: 105 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PIPE CLAMP BOLT, HEX 3/4"-10 UNC-2A	N/A	N/A	N/A	STOCK # 0197843 UTC 378857 R N/A	N/A	Replacement	No

7. Description of Work: SNUBBER 3-1036 (CR 95-829) REPLACED PIPE CLAMP BOLT AT SNUBBER END, ADJUSTED

TIGHTENED PIPE CLAMP.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-3 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repênement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Donald P. Smith, Chief Technical Manager Date October 3 1995
Owner or Owner's Designee/Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/20/95 to 10/03/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Black
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 3 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/10/95

Sheet 1 of 2

Unit 3
PWO #:4938/63 WO #: 94018887 CR #: 94-167

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
HEAVY HEX NUT(1)	N/A	N/A	N/A	SA-194 GR 2H 3/4"-UNC-2B NOV-3-535	UNK	Replacement	No
DOUBLE END STUD(2)	N/A	N/A	N/A	SA-193 GR B7 TYPE 3 3/4"-10 UNC-2A X 5"	UNK	Replacement	No

7. Description of Work: REPLACED 1 BOLT AND 2 STUDS.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X
Other VT-1/2 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *William H. Smith, Jr.* *Chief Testerman, Wilmington* Date *October 10* 19 *95*
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 06/01/95 to 10/03/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

William H. Smith, Jr.
Inspector's Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date *October 10* 19 *95*

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/10/95

Sheet 1 of 2

Unit 3
PWO #: 4939/63 WO #: 94018905 CR #: 94-167

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: A

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
HEAVY HEX NUT(12)	N/A	N/A	N/A	SA-194 GR 2H 3/4" 10 UNC-2B MOV-3-536	UNK	Replacement	No
DOUBLE END STUD	N/A	N/A	N/A	SA-193 GR B7 TYPE 3 3/4"-10 UNC 2A X 5"	UNK	Replacement	No

7. Description of Work: REPLACED 12 HEX NUTS, AND 1 DOUBLE END STUD

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X
Other VT-1/2 Pressure 2280 psig Test Temperature 525 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING NEEDED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Robert H. Bryant, R. H. Technical Manager Date October 10 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/28/95 to 10/03/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert H. Bryant
Inspector's Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 10 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/05/95

Sheet 1 of 2

Unit 3
PWO #:63/3051 WO #: 95027049 CR #: 95-964

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
2" PIPING 304 SS	N/A	N/A	N/A	UTC376808 ASME SA-312 SCH 10	UNK.	Replacement	No
TEE 304 SS	N/A	N/A	N/A	UTC354808 ASME SA-182 GR 304F	UNK.	Replacement	No
ELBOW 304 SS	N/A	N/A	N/A	UTC369679 ASME SA-182 GR 304F	UNK.	Replacement	No
DIAPHRAM VALVE 2"	ITT GRINELL	N/A	N/A	VLV 3-348	UNK.	Replacement	No
DIAPHRAM VALVE 2"	ITT GRINELL	75-4104-30- 6	N/A	UTC378096 VLV 3-348 ASME SA-351 GR CF8	1976	Replacement	Yes

7. Description of Work: PIPING, TEE, ELBOW, VALVE AND COUPLING REPLACED DUE TO PIPING THROUGH WALL LEAK.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure
Other VT-2 Pressure 190 psig Test Temperature 92 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repairment conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned William H. F. Smith, Technical Manager Date October 10 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/28/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

William H. F. Smith
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 6 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/10/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #:7659/63 WO #: 95004524

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: REACTOR COOLANT System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PRESSURIZER RELIEF VALVE	N/A	N69877000004	N/A	RV-3-551B	UNK	Replaced	No
PRESSURIZER RELIEF VALVE	N/A	N69877010008	N/A	RV-3-551B	UNK	Replacement	No

7. Description of Work: REMOVE/REPLACE PRESSURIZER SAFETY VALVE RV-3-551B WITH SPARE IN PRESSURIZER

CUBICLE

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-1/2 Pressure 2280 psig Test Temperature 525 °F

FORM NIS-2 (Back)

9. Remarks: NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Robert H. Engel, Robert Thomas Robinson Date October 10 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/21/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert H. Engel
Inspectors Signature

Commissions

NB 8230 (N)(I)

National Board, State, Providence, and Endorsements

Date

October 10 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/10/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #:7661/63 WO #: 95004541

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: REACTOR COOLANT System #: 41 Quality Group: A

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PRESSURIZER RELIEF VLV	N/A	N/A	N/A	RV-3-551C	UNK	Replaced	No
PRESSURIZER RELIEF VLV	N/A	N6877010009	N/A	RV-3-551C	UNK	Replacement	No

7. Description of Work: REMOVE/REPLACE PRESSURIZER SAFETY VALVE RV-3-551C WITH SPARE IN PRESSURIZER

CUBICLE

8. Tests Conducted: Hydrostatic: Pneumatic: Nominal Operating Pressure X

Other VT-1/2 Pressure 2280 psig Test Temperature 525 °F

FORM NIS-2 (Back)

9. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed *Robert J. Smith* *Robert J. Smith* Date *Oct 10* 19*95*
Owner/or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/21/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James H. Smith
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date *October 10* 19*95*

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/04/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #: 63/7459 WO #: 94000673

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: Feedwater System #: 74 Quality Group: 8

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
HEAVY HEX NUT (16)	N/A	N/A	N/A	UTC 377471 CV-3-2902	N/A	Replacement	No
STUDS (16)	N/A	N/A	N/A	UTC377474 CV-3-2902 A-193	N/A	Replacement	No

7. Description of Work: Replaced 16 studs and 16 nuts on valve CV-3-2902.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____
Other VT-4 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION. NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed [Signature] , TDM Date 10-4 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/03/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspectors Signature

Commissions NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date 10/4 19 95

FORM-NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/04/95

Sheet 1 of 2

Unit 3
PWO #:7658/63 WO #: 95004521

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: A

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
PRESSURIZER RELIEF VALVE	N/A	1579	N/A	RV-3-551A	UNK	Replaced	No
PRESSURIZER RELIEF VALVE	N/A	N-5124 91580	N/A	RV-3-551A	UNK	Replacement	No

7. Description of Work: PRESSURIZER SAFETY VALVE RV-3-551A REMOVED AND SPARE INSTALLED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X
Other VT-1/2 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION - NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed William P. King, P.E. Piping Technical Manager Date October 10, 1995
Owner or Owner's Designee Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 02/17/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Glen
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 6, 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/04/95

700 Universe Blvd. Juno Beach FL 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #: 3746/63 WO #: 94012351

9700 SW 344 Street, Florida City, FL 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, FL 33032
Address

4. Identification of System: FEEDWATER System #: 74 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUD (6)	N/A	N/A	N/A	R94-1769 VLV 3-20-232 SA 193	UNK	Replacement	No
NUTS (6)	N/A	N/A	N/A	R94-1769 VLV 3-20-232 SA 194	UNK	Replacement	No

7. Description of Work: REPLACED 6 STUDS AND 6 NUTS ON BODY TO BONNET.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM HIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned David M. Smith, Asst. Technical Manager Date October 10 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/20/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Smith
Inspectors Signature

Commissions

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date

October 6 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/10/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:2539/63 WO #: 95024145

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: REACTOR VESSEL System #: 43 Quality Group: A

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
NUTS (8)	N/A	N/A	N/A	SA-194 R95-0078 VALVE 3-500	UNK		No
STUDS (4)	N/A	N/A	N/A	A-193 GR B7 VALVE 3-500 UNC-2A X	UNK		No

7. Description of Work: 8 NUTS AND 4 STUDS REPLACED ON FLANGE BY VALVE 3-500.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VI-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDED REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Richard B. Blum Date October 10 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County, and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/04/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Richard B. Blum
Inspector's Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 10 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/04/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:63/1976 WO #: 95019741

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: INTAKE COOLING WATER System #: 19 Quality Group: C

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
COVER STUDS, (16)	HAYWARD	N/A	N/A	5 1/2 X UTC 0000372070 U 90-6200 BS-3-1403	N/A	Replacement	No
NUTS (16)	N/A	N/A	N/A	ASME SA-194 GR 2H R95-0154 BS-3-1403	N/A	Replacement	No

7. Description of Work: REPLACED COVER STUDS(16) AND (16)NUTS.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other _____ Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Steve P. [Signature] Date October 6 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/13/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements-

Date October 6 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/04/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:8716/63 WO #: 95009370

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

Expiration Date N/A

4. Identification of System: MAINSTEAM System #: 72 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (3) 1 7/8"-8UN X 10"	N/A	N/A	N/A	R93-2404 VLV POV-3-2604 SA-193	UNK.	Replacement	No
NUTS (3) 1 7/8"-8UN-2B	N/A	N/A	N/A	(1)R93-2485, (2)R93-1915 VLV POV-3-2604 SA-194	UNK.	Replacement	No

7. Description of Work: 3 STUDS AND 3 NUTS WERE REPLACED.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM HIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *L. Smith* *Arch T. L. Minner* Date *October 10* 19*95*
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 03/31/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Blum
 Inspectors Signature

Commissions NB 8230 (N)(1)
 National Board, State, Providence, and Endorsements

Date *October 6* 19*95*

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code-Section XI

1. Owner Florida Power & Light
Name

Date 10/04/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #:7322/63 WO #: 95002943

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: FEEDWATER System #: 74 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (16)	N/A	N/A	N/A	(10)R95-0067, (6)UTC377474 VLV CV-3-2901 A-193	UNK	Replacement	No
NUTS (16)	N/A	N/A	N/A	UTC377471 VLV CV-3-2901	UNK	Replacement	No

7. Description of Work: (16) STUDS AND (16) NUTS REPLACED ON CV-3-2901 DURING SOER 86-03 INSPECTION.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned *Walter A. [Signature]* Date *October 3* 19*95*
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

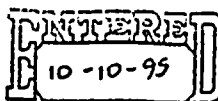
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 01/30/95 to 10/04/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date *October 6* 19*95*



FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/05/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3
PWO #: 2867/63 WO #: 95025933 CR #: 95-892

9700 SW 344 Street, Florida City, FL. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

P.O. Box 4332, Princeton, FL. 33032
Address

4. Identification of System: BORIC ACID TRANSFER System #: 46 Quality Group: B

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
2" PIPE 304 SS	N/A	N/A	N/A	UTC376808 ASME SA-312 SCH 10	UNK.	Replacement	No
TEE 304 SS	N/A	N/A	N/A	R95-0637 ASME SA-182 GR 304F	UNK.	Replacement	No
ELBOWS (2) 304 SS	N/A	N/A	N/A	R95-0637 ASME SA-182 GR 304F	UNK.	Replacement	No

7. Description of Work: PIPING, TEE'S AND ELBOWS REPLACED DUE TO THRU WALL LEAK ON BORIC ACID TRANSFER

PIPING LEADING TO 3A & 3B BA PMP DISCHARGE CROSS CONNECTS.

8. Tests Conducted: Hydrostatic: X Pneumatic: Nominal Operating Pressure

Other VT-2 Pressure 188 psig Test Temperature 93 °F

FORM NIS-2 (Back)

9. Remarks: ALL WELDING PERFORMED IN ACCORDANCE WITH APPROVED PLANT PROCEDURES.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned *Robert T. Blum* Date October 10 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/20/95 to 10/05/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert T. Blum
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 6 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/05/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #: 6720/63 WO #: 94032280

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: REACTOR COOLANT SYSTEM System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
BONNET EXTENSION	COPEL VULCAN	N/A	N/A	PCV-3-455B	UNK	Replacement	No

7. Description of Work: RECONDITIONED VALVE BONNET EXTENSION FROM PCV-4-455A W095006940 WAS INSTALLED

ON VALVE PCV-3-455B.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-2 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned *William J. Blum* Date *October 10* 19 *95*
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 12/29/94 to 10/05/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

William J. Blum
Inspector's Signature

Commissions NB 8230 (N)(I)
National Board, State, Providence, and Endorsements

Date *October 6* 19 *95*

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 10/12/95

Sheet 1 of 2

Unit 3
PWO #:2575/63 WO #: 95024280

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: REACTOR COOLANT System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (4)	N/A	N/A	N/A	R92-0244 SA-193 3/4" GR B7 3P2008	UNK	Replacement	No
NUTS (8)	N/A	N/A	N/A	R95-0154 SA-194 3/4" GR 2H 3P2008	UNK	Replacement	No

7. Description of Work: REPLACED 4 NEW STUDS AND 8 NUTS.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-1/2 Pressure 2280 psig Test Temperature 525 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING NEEDED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *Samuel P. Foyt, Acting Technical Manager* Date October 13 1995
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/05/95 to 10/12/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Samuel P. Foyt
Inspector's Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date October 12 1995

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/12/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #:63/8717 WO #: 95009377

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: Mainsteam System #: 72 Quality Group: B

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (2)	N/A	N/A	N/A	R93-2404 1 7/8" POV-3-2605	UNK		No
NUTS(2)	N/A	N/A	N/A	R93-2485 1 7/8" POV-3-2605	UNK		No

7. Description of Work: Replaced 2 studs and 2 nuts.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure _____

Other VT-1 Pressure _____ psig Test Temperature _____ °F

FORM NIS-2 (Back)

9. Remarks: _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed *Donald J. L. Acting Technical Manager* Date October 13 19 95
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 03/31/95 to 10/12/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Glen
Inspector's Signature

Commissions NB 8230 (H)(1)
National Board, State, Providence, and Endorsements

Date October 12 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

Date 10/12/95

700 Universe Blvd. Juno Beach Fl. 33408
Address

Sheet 1 of 2

2. Plant Turkey Point Plant
Name

Unit 3

PWO #:2573/63 WO #: 95024277

9700 SW 344 Street, Florida City, Fl. 33034
Address

Repair Organization P.O. No., Job No., etc

3. Work Performed by Florida Power & Light
Name

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

P.O. Box 4332, Princeton, Fl. 33032
Address

4. Identification of System: REACTOR COOLANT System #: 41 Quality Group: A

5. (a) Applicable Construction Code B31.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
STUDS (4) 1"-8UNC-2A	N/A	N/A	N/A	UTC335689 ASME SA-193 3P200A SEAL INJ FLANGE	UNK.	Replacement	No
NUTS (8) 1"	N/A	N/A	N/A	UTC370714 ASME SA-194 3P200A SEAL INJ FLANGE	UNK.	Replacement	No
STUDS (8) 7/8"-9UNC-2A	N/A	N/A	N/A	UTC356870 ASME SA-193 3P200A THERMAL BARRIER	UNK.	Replacement	No
NUTS (16) 7/8"	N/A	N/A	N/A	UTC351581 ASME SA-194 3P200A THERMAL BARRIER	UNK.	Replacement	No

7. Description of Work: (4) STUDS AND (8) NUTS REPLACED ON 3A RCP SEAL INJECTION FLANGE AND (8) STUDS.

AND (16) NUTS REPLACED ON 3A RCP THERMAL BARRIER FLANGE.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT1/2 Pressure 2280 psig Test Temperature 525 °F

FORM NIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Paul Banaszak PAUL BANASZAK for DR. POWELL Date 10/16 19 95
 Owner or Owner's Designee, Title TEST DEPT MANAGER

MSD

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 09/05/95 to 10/12/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James J. Blum
 Inspectors Signature

Commissions NB 8230 (N)(I)
 National Board, State, Providence, and Endorsements

Date October 16 19 95

FORM HIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 11/13/95

Sheet 1 of 2

Unit 3
PWO #:63/3366 WO #: 95028282

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: INTAKE COOLING WATER System #: 19 Quality Group: C

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case.

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
INTAKE COOLING WATER PUMP	JOHNSTON PUMP	N/A	N/A	MODEL 33 CMC IST-2 3P9B	UNK.	Replaced	No
INTAKE COOLING WATER PUMP	JOHNSTON PUMP	N/A	N/A	MODEL 33 CMC IST-6 3P9B	UNK.	Replacement	No
STUDS (6) 1-1/4"-7UNC-2A	N/A	N/A	N/A	R94-1520 ASME A-193 GR B7 3P9B	UNK.	Replacement	No

7. Description of Work: 3B INTAKE COOLING WATER PUMP IST-2 REPLACED WITH SPARE IST-6.

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X

Other VT-1/2 Pressure 16.3 psig Test Temperature 87 °F

FORM HIS-2 (Back)

9. Remarks: MECHANICAL CONNECTION, NO WELDING REQUIRED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A

Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed Paul Bernazzani TECHNICAL DEPT MANAGER te 11/17 19 95
Owner or Owner's Designee, Title

NAB

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 10/09/95 to 11/09/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James H. Glen
Inspectors Signature

Commissions

NB 8230 (N)(1)

National Board, State, Providence, and Endorsements

Date 11/20 19 95

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Florida Power & Light
Name

700 Universe Blvd. Juno Beach Fl. 33408
Address

2. Plant Turkey Point Plant
Name

9700 SW 344 Street, Florida City, Fl. 33034
Address

3. Work Performed by Florida Power & Light
Name

P.O. Box 4332, Princeton, Fl. 33032
Address

Date 11/17/95

Sheet 1 of 2

Unit 3
PWO #:0398/63 WO #: 95013045

Repair Organization P.O. No., Job No., etc

Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System: INTAKE COOLING WATER System #: 19 Quality Group: C

5. (a) Applicable Construction Code 831.1 1955 Edition, NA Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Edition, N/A Addenda, N/A Code Case

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board	Other Identification	Year Built	Repaired Replaced or Replacement	ASME Code Stamp Yes/No
CK VALVE (3P98)	N/A	W6730	N/A	3-50-321	UNK	Replaced	No
CK VALVE (3P98)	N/A	75204	N/A	3-50-321 R 95-0795 UTC 0000369237	UNK	Replacement	No
STUD (1)	N/A	N/A	N/A	1-1/8" -8UN-2A X 19" UTC 0000383150	UNK	Replacement	No
NUTS (2)	N/A	N/A	N/A	40774	UNK	Replacement	No

7. Description of Work: REMOVE/REPLACE SPARE CHECK VALVE FOR INTAKE COOLING WATER PUMP B (3P98)

DISCHARGE

8. Tests Conducted: Hydrostatic: _____ Pneumatic: _____ Nominal Operating Pressure X
Other VI-1/2 Pressure 16.3 psig Test Temperature 87 °F

FORM NIS-2 (Back)

9. Remarks: _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date _____ N/A _____

Signed Paul Benavise TECH DEPT. MANAGER Date 11/20 19 95
Owner or Owner's Designee, Title

4023

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the state or Province of Dade County and employed by Arkwright Mutual Insurance Company of Norwood, Ma. have inspected the components described in this Owners Report during the period 07/01/95 to 11/17/95 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

James B. Gluck
Inspectors Signature

Commissions NB 8230 (N)(1)
National Board, State, Providence, and Endorsements

Date 11/20 19 95

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Number	Number	Date	T	Test	T	Dimension	T

Visual and Functional Summary

3-1000 18015 09/11/95 P / /

12.8750 P Snubber 3-1000 visual inspection report TP-95-22 revealed the following items described in Deviation Report 015-TP-95-22:

10) Both spherical bearings have minor paint and light rust.

11) Snubber end cap painted, both load pins have minor paint and light rust.

Spherical bearings and load pins were cleaned for minor paint and light rust under PWO 95024339. Painted snubber end cap does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.

REPLACEMENT ITEMS: M&S

4 cotter pins R91-6050

3-1001 27095 09/15/95 P / /

17.1250 P Snubber 3-1001 visual inspection report TP-95-40 revealed the following conditions described in Deviation Report 045-TP-95-40:

5) One spacer is missing at the snubber end cap rear bracket.

10) The spherical bearing at the transition tube end has paint.

11) The ears of the pipe clamp are not parallel and 4 spacers are installed. The dimension between the ears of the pipe clamp at the load pin is 1 1/2" and the dimension at the pipe insulation is 1 1/4". The transition tube of the snubber does not match the configuration as indicated on the drawing. Sheet 100 of the drawing indicates that the pipe clamp is item #12 and it should indicate item #13. No snubber ID tag.

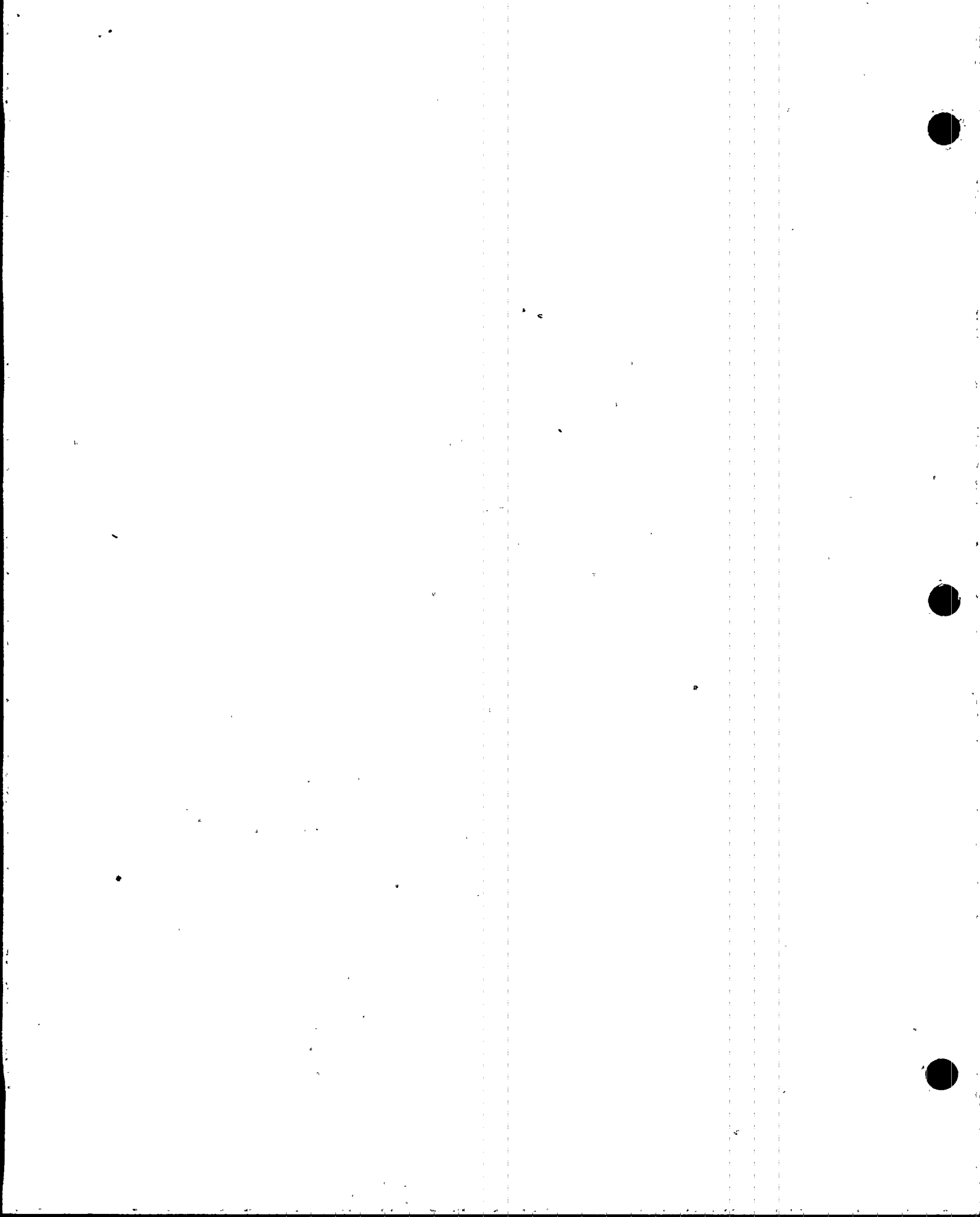
Condition Report 95-843 was written to address the drawing discrepancies and the clamp ears, item 11. Engineering evaluation showed the pipe clamp is tight and acceptable as is. The transition tube shown on the drawing will be updated via PHAI 9509070 to engineering along with the misidentified pipe clamp. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Spherical bearings were cleaned and lubricated under PWO 95024339. The missing spacer washer was replaced in accordance with engineering evaluation JPN-PTP-SECS-95-037, rev. 0, step 1.2.

REPLACEMENT ITEMS: M&S

2 cotter pins 031-46301-1
1 spacer washer 006-70905-2/R91-4598

3-1002 104 09/15/95 P / /

17.2500 P Snubber 3-1002 visual inspection report TP-95-41 revealed the following conditions described in Deviation Report 044-TP-95-41:



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Visual and Functional Summary

5) The rear bracket is not identified in the drawing bill of materials. The transition tube does not match the configuration as indicated on the drawing. The transition tube assembly bolts were found to be flush and 1 full thread is required to be considered full engagement. The plate thickness is 1/2" and the bolt identification could not be verified due to paint. Spacers at rear bracket are welded in place.

Condition Report 95-842 was written to address the drawing discrepancies, item 5. The final engineering disposition of CR 95-842 showed the rear bracket is acceptable as is, the welded spacer washers at the rear bracket are acceptable as is, and engineering was issued PHAI 9509069 to update the drawing. The inadequate thread engagement was previously addressed under CR 95-581 was acceptable and is also identified as acceptable under CR 95-842. Spherical bearings were cleaned and lubricated under PWO 95024339.

REPLACEMENT ITEMS: M&S

1 cotter pins 031-46301-1

3-1003 29625 09/15/95 P 09/15/95 P 15.6250 P Snubber 3-1003 visual inspection report TP-95-42 revealed the following conditions described in Deviation Report 039-TP-95-42:

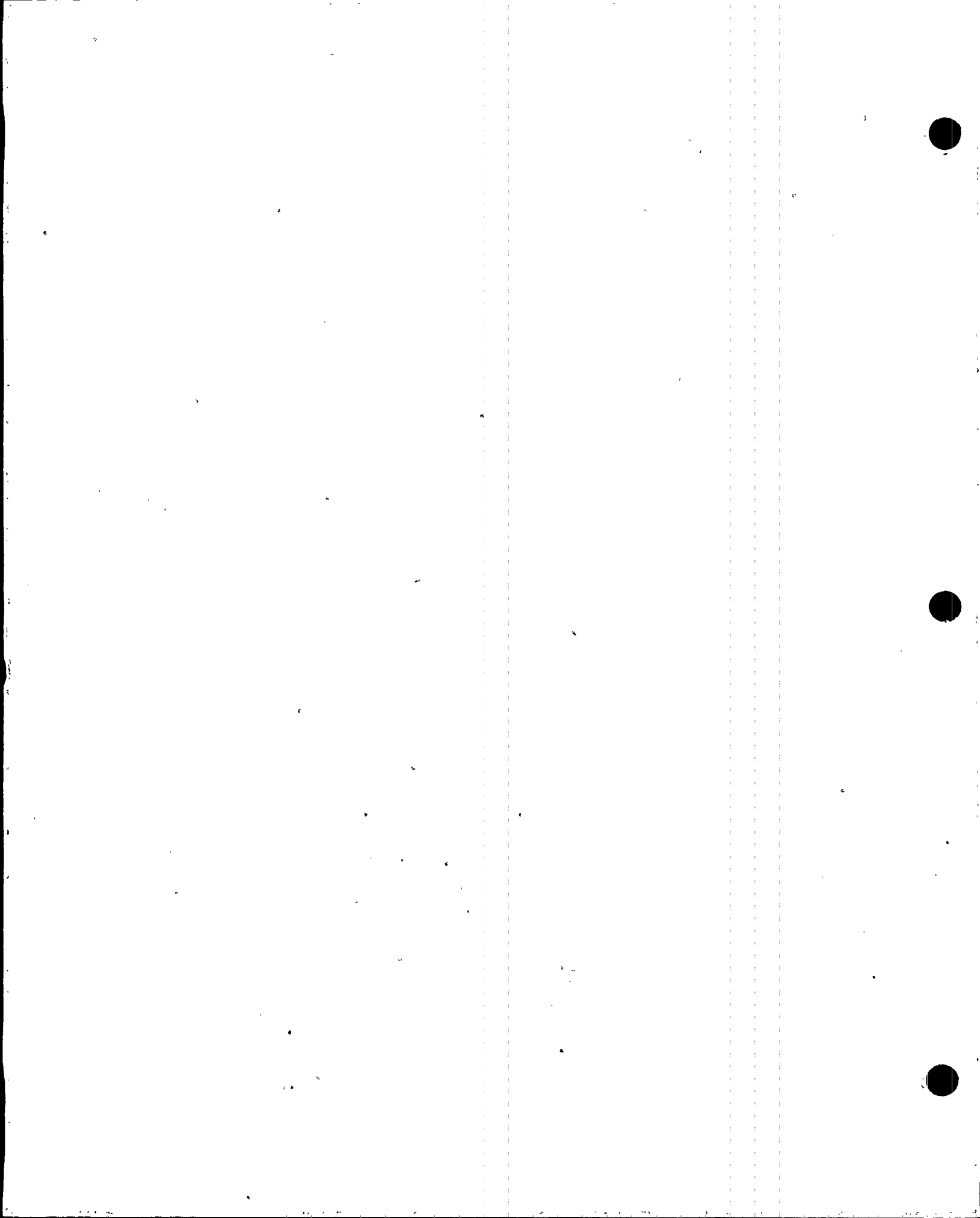
1,11) The rear bracket has been modified and the drawing does not indicate the changes.

10) The spherical bearings have light rust and dirt.

11) The transition tube assembly bolts lack full thread engagement by 1/32". The transition tube plate is 1/2" thick. The bolt diameter is 5/16" and identified by L5. The drawing also indicates that items #28 are installed at that location, but it's believed that items #28 are installed at item #50. The bolts installed at item #50 are flush with the nuts and 1 full thread is required for full engagement. Note washers are also installed. Light rust on snubber and unpainted surfaces. No snubber ID tag is installed. Spacers welded in place.

5) During removal of the load pin the pipe clamp rotated. The pipe clamp is insulated.

Condition Report 95-826 was written to address items 1, 5 & 11. Final disposition of CR 95-826 identified several discrepant items for updating the drawing and work to be performed in the field. Engineering was issued PHAI 9509067 to update the drawing and PHAI 9509068 was issued to projects for improper assembly. The corrective actions for the field work per the condition report were performed by projects under PWO 95025427. The snubber was functionally tested and passed, therefore meeting the technical specifications for operability. Spherical bearings were cleaned and lubricated under PWO 95024339. The light rust and paint on the snubber



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		Date	T	Test	T	Dimension T

Visual and Functional Summary

does not affect the operability of the snubber as evidenced by the satisfactory functional test and the condition is acceptable as is. Pipe clamp movement did not affect the snubber operation as evidenced by the satisfactory functional test and is normal for the clamp to move when the snubber is unpinned, therefore the condition is acceptable as is. The snubber ID tag will be ordered by the ISI group and installed during the next snubber inspection (TS-95-10-001). This snubber was functionally tested as part of the initial sample.

FUNCTIONAL TEST RESULTS

	TENSION	COMPRESSION	CRITERIA
1)	15.55	12.95	300.00
2)	28.23	20.87	300.00
3)	.002	.002	.02
4)	30.88	25.11	300.00

REPLACEMENT ITEMS:

M&S

1 load pin

006-70895-1/R89-3493

3-1004 101 09/13/95 P / / 17.5000 P Snubber 3-1004 visual inspection report TP-95-29 revealed the following conditions described in Deviation Report 025-TP-95-29:

5) No spacer installed at pipe clamp bolt as required.

10) Light to medium rust and dirt at the spherical bearings.

11) 1 cotter pin damaged at pipe clamp load pin, but still performing its intended function. 4 spacers are installed at the pipe clamp load pin, 1 at the top and 3 at the bottom of the spherical bearing. Light rust on snubber and extension piece attachment bolts. No snubber ID tag.

Snubber had 3 beveled washers and 1 flat washer. Removed 1 beveled and 1 flat washer. Installed 4 flat washers and 2 beveled washers.

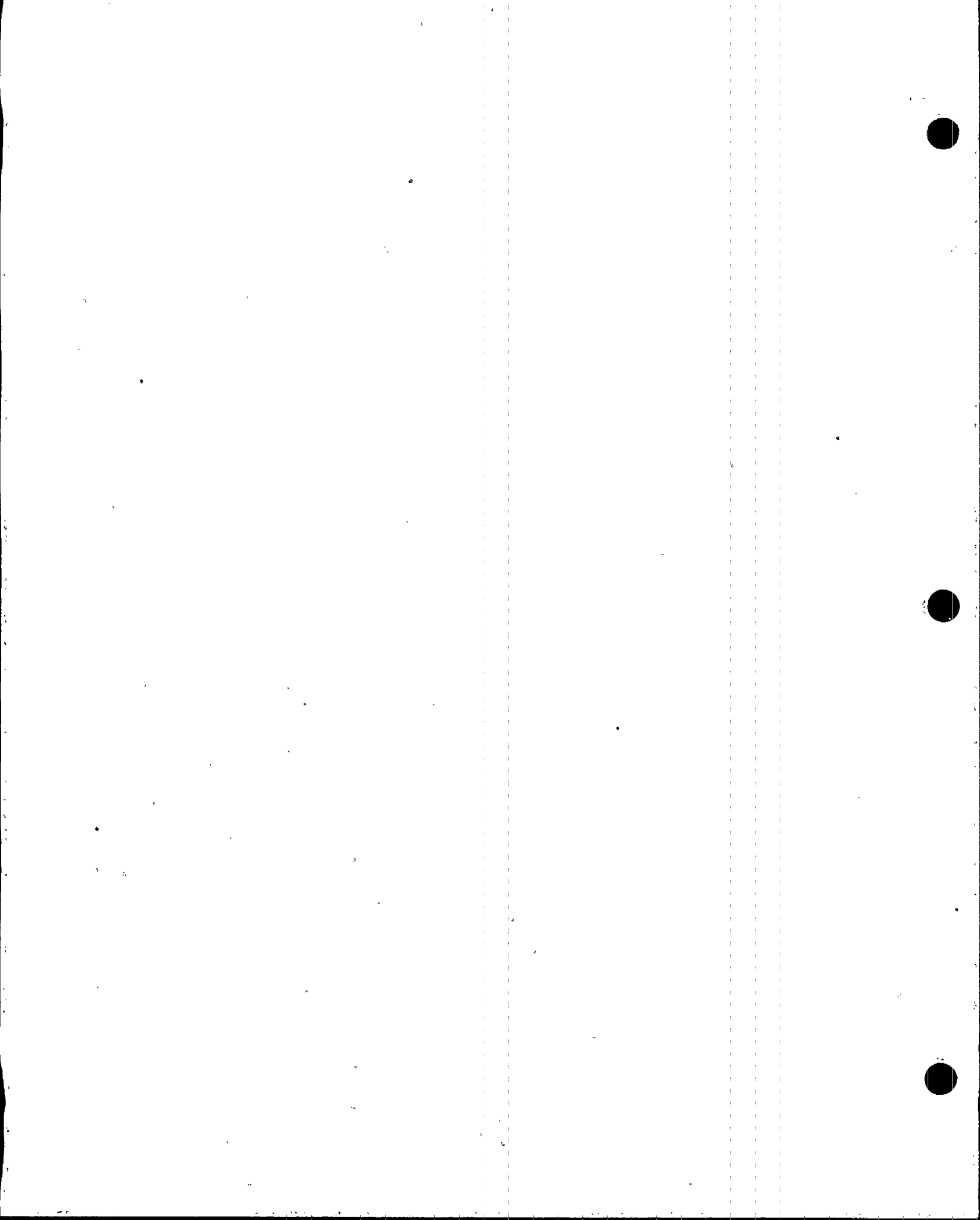
Condition Report 95-836 was written to resolve items 5 & 11. The final disposition of CR 95-836 is acceptable for use as is for all the discrepancies. As a result of CR 95-836, engineering was issued PHAI 9509139 to update the snubber drawing. The snubber ID tag will be ordered by the ISI group and will be installed during the next inspection (TS-95-10-001). Spherical bearings were cleaned and lubricated under PWO 95024339.

REPLACEMENT ITEMS:

M&S

4 spacer washers

006-70905-2/R91-4598



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Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

4 cotter pins

031-46500-5

3-1005 10035 09/08/95 P / /

26.3750 P Snubber 3-1005 visual inspection report TP-95-04 revealed the following conditions described in Deviation Report 022-TP-95-04:

5) No snubber ID tag.

6) The snubber end caps are slightly misaligned but are not binding in rear brackets.

11) The bearing is worn in the end cap assembly about 1/16".

Pipe insulated.

Condition Report 95-769 was written to address end cap assembly bearing wear. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. The misalignment does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the fact the snubber is not binding in the clamp/rear bracket. Spherical bearings on both ends of the snubber were replaced by projects under CR 95-769 and PWO 95025026. Snubber as left was performed on 09/29/95. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Insulated pipe does not affect the operability of the snubber.

REPLACEMENT ITEMS:

M&S

1 cotter pins

031-49200-4/0029158-2

2 spherical bearings

0197330-1/0000377952

3-1006 6521 .09/08/95 P 09/08/95 P

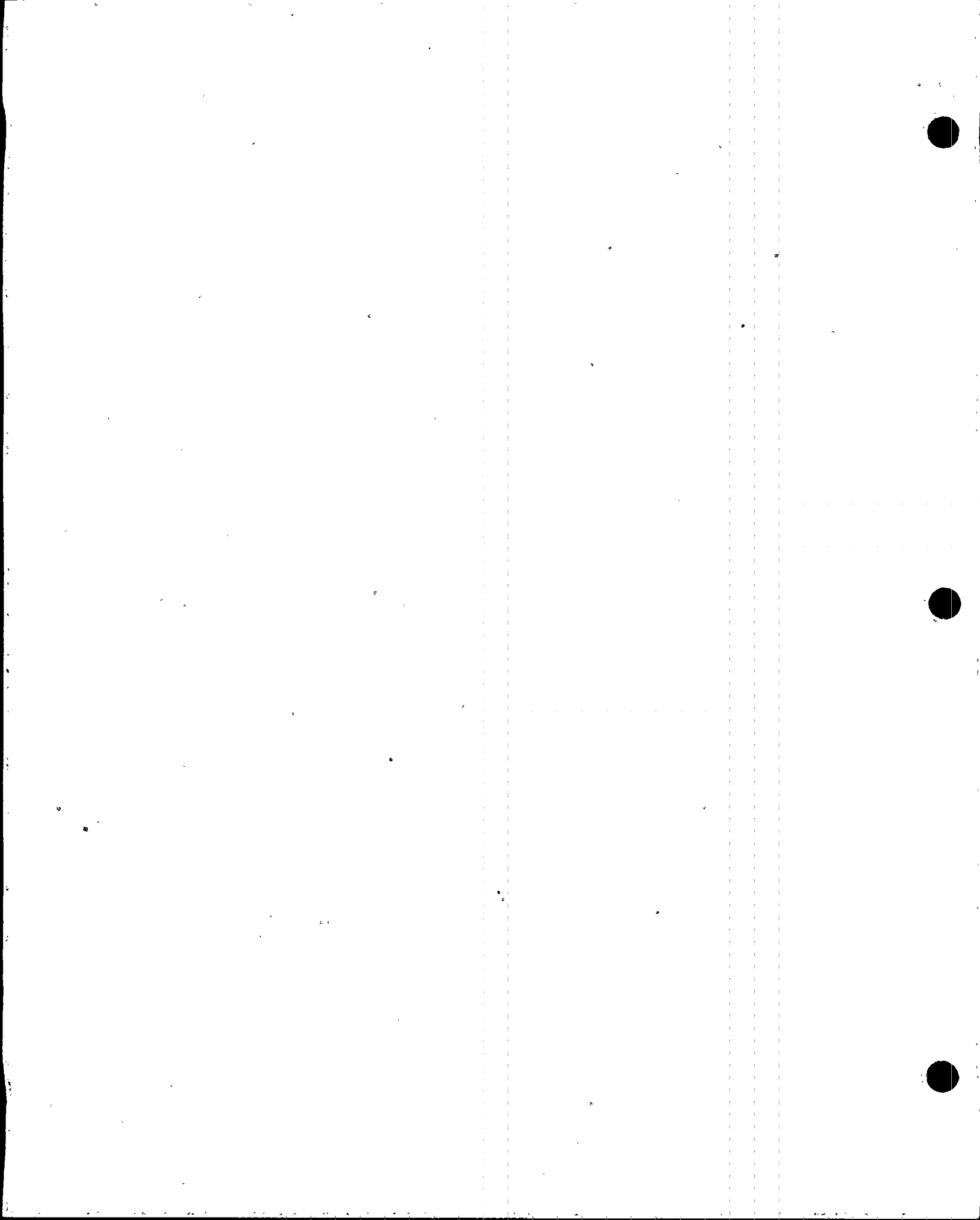
26.7500 P Snubber 3-1006 visual inspection report TP-95-01 revealed the following conditions described in Deviation Report 01-TP-95-01:

1,5) The two tack welds at the extension piece end cap were found to be broken.

4) The spherical bearing at the extension piece end was found to have some minor play at the bearing to outer race.

5) The end cap nut at telescoping tube end was found to be loose (150 ft. lb. torque required). ID tag was found to be broken/missing.

Condition Report 95-714 was written to address items 1, 4 & 5. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. The snubber ID tag will be ordered by the ISI group and will be installed during the next inspection (TS-95-10-001). Reinstallation will not be by Pacific Scientific but will be performed by



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		S	Date	S	S
	Visual	T	of	T	T
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Visual and Functional Summary

projects as part of the implementation of the CR 95-714 under PWO 95025026. PMAI 9510003 was issued to ISI group to inspect the snubber every 4 months and report the end cap to engineering if it becomes loose. Projects replaced spherical bearings on the transition tube assembly end, removed the broken tack welds, torqued the pipe end - end cap to 150 lbs with B-5140 cal due date 03/19/96 and performed the as left on 09/29/95. This snubber was functionally tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	69.71	148.59	2500.00
2)	95.09	148.59	2500.00
3)	.006	.006	.02
4)	90.55	158.15	2500.00

REPLACEMENT ITEMS: H&S

1 spherical bearing. 0197330-1/0000377952

3-1007 4590 09/08/95 P 09/08/95 P 27.3125 P Snubber 3-1007 visual inspection report TP-95-02 revealed the following conditions described in Deviation Report 002-TP-95-02:

4) Both spherical bearings were found to have play at the bearings to outer race.

5) Spacers missing at lower side of the load pin and load stud.

7) The load pin diameter at the rear bracket was found to be reduced to 1.486" and the load stud was found to be reduced to 1.476" (1.5" required). Dial caliper S/N B-5538 cal. date 6/8/95, cal due date 12/05/95.

10) End caps are painted.

11) The lower ears of the rear bracket and pipe clamp were found to be worn in the area of the load pin and stud by the spherical bearing. Rear bracket reduced by ~1/16" pipe clamp ~1/8". Pipe clamp is insulated.

Condition report 95-715 was written to address items 4, 5, 7 & 11. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. The spherical bearing was identified to be loose as a result of this inspection. Both of the spherical bearings were replaced for this snubber. Projects implemented the requirements set forth in the disposition of CR 95-715 under PWO 95025026 and the as left exam

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was performed on 09/29/95. PHAI 9510001 was issued to engineering to update the snubber drawing and PHAI 9510002 was issued to the ISI group to provide long term corrective action for the vibration problem on the mainsteam. The painted end cap does not affect the operability of the snubber as evidenced by the satisfactory functional test.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	82.05	281.35	2500.00
2)	143.41	417.35	2500.00
3)	.001	.001	.02
4)	163.03	361.97	2500.00

REPLACEMENT ITEMS:

M&S

2 spherical bearings	0197330-1/0000377952
1 load stud	0197328-1/0000377933
2 hardened washers	0197329-3
1 load pin	0015329-1/0000331244

3-1008 8084 09/08/95 P / /

27.5000 P Snubber 3-1008 visual inspection report TP-95-06 revealed the following conditions described in Deviation Report 004-TP-95-06:

5) 2 spacer washers on the strut end, one 1/4" the other 1/16". One spacer on snubber end. No snubber ID tag.

Corrected deviation for spacer washers in accordance with engineering evaluation JPN-PTP-SECS-95-037, rev 0, step 1.2. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. No additional problems were encountered as a result of this inspection. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Spherical bearings were cleaned and lubricated under PWO 95024339. Load pin was drilled in accordance with JPN-PTP-SECS-95-037, rev 1, step 3.2 under PWO 95025170.

REPLACEMENT ITEM:

M&S

2 cotter pins	031-49200-2/0029158-4
7 spacer washers	006-70907-9

3-1009 1203 09/08/95 P / /

26.7500 P Snubber 3-1009 visual inspection report TP-95-08 revealed the following conditions described in Deviation Report 07-TP-95-08 and 23-TP-95-08:

5) No snubber ID tag attached.

10) Snubber support cyclinder and housing is painted. Light rust on

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	Visual	T	of	T	T
Tag	Serial	Inspection	A	Functional	A
Number	Number	Date	T	Test	T
				Dimension	T

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spherical bearings and load pins.

11) Minimal wear on rear brackets from cotter pin,

Spherical bearing has 1/16" play.

Condition Report 95-769 was written to address worn spherical bearings on snubbers 3-1005, 3-1009 & 3-1010. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. As a result of this inspection, there was 1/16" play identified on both ends of this snubber. The condition report required the spherical bearing to be replaced and it will be done by projects under CR 95-769 and PWO 95025026. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Spherical bearing on pipe clamp end were replaced and lubricated under CR 95-769 and PWO 95024339. The minor wear on the rear bracket from the cotter pin is insignificant and is acceptable as is. As left visual examination was performed on 09/29/95. The paint on the snubber does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.

REPLACEMENT ITEMS:

M&S

2 cotter pins	031-49200-2
1 spherical bearing	0197330-1/0000377952

3-1010 11931 09/08/95. P / /

26.3750 P Snubber 3-1010 visual inspection report TP-95-03 revealed the following conditions described in Deviation Report 21-TP-95-03:

5) No snubber ID tag installed.

6) Snubber end caps are slightly misaligned but are not binding in the rear bracket.

10) The end caps are painted and the snubber has minor paint and firecrete on it.

The bearing on the end cap assembly is worn. Play in the race. Minimum 1/16" play.

Condition report 95-769 was written to address the worn spherical bearing and end cap misalignment. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. As a result of this inspection the spherical bearings on both ends of the snubber were replaced by projects under CR 95-769 and PWO 95025026. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). The firecrete and minor paint on the snubber do not affect

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Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.

REPLACEMENT ITEMS: M&S

3 cotter pin 031-49200-2/0029158-4
2 spherical bearings 0197330-1/0000377952

3-1011 12376 09/10/95 P / /

20.2500 P Snubber 3-1011 visual inspection report TP-95-07 revealed the following conditions described in Deviation Report .005-TP-95-07 and 047-TP-95-07:

11) Thread engagement on extension bolts are recessed into the housing by 1/16".

Condition Report 95-719 was written to address inadequate thread engagement. Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. No additional problems were encountered as a result of this inspection. The thread engagement is acceptable as is per CR 95-581 with PMAI 9508107 going to engineering to update the drawing. Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber load pin had an "E" clip on one end. In accordance with engineering evaluation JPN-PTP-SECS-95-037, rev. 1, the pin was drilled per step 3.2 under PWO 95025170 and reinstalled.

REPLACEMENT ITEM: M&S

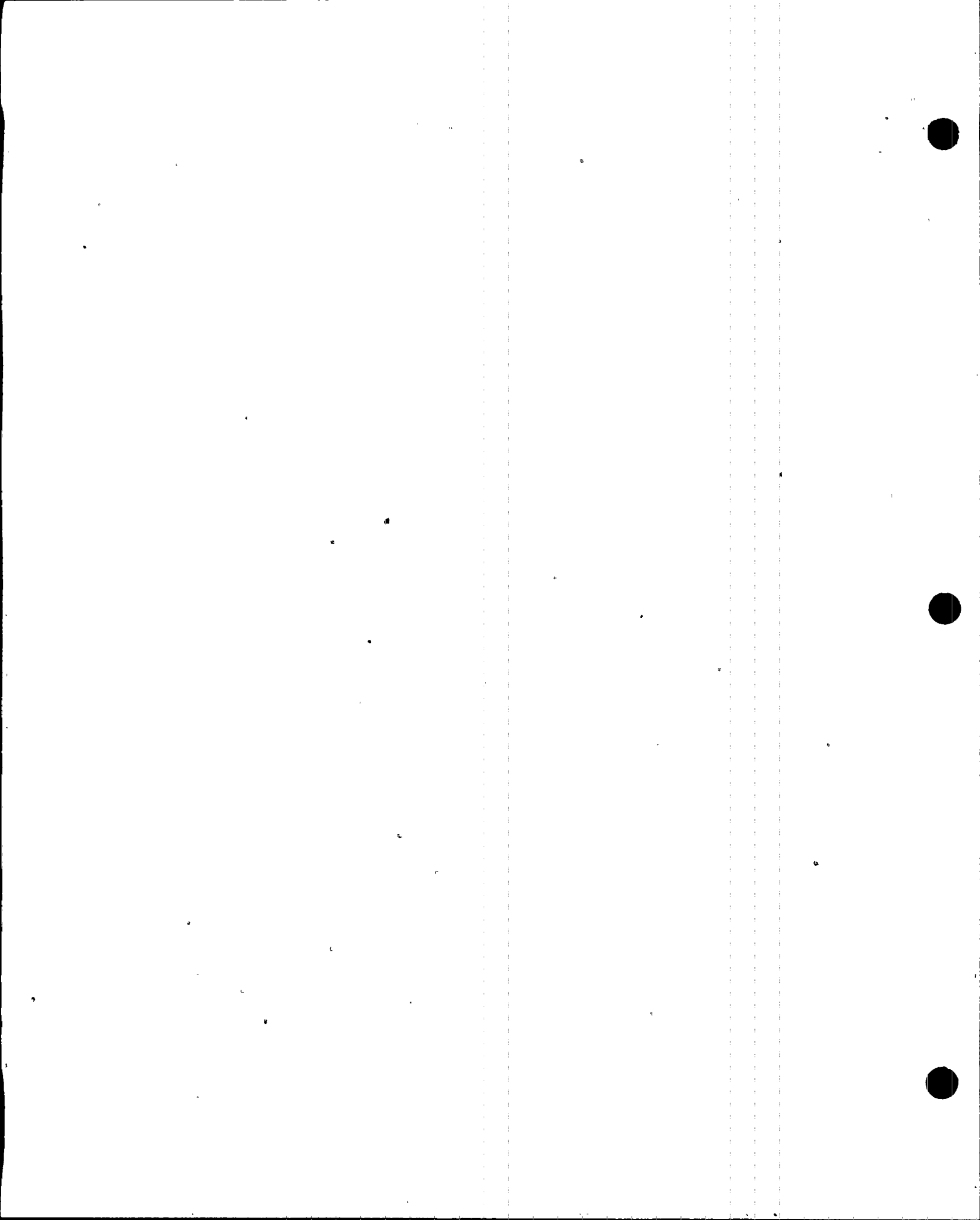
2 cotter pins R92-1049

3-1012 8086 09/08/95 P / /

26.7500 P Snubber 3-1012 visual inspection report TP-95-05 revealed the following items described in Deviation Report 003-TP-95-05:

5) Missing lower spacer at rear bracket and there's sufficient room for additional one. At the clamp, one spacer is installed and there isn't sufficient room for an additional one. Portion of the support encompassed in fire barrier was not examined. Manufacturer's data plate is identified as 3-MSHX-16 and it should be -19. Pin and Bearings have light rust. Light rust on adaptor nut stud in pipe clamp, spacer washer damaged. Pipe insulated.

Condition report 95-769 required the unpinning of the opposite end that was originally unpinned and provide the results to engineering if loose spherical bearings are found. No additional problems were encountered as a result of this inspection. Spherical bearings were cleaned and lubricated under PWO 95024339. Replaced spacer washers on the rear bracket as stated in JPN-PTN-SECS-095-037, rev. 1, step 1.2. Manufacturer's data plate does not affect the operability of the snubber and is not used for reference or identification and is acceptable as is. Insulated pipe does not affect operability of the snubber. The portion of the support that is



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		T	T	T	T	T	T

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encased under the fire barrier does not require inspection.

REPLACEMENT ITEMS:

M&S

2 Cotter Pins(clamp)	031-49200-2
2 Spacer Washer	006-70907-9
2 Cotter Pins(rear)	031-48600-2

3-1013 33624 09/17/95 P 09/17/95 P 10.5000 P Snubber 3-1013 visual inspection report TP-95-48 revealed the following items described in Deviation Report 049-TP-95-48:

5) No pipe clamp spacer installed.

11) Minor paint on indicator tube and end cap of the snubber.

The spacer identified above is not required for a B-P pipe clamp part 2640-.35-R/4-3 per BP catalog 77NFR1. The minor paint on the snubber does not affect the operability of the snubber as evidenced by the satisfactory functional test and the condition is acceptable as is. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	2.07	2.12	17.50
2)	3.14	2.47	17.50
3)	.012	.016	.02
4)	4.96	.54	17.50

REPLACEMENT ITEMS:

M&S

2 cotter pins	R 91-6050
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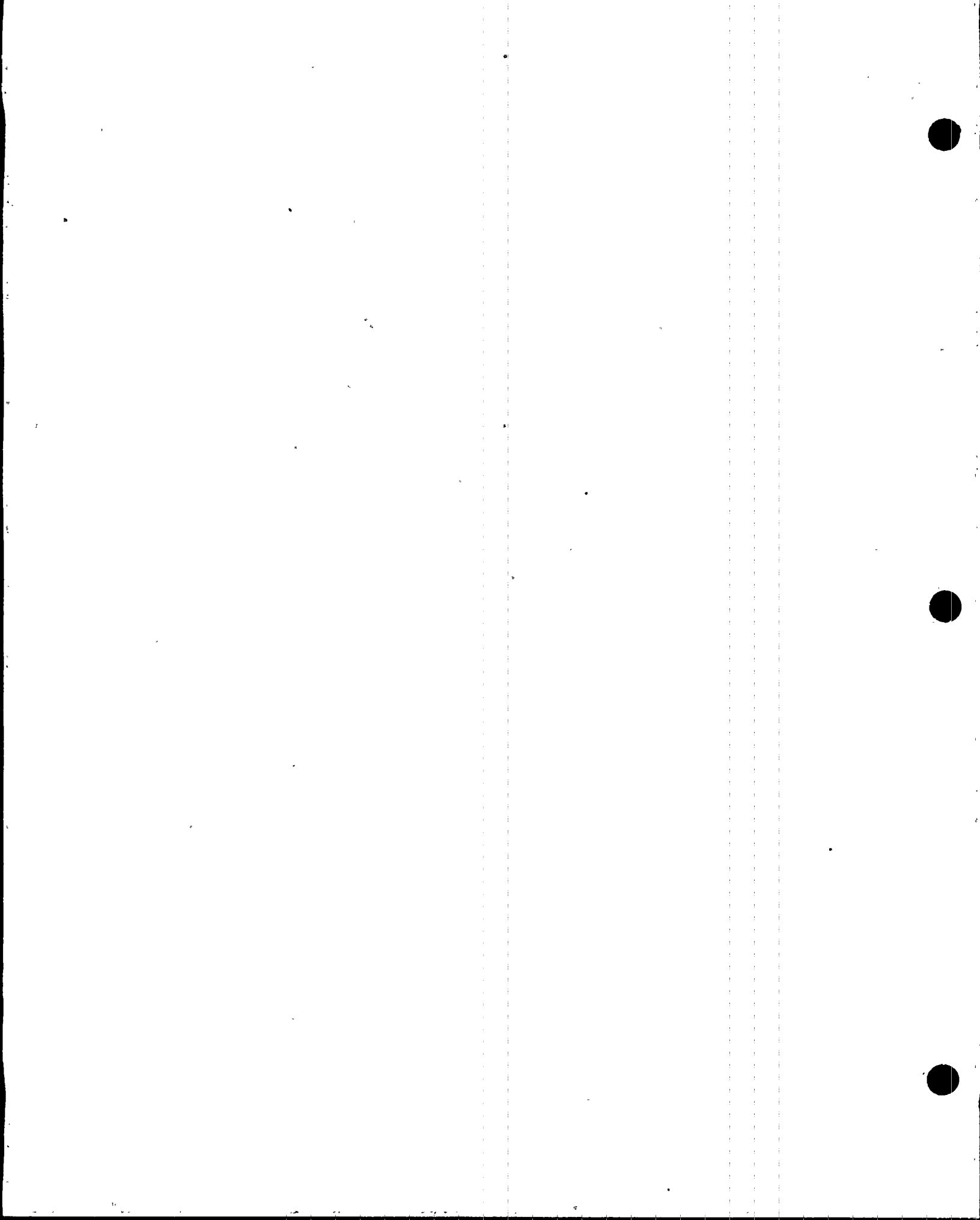
3-1014 1722 09/16/95 P 09/16/95 P 8.7500 P Snubber 3-1014 revealed the following item described in visual examination report TP-95-44:

No snubber ID tag installed.

The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	3.10	3.06	32.50
2)	3.41	3.27	32.50



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Number	Number	Date	T	T	of	T	T
			A	Functional	A	"L"	A
			T	Test	T	Dimension	T

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3)	.014	.018	.02
4)	4.71	1.98	32.50

REPLACEMENT ITEM M&S

2 cotter pins R 91-6050

3-1015 18009 09/17/95 P / / 11.7500 P Snubber 3-1015 visual inspection report TP-95-49 revealed the following conditions described in Deviation Report 060-TP-95-49:

11) Light rust at snubber end cap screws and light rust and dirt on snubber.

Spherical bearings were cleaned and lubricated under PWO 95024339. Light rust does not affect the operation of the snubber as evidenced by the satisfactory handstroke.

REPLACEMENT ITEMS: M&S

2 cotter pins R91-6050

3-1016 18012 09/17/95 P 09/17/95 P 12.0625 P Snubber 3-1016 visual inspection report TP-95-50 revealed the following items described in Deviation Report 061-TP-95-50:

5) No pipe clamp spacer installed.

11) Light rust at snubber end cap. Cap screws and light rust and dirt on snubber.

The spacer identified above is not required for a B-P pipe clamp part 2640-1.5-R/4-6 per BP catalog 77NFR1. The light rust and dirt on the snubber does not affect the operability of the snubber as evidenced by the satisfactory functional test and the condition is acceptable as is. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	2.07	2.12	17.50
2)	3.14	2.47	17.50
3)	.012	.016	.02
4)	4.96	.54	17.50

REPLACEMENT ITEM M&S

2 cotter pins R-91-6050

3-1017 18003 09/17/95 P / / 13.8750 P Snubber 3-1017 visual inspection report TP-95-51 revealed the following

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Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

conditions described in Deviation Report 050-TP-95-51:

5) No pipe clamp spacer installed.

11) Light rust on snubber end cap screws and light rust and dirt on snubber.

The spacer identified above is not required for a B-P pipe clamp part 2640-1.5-R/4-6 per BP catalog 77NFR1. Spherical bearings were cleaned and lubricated under PWO 95024339. The light rust and dirt on snubber does not affect the operability of the snubber as evidenced by the satisfactory handstroke.

REPLACEMENT PARTS: M&S

2 cotter pins R91-6050

3-1018 18013 09/17/95 P / /

13.3750 P Snubber 3-1018 visual inspection report TP-95-52 revealed the following conditions described in Deviation Report 061-TP-95-52:

5) No pipe clamp spacer installed.

The spacer identified above is not required for a B-P pipe clamp part 2640-1.5-R/4-10 per BP catalog 77NFR1.

REPLACEMENT ITEMS: M&S

2 cotter pins R91-6050

3-1019 2889 09/15/95 P / /

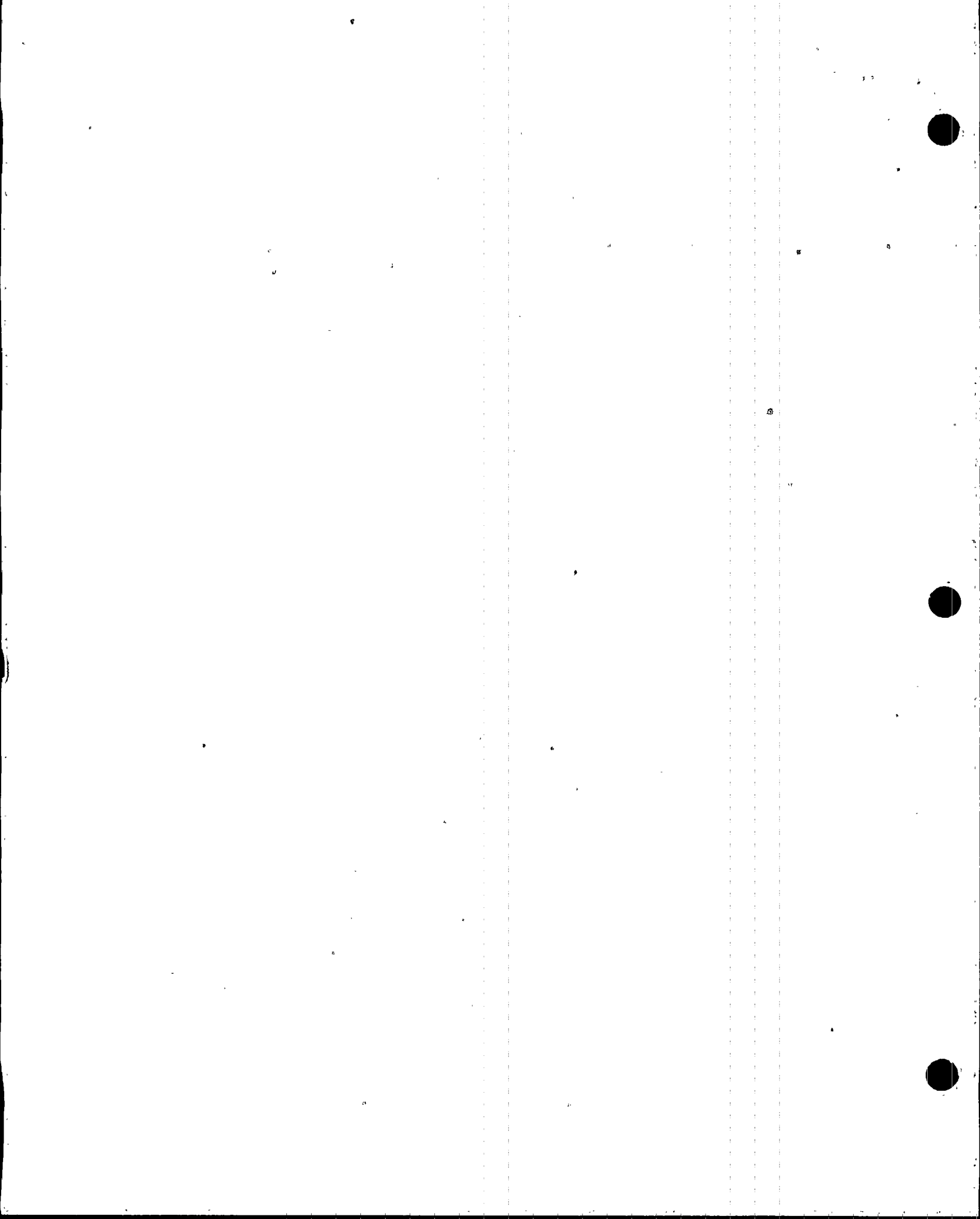
17.2500 P Snubber 3-1019 visual inspection report TP-95-38 revealed the following conditions described in Deviation Report 043-TP-95-38:

5) No spacer installed at the pipe clamp bolt adjacent to load pin.

10) The spherical bearings have light rust, paint and dirt.

11) Cap screws are installed at the transition tube assembly and lack full thread engagement by 1/32". The transition tube plate is 1/2" thick and the cap screw diameter is 5/16". All unpainted surfaces have light rust due to the exposure to the weather. Snubber end cap is painted.

The spacer identified above is not required for a B-P pipe clamp part 2640-6-R/4-16 per BP catalog 77NFR1. Condition report 95-581 evaluated the thread engagement for this snubber location and the subject bolting is acceptable as is. Spherical bearing light rust, paint and dirt were cleaned and lubricated under PWO 95024339. The light rust and paint on the snubber and snubber end cap does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.



Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	S	Date	S	S
Number	Number	Date	T	of	T	T
		Inspection	A	Functional	A	"L" A
		Date	T	Test	T	Dimension T

Visual and Functional Summary

REPLACEMENT ITEMS:

M&S

2 cotter pins

006-70921-4

3-1020 103 09/15/95 P / /

16.8750 P Snubber 3-1020 visual inspection report TP-95-39 revealed the following conditions described in Deviation Report 046-TP-95-39:

5) No spacer installed at the pipe clamp bolt adjacent to load pin.

10) The spherical bearings have light rust, paint and dirt.

11) Cap screws are installed at the transition tube assembly and lack full thread engagement by 1/32". The transition tube plate is 1/2" thick and the cap screw diameter is 5/16". All unpainted surfaces have light rust due to exposure to the weather. The settings markers are barely visible due to weathering.

The spacer identified above is not required for a B-P pipe clamp part 2640-6-R/4-16 per BP catalog 77NFR1. Condition report 95-581 was written previously for the thread engagement and the subject condition is acceptable for use as is. The light rust and paint on the snubber does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is. The hot/cold setting that is no longer visible on the snubber due to weathering can still be obtained by physical measurement and is acceptable as is.

REPLACEMENT ITEMS:

M&S

1 cotter pin

006-70921-4/R92-1049

1 cotter pin

031-46301-1

3-1021 16725 09/17/95 P / /

8.7500 P Snubber 3-1021 visual inspection report TP-95-53 revealed the following conditions described in Deviation Report 052-TP-95-53:

5) No pipe clamp spacer installed.

10) Light rust and dirt at spherical bearings.

11) Due to the location of the snubber it's getting covered with dirt, paint and stains, however it doesn't appear to be effecting it's operation.

Spherical bearings were cleaned and lubricated under PHO 95024339. The spacer identified above is not required for a B-P pipe clamp part 2640-.65-R/4-8 per BP catalog 77NFR1. No action for item 11 as the snubber operation is unaffected by these attributes as evidenced by the satisfactory handstroke.

Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	Inspection	Date	S	of	S	"L"	A
Number	Number	Date	T	Test	T	Dimension	T		

Visual and Functional Summary

REPLACEMENT ITEMS: M&S

2 cotter pins R91-6050

3-1022 18006 09/14/95 P 09/16/95 P 13.6250 P Snubber 3-1022 visual inspection report TP-95-35 revealed the following items described in Deviation Report 037-TP-95-35:

10) Spherical bearings have paint on them.

Spherical bearings were cleaned and lubricated under PWO 95024339. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	10.45	5.30	75.00
2)	12.50	2.24	75.00
3)	.009	.010	.02
4)	12.93	2.59	75.00

REPLACEMENT ITEMS: M&S

3-1023 23273 09/14/95 P / / 12.6250 P Snubber 3-1023 visual inspection report TP-95-36 revealed the following conditions described in Deviation Report 038-TP-95-36:

10) Spherical bearings have paint and 1 spacer is installed backwards.

11) "E" clip damaged during pin removal.

Spherical bearings were cleaned and lubricated under PWO 95024339. The load pin with the damaged "E" clip was drilled per JPN-PTP-SECS-95-037, rev. 1, step 3.2, under PWO 95025170. The backwards spacer washer was reinstalled by the vendor in the correct position.

REPLACEMENT ITEMS: M&S

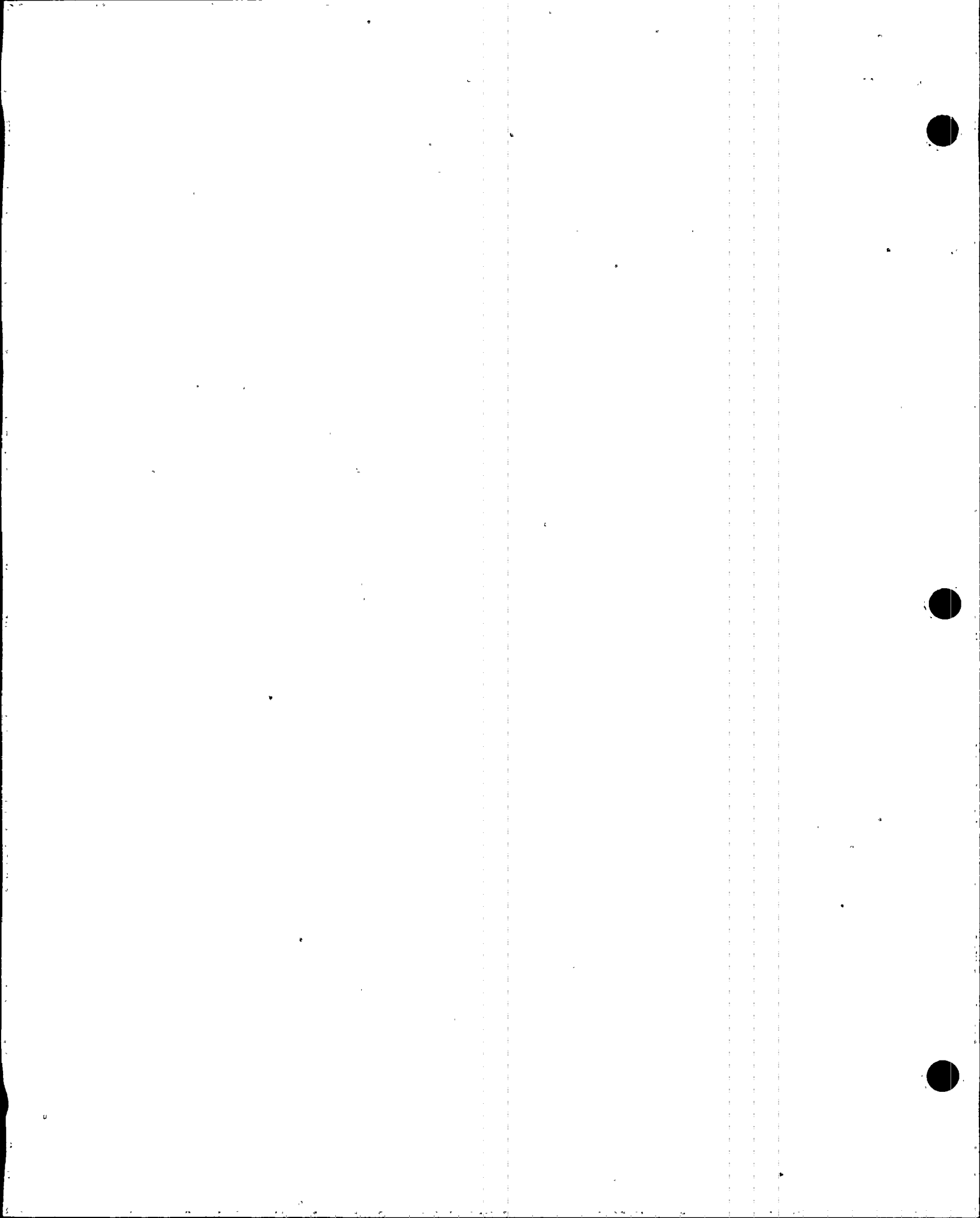
3 cotter pins R91-6050

3-1024 17427 09/16/95 P 09/16/95 P 17.1250 P Snubber 3-1024 visual inspection report TP-95-45 revealed the following items described in Deviation Report 048-TP-95-45:

10) Spherical bearings have light rust and paint.

11) Snubber end cap painted. Cap screws installed at extension piece assembly in place of bolts.

No snubber ID tag installed.



Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	S	Date	S	S
Number	Number	Date	T	of	T	T
			Inspection	A	Functional	A
			T	Test	T	Dimension

Visual and Functional Summary

The spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI Group and installed during the next inspection (TS-95-10-001). The painted end cap is acceptable as it does not affect the operation of the snubber as evidenced by the satisfactory functional test. Cap screws at the extension piece (item 2) entails the complete assembly from pin to pin as shown in BP catalog for the 2540 snubber assembly, therefore the condition is acceptable as is. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	15.44	15.94	300.00
2)	19.88	18.36	300.00
3)	.012	.013	.02
4)	17.73	18.82	300.00

REPLACEMENT ITEM	M&S
2 cotter pins	031-46301-1

3-1025 100 09/16/95 P / / 17.0000 P Snubber 3-1025 visual inspection report TP-95-47 revealed the following conditions described in Deviation Report 053-TP-95-47:

11) End cap painted. No snubber ID tag installed.

The painted end cap does not affect the operation of the snubber and is acceptable as evidenced by the satisfactory handstroke. Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001).

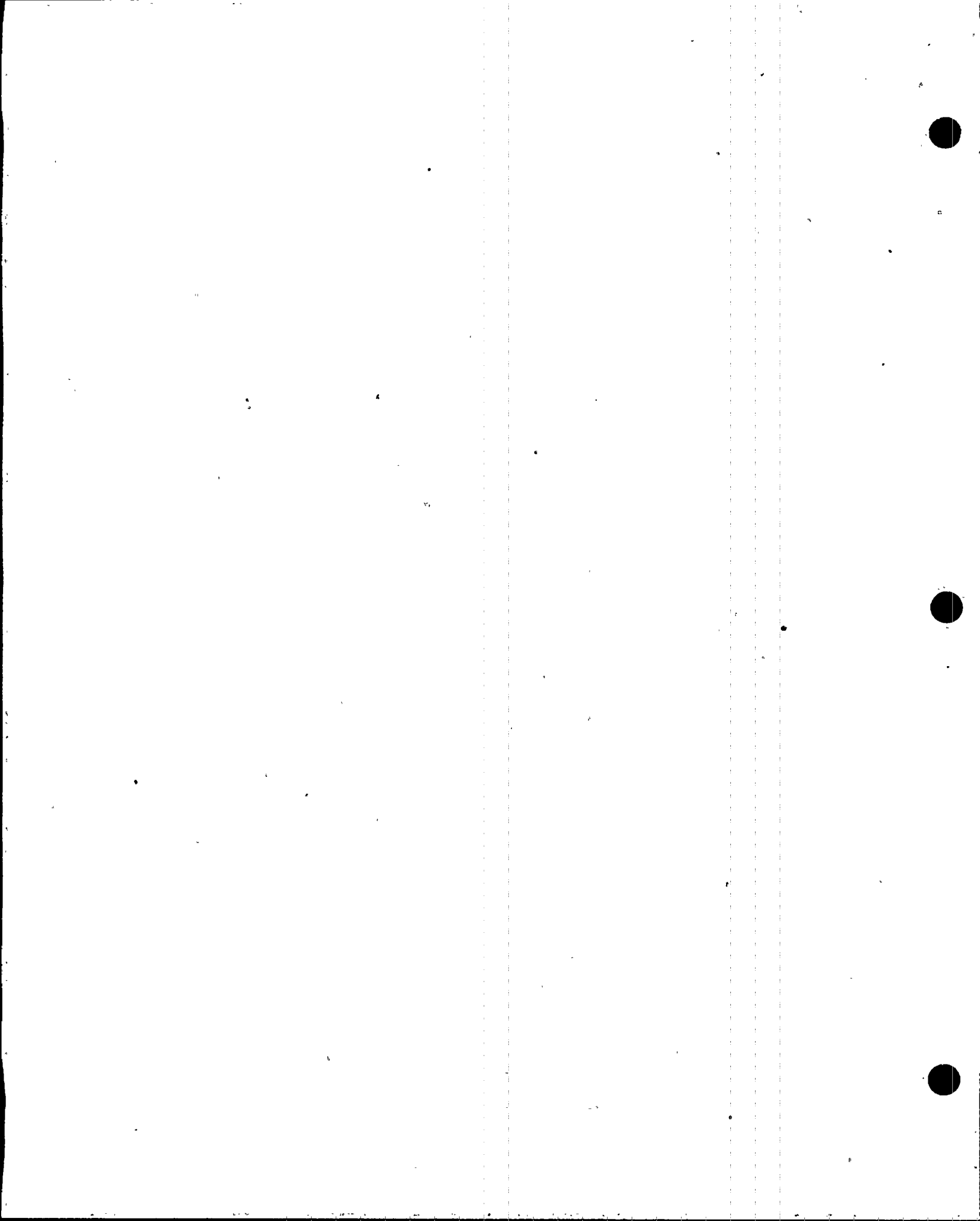
REPLACEMENT ITEMS:	M&S
1 cotter pin	R91-6050

3-1026 12394 09/17/95 P 09/17/95 P 18.8750 P Snubber 3-1026 visual inspection report TP-95-54 identified the following items described in Deviation Report 057-TP-95-54:

1,11) The clamp has been modified and the drawing does not indicate the changes.

5) The tie bars shown on the drawings (Sheet 20B & 20C) at the added ears to the clamp do not exist and are not indicated on the bill of materials.

11) The extension piece assembly bolts (item 11) lack full engagement by 1/32". Spacers welded in place.



Turkey Point
Outage Summary
Report
Unit 3

		Visual	S	Date	S	S
Tag	Serial	Inspection	T	of	T	T
Number	Number	Date	T	Test	T	"L" A

Visual and Functional Summary

Removed extension bolts to transport snubber to the trailer. This snubber was a scheduled rebuild. Overall condition of the snubber was good and the post rebuild test passed. Condition report 95-868 was written to evaluate the drawing discrepancies for items 1, 5 & 11. The final disposition of CR 95-868 revealed all the discrepancies are acceptable as is with PMAI 9509123 issued to engineering to update the drawings. Vendor installed safety wire on transition tube assembly after torquing. This snubber was a scheduled rebuild. Overall condition of the snubber was good and it passed the functional test after being rebuilt.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	38.86	56.21	750.00
2)	24.13	63.30	750.00
3)	.014	.012	.02
4)	31.22	65.75	750.00

REPLACEMENT ITEM	M&S
2 cotter pins	006-70921-4/R92-1049
1 clutch spring	006-74271-8/R90-4394
1 capstan spring	006-74277-7/R90-0766
1 retaining ring	006-74273-4/R90-4394
1 retaining ring	006-74265-3/R90-1321
1 retaining ring	006-74267-0/R93-4312
2 washers	006-74272-6/R93-4361
1 washer	006-74274-2/R93-4361
3 filister head screws	006-74262-9/R90-1627
3 washers	006-74263-7/0015716-3
1 washer	006-74264-6/R93-4361
2 keeper rings	006-74276-9/R93-4375

3-1027 16237 09/17/95 P / /

20.8750 P Snubber 3-1027 visual inspection report TP-95-55 revealed the following conditions described in Deviation Report 055-TP-95-55:

1,11) The clamp has been modified and the drawing does not indicate the changes.

5) No clamp spacer installed.

11) The extension piece assembly bolts (item #11) lack full engagement by 1/32". Spherical bearing spacers welded in place.

Condition report 95-870 was written to address the modified pipe clamp and lack of thread engagement. Final engineering evaluation showed all items acceptable for use as is and PMAI 9509203 issued to engineering to update

Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	Inspection	A	Functional	A	"L" A
Number	Number	Date	T	Test	T	Dimension	T

Visual and Functional Summary

the drawing.

REPLACEMENT ITEMS: M&S

1 cotter pin 006-70821-4/R92-1049

3-1028 11135 09/16/95 P / /

19.5000 P Snubber 3-1028 visual inspection report TP-95-56 revealed the following conditions described in Deviation Report 059-TP-95-56:

1,11) The clamp has been modified and the drawing does not indicate the changes.

10) Light rust, dirt and paint on spherical bearings.

11) The extension piece assembly bolts (item #13) lack full thread engagement by 1/32" and the plate thickness is 5/8" thick. An Ashcroft long stem thermometer was found in between the ears of the rear bracket. The thermometer was removed and no damage was found. Spherical bearings spacers welded in place. No snubber ID tag.

Condition report 95-869 was written to address the drawing discrepancies, items 1 & 11. Final engineering disposition of CR 95-869 was that all conditions were acceptable as is and PHAI 9509124 issued to engineering to update the drawing. Spherical bearings were cleaned and lubricated under PWO 95024339. A walkdown was performed by engineering and the missing tag reported by the inspector was in place and hanging on the snubber. The thread engagement was previously identified and accepted for use as is by condition report 95-581.

REPLACEMENT ITEMS: M&S

1 cotter pin 006-70921-4/R92-1049

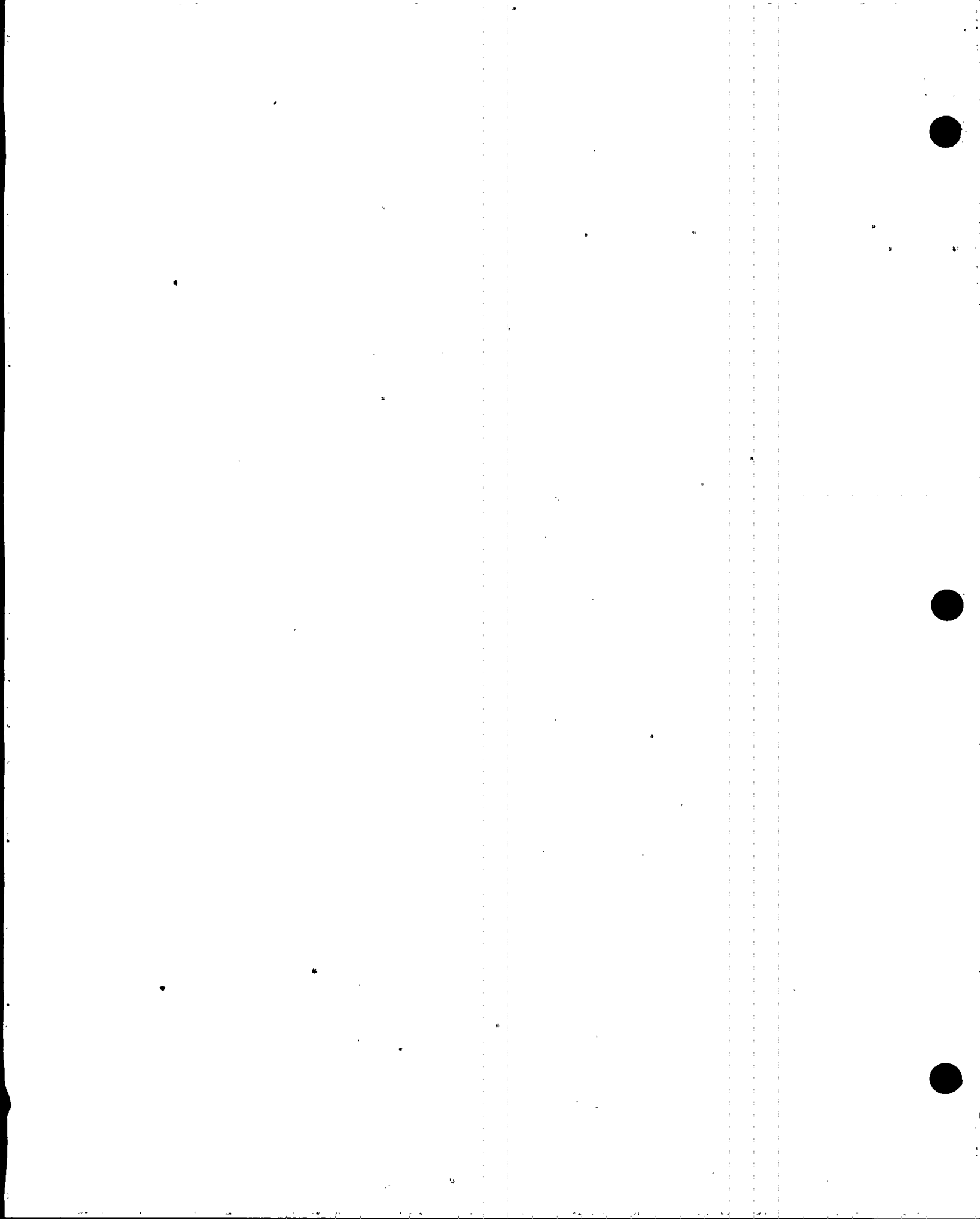
3-1029 11330 09/16/95 P / /

21.8750 P Snubber 3-1029 visual inspection report TP-95-57 revealed the following conditions described in Deviation Report 056-TP-95-57:

1,11) The clamp has been modified and the drawing does not indicate the changes.

5) No clamp spacer installed and note 4 on the drawing indicates that a 1" diameter stud with 2 hex and 2 locknuts may be substituted and it was found that a 1" diameter all thread rod and only 2 hex nuts were installed.

11) The extension piece assembly was found not to match the configuration shown on the drawing. Only one item # 10 with no bolt holes is installed and welded. The extension piece assembly bolts item # 13 lack full thread engagement by 1/32". Spherical bearing spacers welded in place. No snubber ID tag.



Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	Inspection	A	Date	S	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T			

Visual and Functional Summary

Condition report 95-866 was written to address the drawing discrepancies, items 1, 5 & 11. Final engineering disposition of CR 95-866 showed all items are acceptable as with PHAI 9509122 going to engineering to update the drawing. An walkdown was performed by engineering and the missing ID tag reported by the inspector was in place and hanging on the snubber.

REPLACEMENT ITEMS: M&S

1 cotter pin 006-70921-4/R92-1044

3-1030 11121 09/15/95 P 09/16/95 P 21.0000 P Snubber 3-1030 visual inspection report TP-95-37 revealed the following items described in Deviation Report 040-TP-95-037:

5) No spacer installed at the pipe clamp bolt adjacent to snubber load pin.

10) The spherical bearings have light rust, paint and dirt.

11) The pipe clamp bolt adjacent to the snubber load pin lacks full thread engagement into the nut, bolt is flush and 1 full thread beyond the face of the nut is required. The transition tube assembly bolts lack full engagement by 1/32". The transition tube plate is 5/8" thick. The bolt diameter is 1/2" and bolt identification could not be verified due to paint. The snubber ID tag is installed on the support cyclinder of the snubber which may interfere with the operation of the snubber.

The spacer identified above is not required for a B-P pipe clamp part EA3 per BP catalog 66R. Light rust and paint were removed and the spherical bearings were lubricated under PWO 95024339. The pipe clamp bolt thread engagement is acceptable per JPN-PTN-91-0684. The transition tube assembly bolts are acceptable as is per SPEC-M-004. The snubber tag has been moved by the ISI group to a position that will not impede snubber operation. This snubber was tested and passed as part of the initial sample.

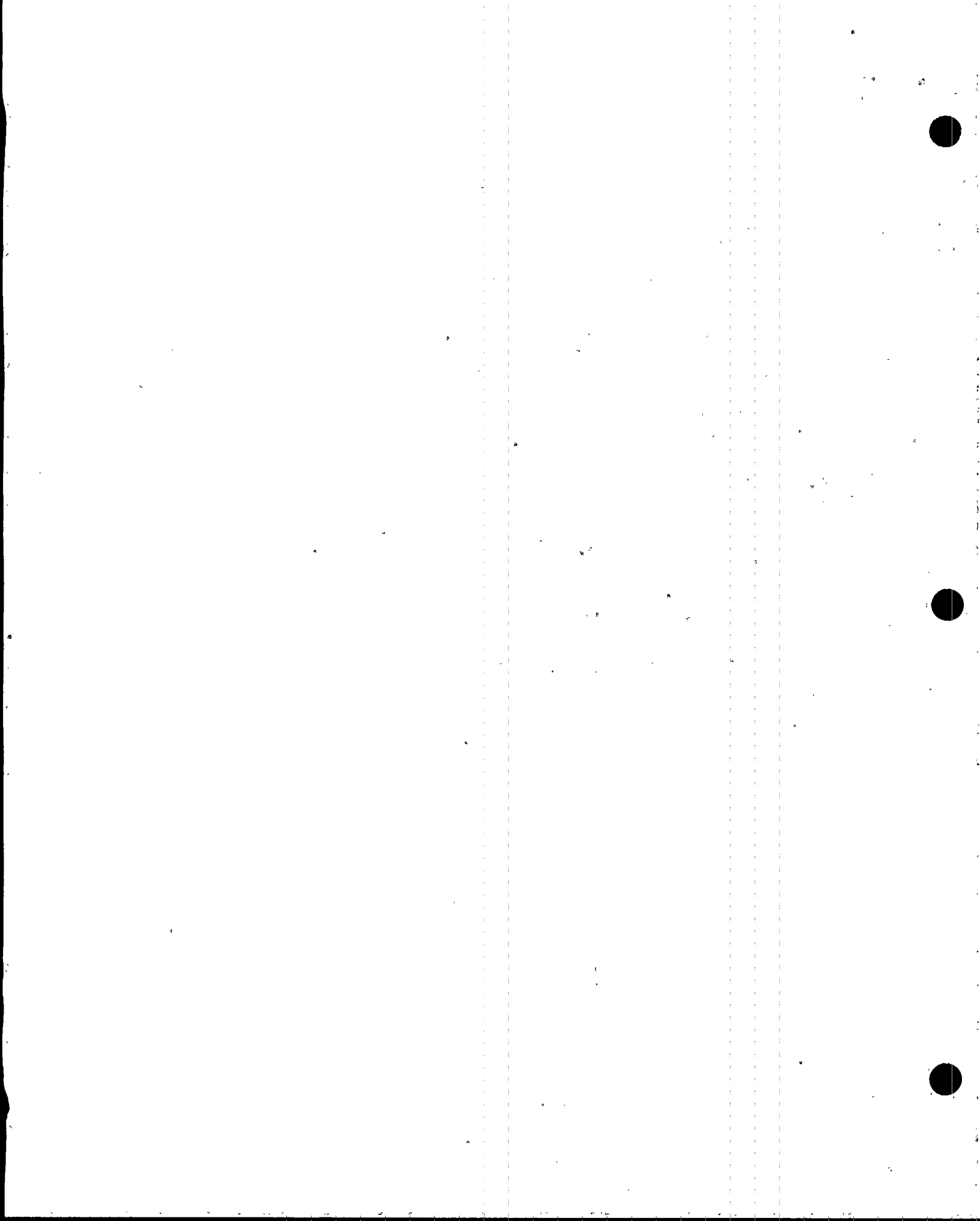
FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	13.04	42.27	750.00
2)	24.64	59.30	750.00
3)	.014	.012	.02
4)	35.07	47.30	750.00

REPLACEMENT ITEMS: M&S

2 cotter pins. 006-70921-4

3-1036 27100 09/13/95 P 09/16/95 P 16.3750 P Snubber 3-1036 visual inspection report TP-95-32 revealed the following



Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	S	Date	S	S
Number	Number	Date	T	of	T	T
		Inspection	A	Functional	A	"L" A
		Date	T	Test	T	Dimension T

Visual and Functional Summary

conditions described in Deviation Report 031-TP-95-32:

3,5,11) The pipe clamp spacer is loose at the clamp bolt (1/8" short) and the distance between the ears at that location is 1" and the distance at the load pin is 1 1/8". The 3/4" diameter bolt at the spacer also has two half nuts (3/8" height) installed and the second nut lacks 5/32" for full engagement. If the clamp and bolting are adjusted to correct the concerns it appears that the snubber end cap will bind in the clamp ears.

11) A possible clearance violation may exist at the extension piece end cap and an adjacent support. Note 4 on the support drawing indicates that no spacers are installed and 1 spacer which is damaged is installed.

10) Light rust and dirt at the spherical bearings.

5). Clamp moved when the pin was removed.

Condition Report 95-829 was written to address items 3, 5 & 11. Projects implemented the disposition of CR 95-829 under PWO 95025026, by replacing the clamp bolt and notching the adjacent insulation. PHAI 9510002 was issued to engineering to update the snubber drawing. Spherical bearings were cleaned and lubricated under PWO 95024339. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	19.81	12.44	300.00
2)	22.75	19.66	300.00
3)	.010	.012	.02
4)	34.04	6.53	300.00

REPLACEMENT ITEMS:

M&S

2 cotter pins
1 bolt

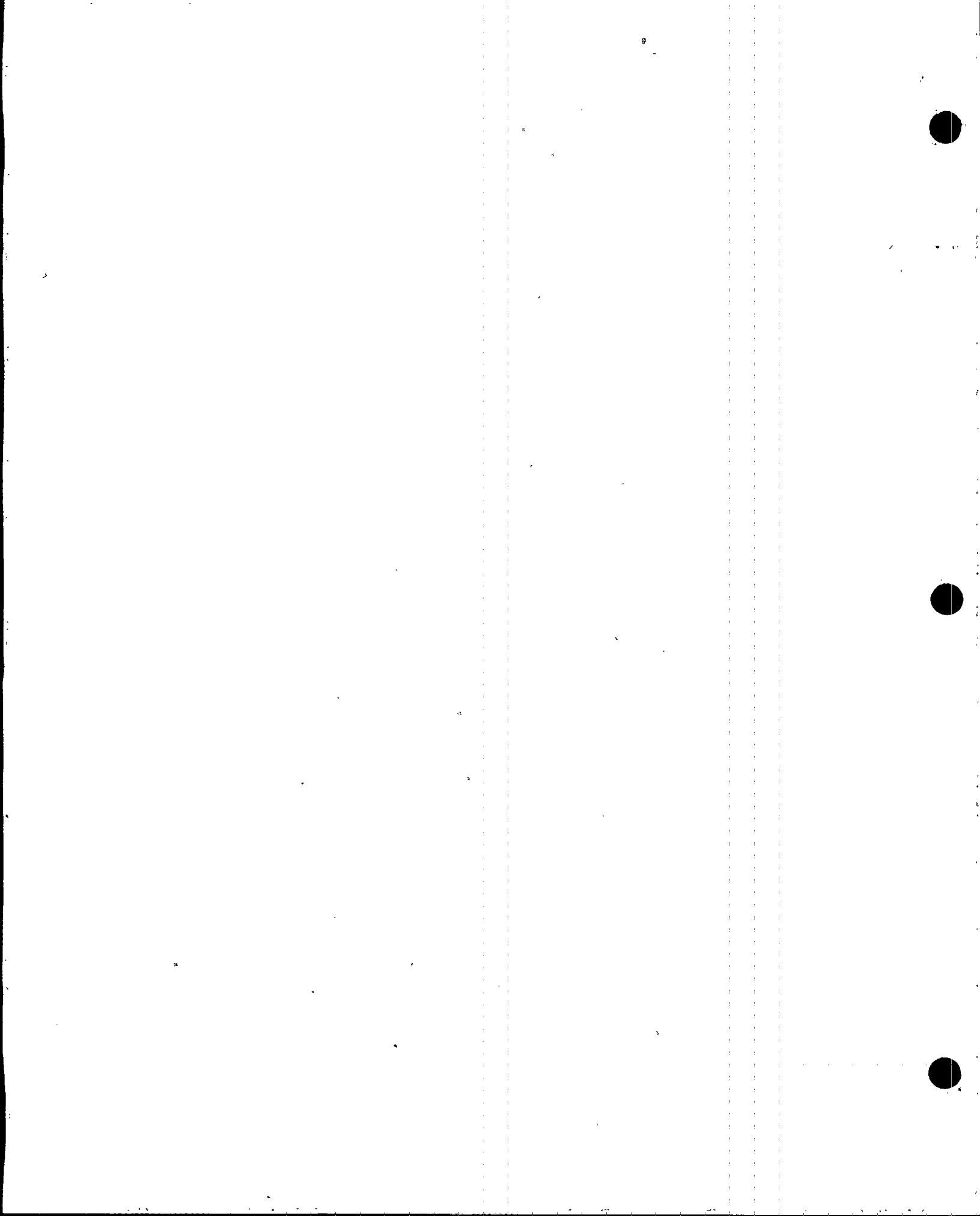
031-46301-1
0197843-1/000037857

3-1039 16241 09/13/95 P 09/16/95 P 20.0625 P Snubber 3-1039 visual inspection report TP-95-31 revealed the following conditions described in Deviation Report 029-TP-95-31:

1,5) The 4 spacers installed at the pipe clamp are loose (1/8" short). The dimension between the ears of the clamp are 1 1/2 +/- 1/16". The clamp is tight to pipe.

11) The transition tube assembly bolts lack full engagement by 3/16", the transition tube plate is 3/4" thick. The bolt dia is 1/2" and the bolt is identified with GR L7C LID.

5). The pipe clamp rotated about 1/4" when the pin was removed. The



Turkey Point
Outage Summary
Report
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Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

spacer washers are tight in the clamp when the snubber is installed.

In accordance with Pacific Scientific document No. 141 Page 27, if clamp ears are parallel and nuts are tight condition is acceptable as-is. Condition report 95-581 previously written addressed lack of full thread engagement and the condition is acceptable as is. Clamp was rotated back into place upon snubber reinstallation. The snubber was functionally tested and passed, therefore meeting the Technical Specifications for operability. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	45.58	43.84	750.00
2)	61.00	67.96	750.00
3)	.013	.009	.02
4)	72.08	54.75	750.00

REPLACEMENT ITEMS:

H&S

2 Cotter Pins

031-46500-5

3-1040 16239 09/13/95 P 09/16/95 P 20.5000 P Snubber 3-1040 visual inspection report TP-95-30 revealed the following conditions described in Deviation Report 030-TP-95-30:

1,5) The 4 spacers installed at the pipe clamp are loose (~1/8" short). The dimension between the ears of the calmp is 1 1/2" +-1/16". The clamp is tight to the pipe.

11) The transition tube assembly bolts lack full thread engagement by 3/16". The transition tube plate is 3/4" thick. The bolt diameter is 1/2" and the bolt is identified as L5.

5) The pipe clamp moved about 1/4" when the pin was removed. If the clamp is tightened, the spacer washers are too thick to install the snubber.

Items 1 & 5, in accordance with Pacific Scientific Document 141, page 27, step F, "If clamp ears are parallel, condition is acceptable as is". Condition Report 95-581 addressed thread engagement as acceptable as is for this tag location. For item 5, for spacer washers, Engineering evaluation JPH-PTP-SECS-95-037, step 1.2, "if there is insufficient clearance to install them, this condition is acceptable as is". This snubber was a scheduled rebuild done to vendor manual PS 193 Rev. 5. Overall condition of the snubber was good, except for load marks on the ball screw shaft in compression where the thrust bearing rides. Grease was dry inside snubber. After rebuild the snubber passed the functional test.

Turkey Point
Outage Summary
Report
Unit 3

		Visual	S	Date	S		S
Tag	Serial	Inspection	T	of	T	"L" A	T
Number	Number	Date	T	Test	T	Dimension	T

Visual and Functional Summary

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	25.06	60.72	750.00
2)	22.80	313.86	750.00
3)	.014	.009	.02
4)	50.53	69.64	750.00

REPLACEMENT ITEMS:

M&S

2 cotter pins	031-46500-5
1 clutch spring	006-74271-8/R90-4394
1 capstan spring	006-74277-7/R90-0766
1 retaining ring	006-74273-4/R90-4394
1 retaining ring	006-74265-3/R90-1321
1 retaining ring	006-74267-0/R93-4312
2 washers	006-74272-6/R93-4361
1 washer	006-74274-2/R93-4361
3 filister head screws	006-74262-9/R90-1627
3 washers	006-74263-7/0015716-3
1 washer	006-74269-6/R93-4361
2 keeper rings	006-74276-9/R93-4375
1 ball screw	006-74287-4/R90-1176

3-1041 16234 09/12/95 P 09/16/95 P 19.6250 P Snubber 3-1041 visual inspection report TP-95-23 revealed the following conditions described in Deviation Report 026-TP-95-23:

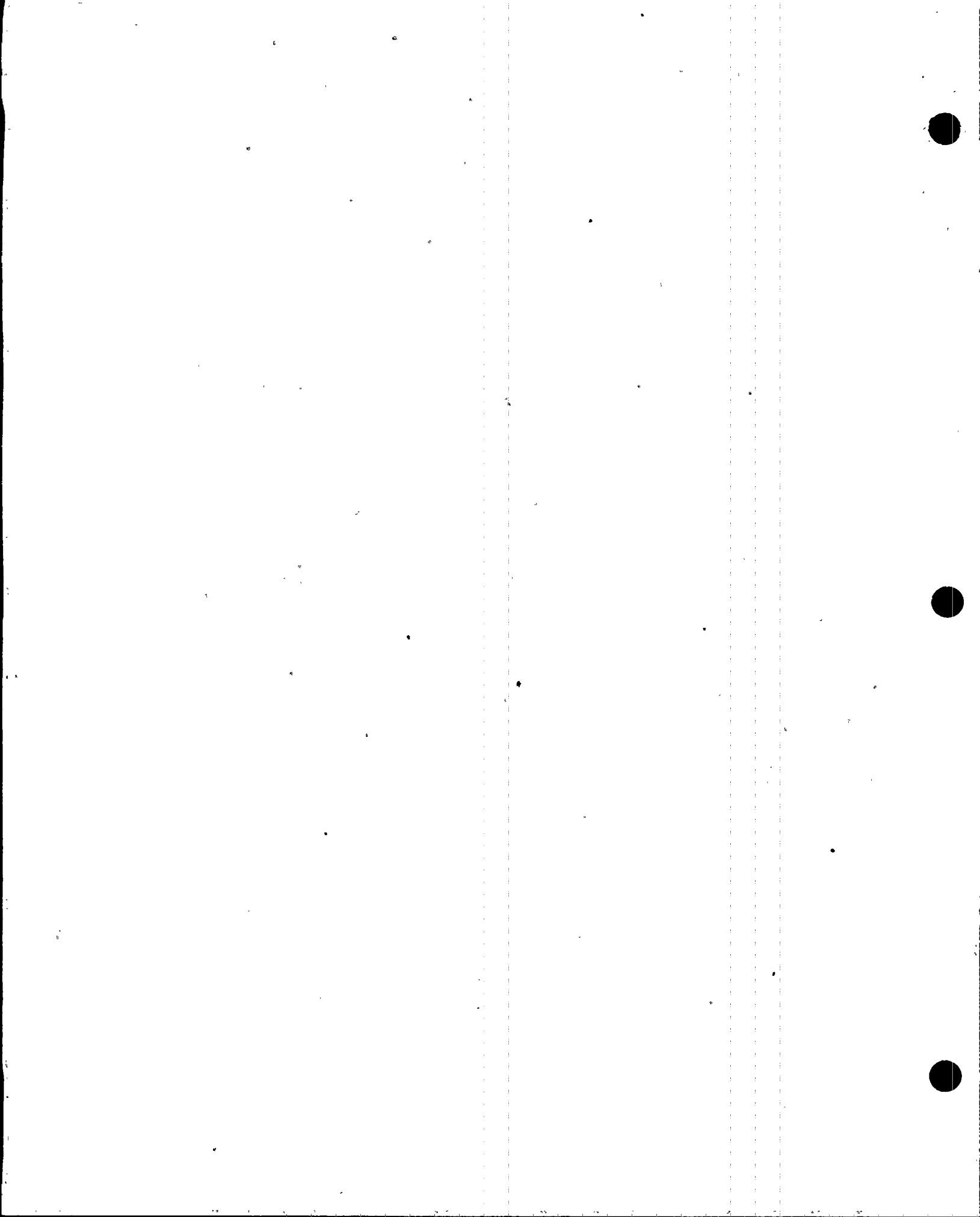
10) Light rust and dirt at bearings.

11) The end paddle at the extension piece end lacks full thread engagement into turnbuckle. Adjustment can be made and the "L" dimension will still be within the acceptable range. Spacers are tack welded. No snubber ID tag.

Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Condition report 95-797 was written to evaluate the inadequate thread engagement. The disposition of condition report 95-797 will be implemented under PWO 95025850. The snubber was adjusted to the correct "L" dimension and the as left performed on 09/29/95. PHAI 9510016 was issued to engineering to update the drawing to reflect the field conditions. This snubber was tested and passed as part of the initial sample.

FUNCTIONAL TEST DATA

TENSION	COMPRESSION	CRITERIA
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Turkey Point
Outage Summary
Report
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Tag	Serial	Visual	Inspection	A	Functional	A	"L" A
Number	Number	Date	T	Test	T	Dimension	T

Visual and Functional Summary

1)	16.85	98.10	750.00
2)	44.61	109.19	750.00
3)	.013	.009	.02
4)	53.61	66.18	750.00

REPLACEMENT ITEMS:

M&S

2 cotter pins

031-46301-1

3-1042 12365 09/12/95 P 09/16/95 P 19.7500 P Snubber 3-1042 visual inspection report TP-95-24 revealed the following conditions described in Deviation Report 027-TP-95-24:

1,11) The support drawing indicates that the "LACC" shall be between 1' 9 1/4" to 1' 10 5/8" and the as found dimension is 1' 7 3/4". Note: Sheet 5B of the support drawing indicates an "A" dimension of 20 1/4". The snubber end cap face is rubbing against the ear of the rear bracket due to limited clearance.

10) Light rust and dirt at bearings.

Spacers tack welded in place. No snubber ID tag.

Condition Report 95-803 was written to address items 1, 11 and the welded spacer washers. The disposition of condition report 95-803 will be implemented by projects under PWO 95025850. Spherical bearings were cleaned and lubricated under PWO 95024339. The "L" dimension was adjusted by the vendor to 20.625". The as left of this snubber was performed on 09/27/95. PHAI 9510015 was issued to engineering to update the drawing to reflect the field condition. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was a scheduled rebuild and passed the functional test after being rebuilt. Overall condition of snubber was good. Grease was a little thick.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	70.26	92.85	750.00
2)	80.95	103.70	750.00
3)	.009	.005	.02
4)	105.29	155.29	750.00

REPLACEMENT ITEM:

M&S

2 cotter pins

031-46500-5

1 clutch spring

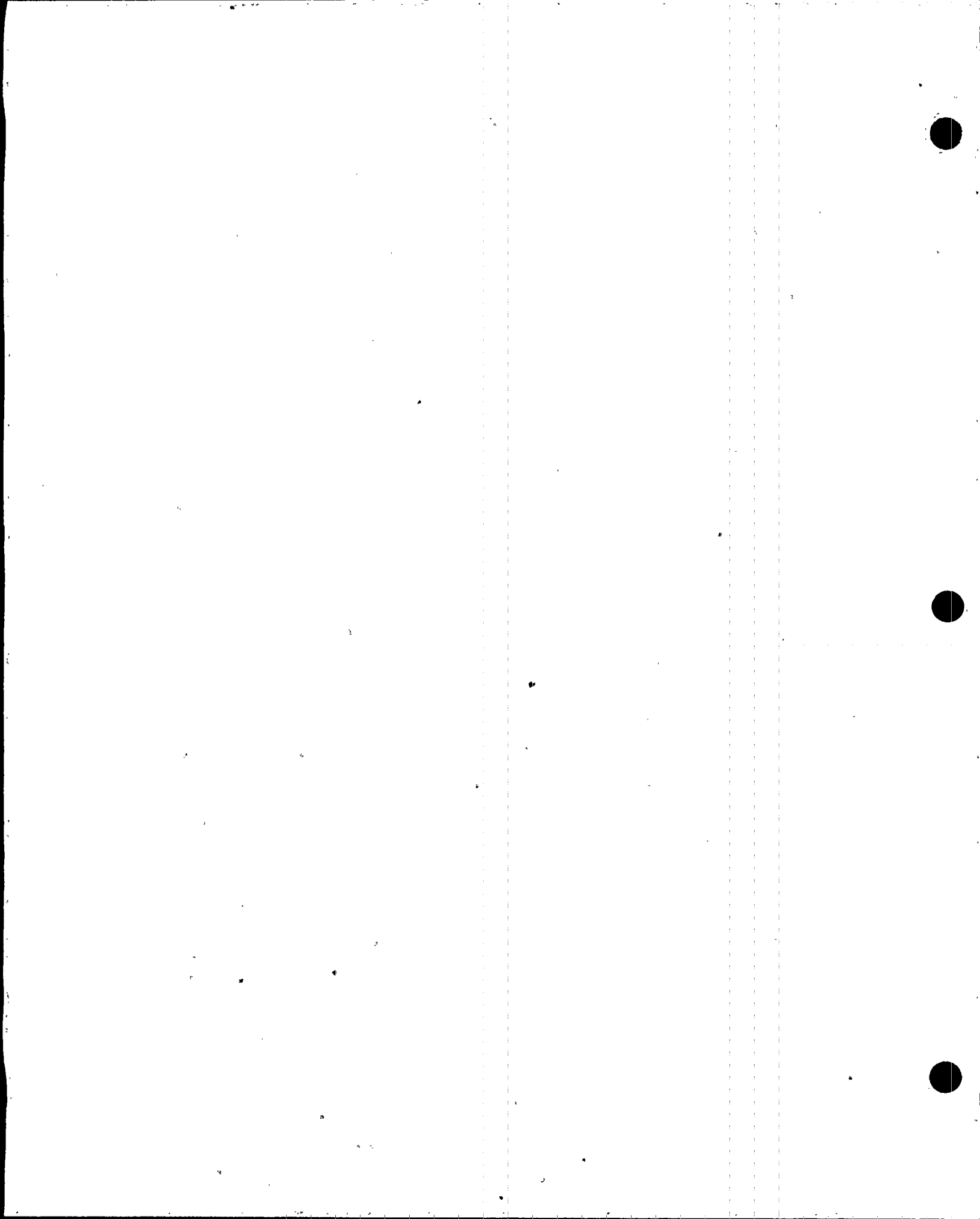
006-74271-8/R90-4394

1 retaining ring

006-74277-7/R90-0766

1 retaining ring

006-74273-4/R90-4394



Turkey Point
Outage Summary
Report
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Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

1 retaining ring	006-74267-0/R93-1321
2 washers	006-74272-6/R93-4361
1 washer	006-74274-2/R93-4361
3 filister head screws	006-74262-9/R90-1627
3 washers	006-74263-7/0015716-3
1 washer	006-74269-6/R93-4361
2 keeper rings	006-74276-9/R93-4375

3-1049 16245 09/15/95 P 09/16/95 P 20.5000 P Snubber 3-1049 visual inspection report TP-95-43 revealed the following items described in Deviation Report 041-TP-95-43:

10) Spherical bearings have light rust and dirt.

Spherical bearings were cleaned and lubricated under PWO 95024339. This snubber was scheduled for rebuild. Overall condition of the snubber was good. This snubber was a scheduled rebuild and passed the functional test after being rebuilt.

FUNCTIONL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	56.95	54.74	300.00
2)	81.02	61.20	300.00
3)	.011	.009	.02
4)	85.78	64.80	300.00

REPLACEMENT ITEMS: M&S

2 cotter pins	031-46301-1
1 clutch spring	006-74271-8/R90-4394
1 capstan spring	006-74277-7/R90-0766
1 retaining ring	006-74273-4/R90-4394
1 retaining ring	006-74265-3/R90-1321
1 retaining ring	006-74267-0/R93-4312
2 washers	006-74272-6/R93-4361
1 washer	006-74274-2/R93-4361
3 filister head screws	006-74262-9/R90-1627
3 washers	006-74263-7/0015716-3
1 washer	006-74269-6/R93-4361
2 keeper rings	006-74276-9/R93-4375

3-1053 2462 09/14/95 P 09/16/95 P 20.5000 P Snubber 3-1053 visual inspection report TP-95-33 revealed the following items described in Deviation Report 036-TP-95-33:

10) Light rust at spherical bearings, unable to rotate, need lubrication, pipe insulated, no ID tag.

Spherical bearings were cleaned and lubricated under PWO 95024339. The

Turkey Point
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Tag	Serial	Inspection	A	Functional	A	"L" A
Number	Number	Date	T	Test	T	Dimension T

Visual and Functional Summary

insulated pipe has no effect on the operability of the snubber. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was a scheduled rebuild and passed the functional test after being rebuilt. Overall condition of the snubber was good. Grease was a little thick and somewhat dry. Capstan spring, keeper rings and clutch spring had light wear marks.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	46.32	65.52	750.00
2)	29.99	72.85	750.00
3)	.013	.011	.02
4)	33.87	68.85	750.00

REPLACEMENT ITEM

M&S

2 cotter pins	031-46301-1
1 clutch spring	006-74271-8/R90-4394
1 capstan spring	006-74277-7/R90-0766
1 retaining ring	006-74273-4/R90-4394
1 retaining ring	006-74265-3/R90-1321
1 retaining ring	006-74267-0/R93-4312
2 washers	006-74272-6/R93-4361
1 washer	006-74274-2/R93-4361
3 filister head screws	006-74262-9/R90-1627
3 washers	006-74263-7/0015716-3
1 washer	006-74269-6/R93-4361
2 keeper rings	006-74276-9/R93-4375

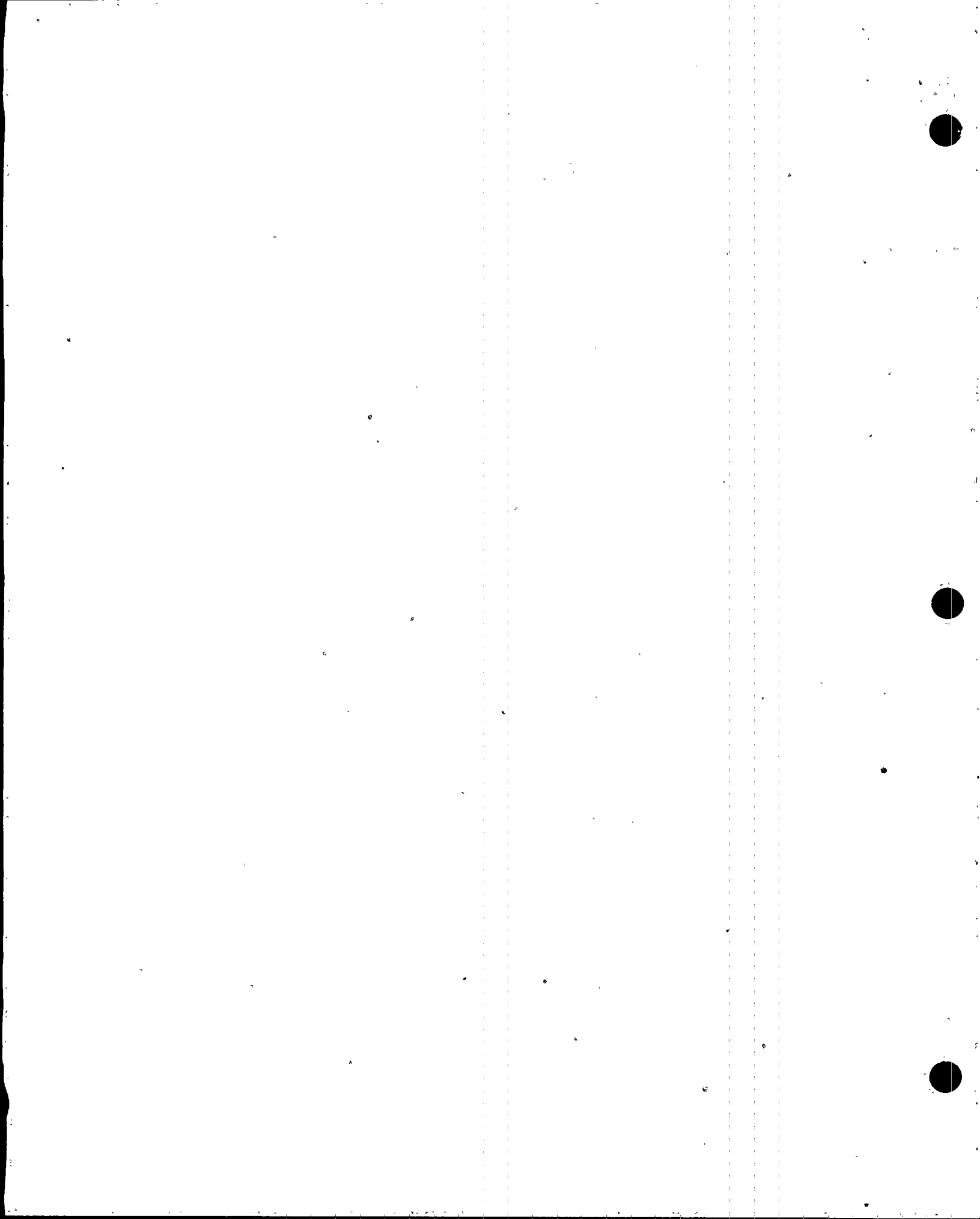
3-1054 16248 09/14/95 P 09/16/95 P 20.2500 P Snubber 3-1054 visual inspection report TP-95-34 revealed the following items described in Deviation Report 035-TP-95-34:

1,11) The rear bracket attached to item 7 indicated on the support drawing has been modified and the drawing does not indicate the changes.

10) Spherical bearings have light rust and dirt.

11) The transition tube assembly bolts lack full thread engagement by 1/32". The transition tube plate is 5/8" thick, the bolt diameter is 1/2" and identified with "L5". The spacers are welded in place. There is no snubber ID tag.

Condition Report 95-834 was written to address the drawing discrepancies, items 1 & 11. Final disposition of CR 95-834 found all items to be acceptable as is and the drawing will be revised and tracked via PHAI 9509113 to reflect the changes. The light rust and dirt have been removed from the spherical bearings and lubricated in accordance with PWO



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Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was functionally tested as part of the post rebuild test program and passed.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	27.80	44.01	750.00
2)	67.62	41.01	750.00
3)	.014	.011	.02
4)	64.71	47.39	750.00

REPLACEMENT ITEM M&S

2 cotter pins 031-46300-5

3-1077 16230 09/12/95 P 09/13/95 P 20.6250 P Snubber 3-1077 visual inspection report TP-95-25 revealed the following conditions described in Deviation Report 032-TP-95-25:

1,11) The rear bracket has been modified and the drawing does not indicate the changes.

6) The snubber end caps are misaligned causing the snubber to bind in the rear bracket and pipe clamp.

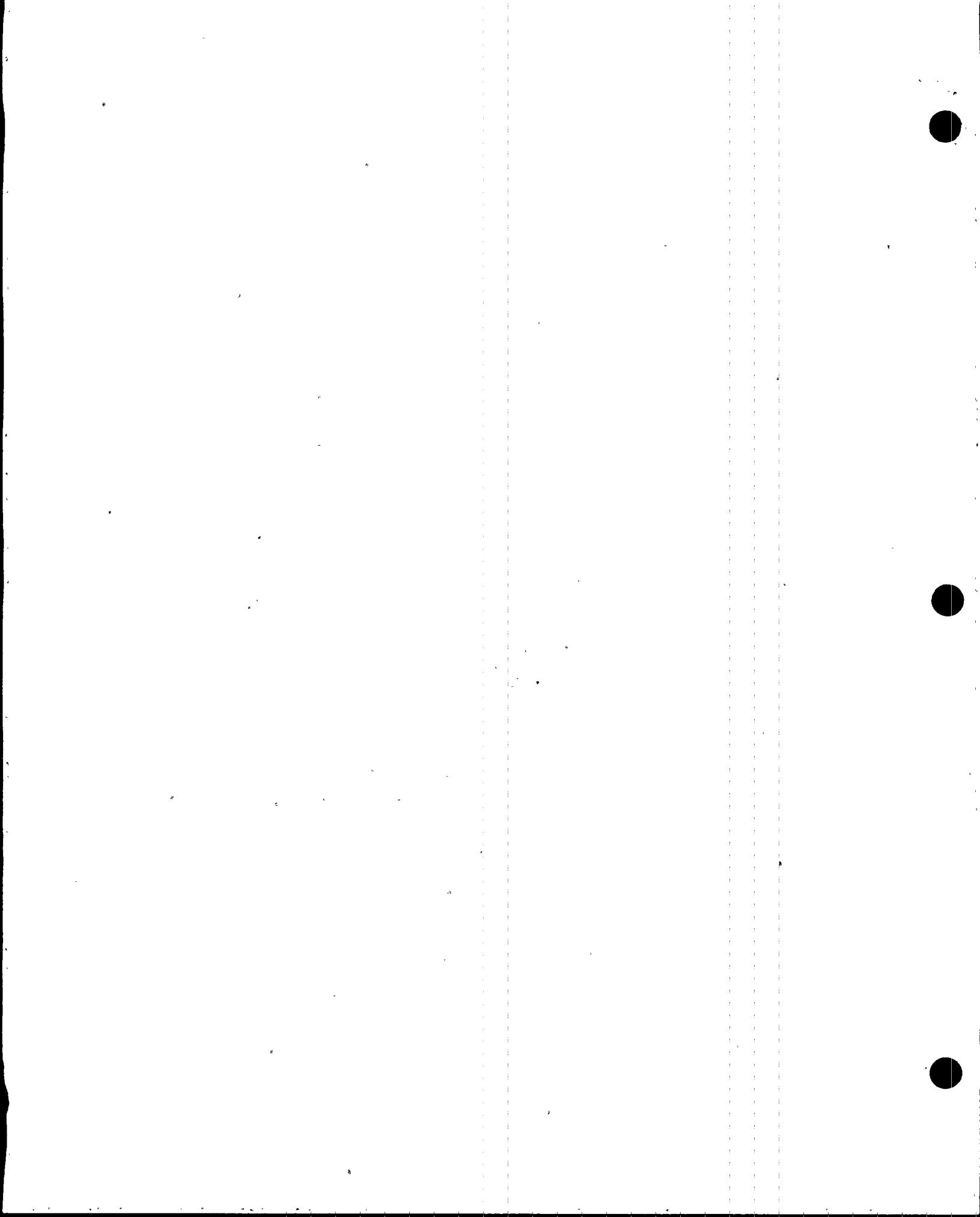
10) The spherical bearings have light rust and dirt.

11) 2 nuts are welded to the top and left sides of item #1 and the drawing does not indicate this. It appears that they were used during installation for lifting. The transition tube assembly bolts lack full engagement by 1/32". The transition tube plate is 5/8" thick. The bolt diameter is 1/2" and identified by L5. The spacers are welded in place and flanged bushings are installed at the rear bracket.

5) The pipe clamp spacers are loose and the pipe clamp is tight to the pipe. No snubber ID tag installed.

Condition Report 95-814 was written to address all the items listed above (1, 5, 6, 10, 11). The final engineering disposition of CR 95-814 is acceptable for use as is with PHAI 9509146 issued to engineering to update the snubber drawing. Item 6 was realigned in accordance with Engineering evaluation JPN-PTP-SECS-95-037. Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was functionally tested as part of the post rebuild test program and passed.

FUNCTIONAL TEST DATA



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Tag	Serial	Visual	Inspection	S	Date	S	S
Number	Number	Date	T	of	T	"L"	A
			T	Test	T	Dimension	T

Visual and Functional Summary

	TENSION	COMPRESSION	CRITERIA
1)	30.02	79.23	750.00
2)	54.97	80.35	750.00
3)	.003	.010	.02
4)	52.44	64.04	750.00

REPLACEMENT ITEMS: M&S

3 cotter pins 031-46500-5

3-1078 16244 09/12/95 P 09/13/95 P 20.2500 P Snubber 3-1078 visual inspection report TP-95-26 revealed the following conditions described in Deviation Report 033-TP-95-26:

1,11) The rear bracket has been modified and the drawing does not indicate the changes.

10) Spherical bearings have light rust and dirt.

11) The transition tube assembly bolts lack full thread engagement by 1/32". The transition tube plate is 5/8" thick. The bolt diameter is 1/2" and identified with L5. The spacers are welded in place and flanged bushings are installed at the rear bracket.

5) The pipe clamp spacers are loose at ID 3-1079 side of clamp. No snubber ID tag installed.

Condition Report 95-581 was previously written and accepted the inadequate thread engagement. Condition Report 95-835 was written to address items 1, 11 and the final engineering disposition of CR 95-835 is acceptable for use as is and PMAI 9509150 issued to engineering to update the drawing. CR 95-849 was written to address the discrepancies for snubber 3-1079. Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was functionally tested as part of the post rebuild test program and passed.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	29.12	36.97	750.00
2)	53.23	41.41	750.00
3)	.014	.010	.02
4)	51.05	38.27	750.00

REPLACEMENT ITEMS: M&S

Turkey Point
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Tag	Serial	Visual	Inspection	A	Functional	A	"L" A
Number	Number	Date	T	Test	T	Dimension	T

Visual and Functional Summary

1 cotter pins .031-47000-4
1 cotter pins 031-49200-2

3-1079 10176 09/12/95 P 09/13/95 P 21.8750 P Snubber 3-1079 visual inspection report TP-95-27 revealed the following conditions described in Deviation Report 034-TP-95-27:

1,11) The rear bracket has been modified and the drawing does not indicate the changes.

5) The pipe clamp spacers are loose.

10) Spherical bearings have light rust and dirt.

11) The transition tube assembly bolts lack full thread engagement by 1/32". The transition tube plate is 5/8" thick. The bolt diameter is 1/2" and identified with L5. The spacers are welded in place and flanged bushings are installed at the rear bracket. No snubber ID tag.

Condition Report 95-849 was written to address 1, 5 & 11. The disposition of CR 95-849 is acceptable for use as is and PHAI 9509149 issued to engineering to update the drawing. Item 10 was cleaned and lubricated in accordance with PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). This snubber was functionally tested as part of the post rebuild test program and passed.

FUNCTIONAL TEST DATA

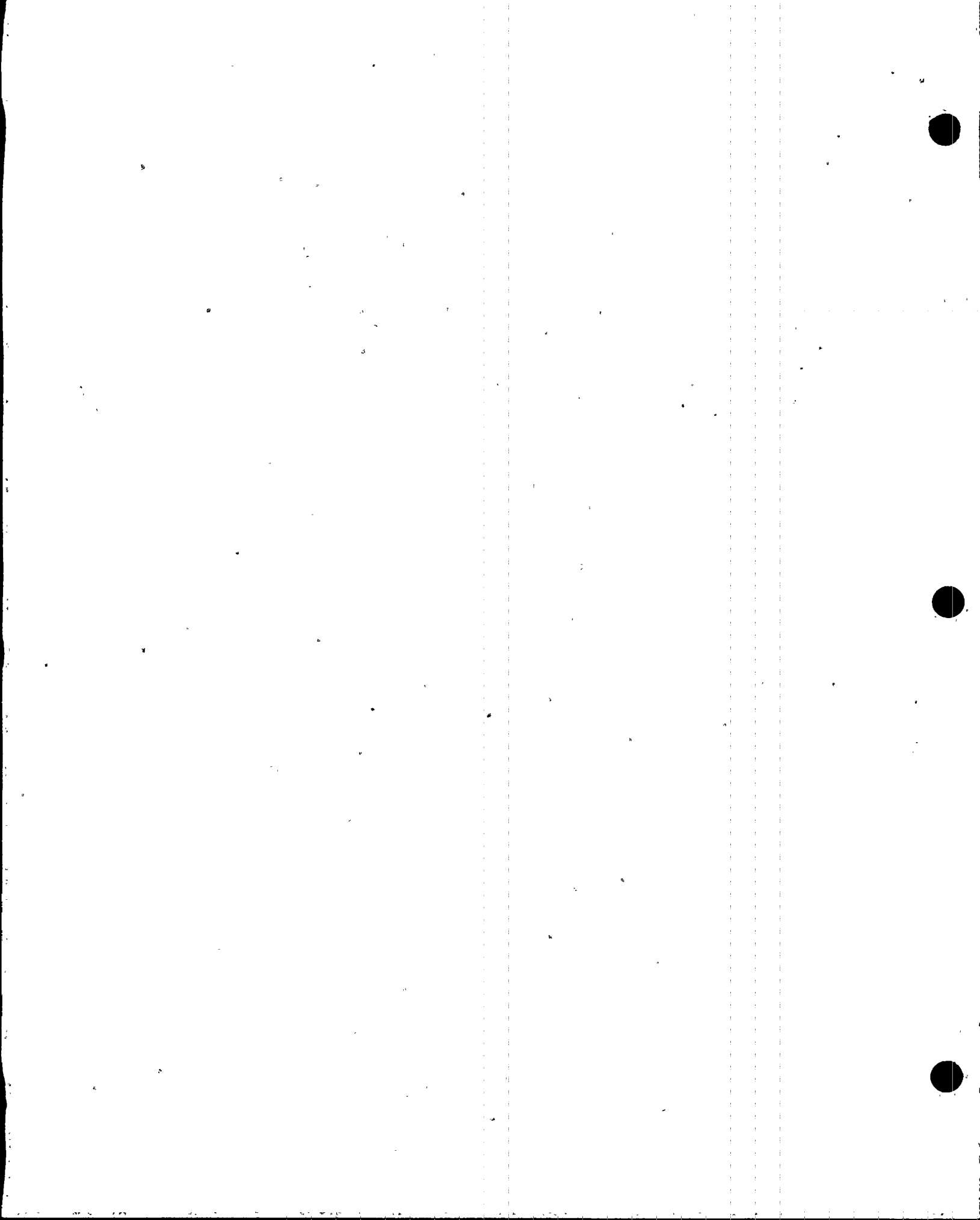
	TENSION	COMPRESSION	CRITERIA
1)	18.85	44.09	750.00
2)	40.33	62.57	750.00
3)	.015	.011	.02
4)	63.82	31.32	750.00

REPLACEMENT ITEMS: M&S

1 cotter pin .031-47000-4
1 cotter pin 031-49200-2

3-1080 12396 09/12/95 P 09/16/95 P 20.8750 P Snubber 3-1080 visual inspection report TP-95-28 revealed the following conditions described in Deviation Report 028-TP-95-28:

1,5,6,10) The end cap at the snubber end is unable to rotate. The condition which exist in this are, The snubber is at an upward angle of 7° which may be binding the end cap. The gaps between the end cap and the ears of the rear bracket are 1/32" to 1/16". The snubber end cap is loose from snubber. Cause will be verified upon removal. Light rust and dirt at bearings.



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		Visual	S	Date	S	S
		T	T	of	T	T
Tag	Serial	Inspection	A	Functional	A	"L" A
Number	Number	Date	T	Test	T	Dimension T

Visual and Functional Summary

11) The transition tube assembly bolts lack full engagement by 1/32". The transition tube plate is 5/8" thick and the bolt diameter is 1/2". Spacers are welded in place. No snubber I.D. tag.

Condition report 95-837 was written to address items 1, 5, 6, 10 & 11. Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Final disposition of CR 95-837 was completed by projects and the as left performed on 09/27/95. PHAI 9510014 was issued to engineering to update the drawing. This snubber was functionally tested as part of the post rebuild test program and passed.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	47.40	46.16	750.00
2)	72.17	37.75	750.00
3)	.010	.006	.02
4)	105.89	38.38	750.00

REPLACEMENT ITEMS:

M&S

2 cotter pins

031-46301-1

3-1084 7000 09/18/95 P / /

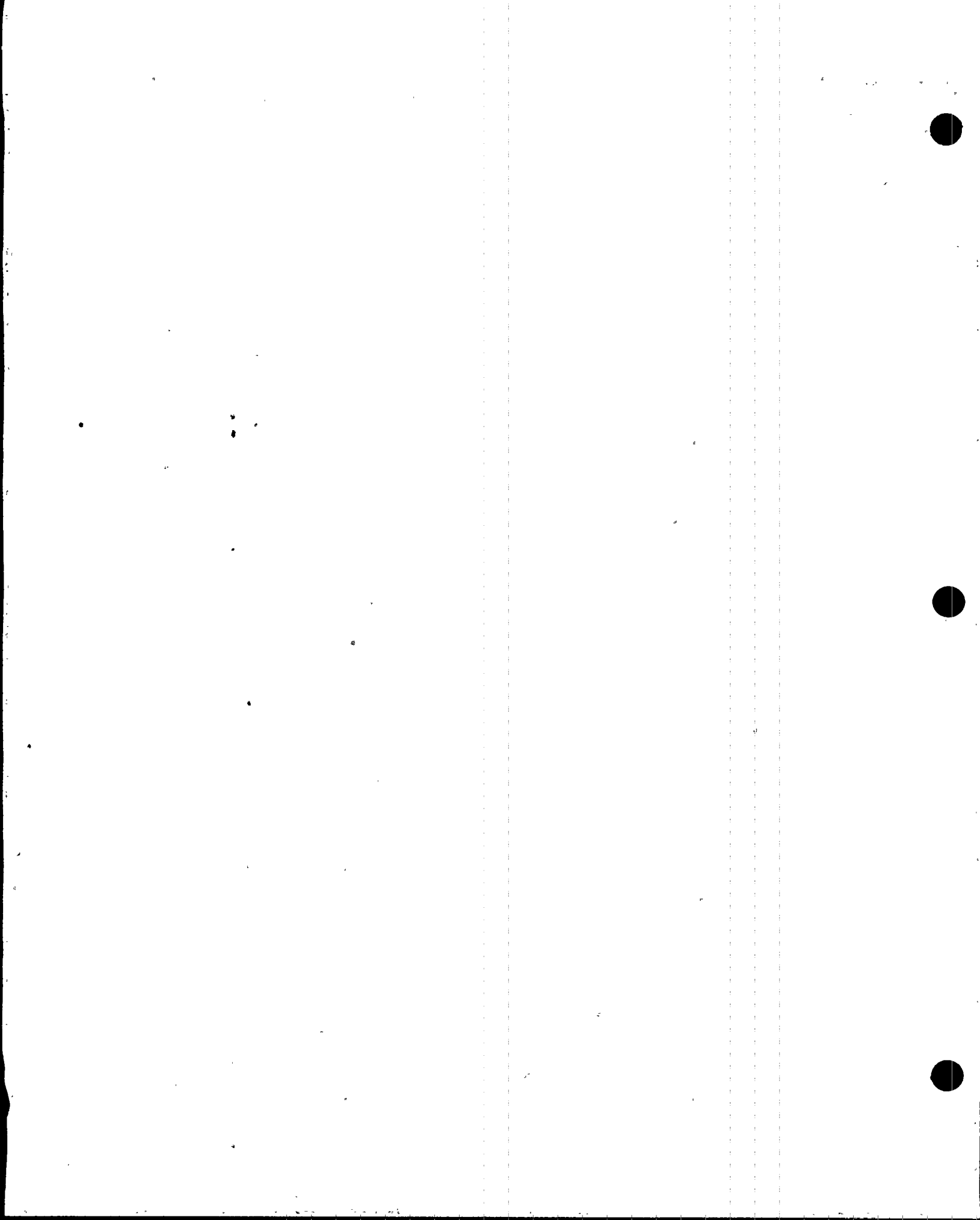
24.5000 F Snubber 3-1084 visual inspection report TP-95-58 revealed the following items described in Deviation Report 051-TP-95-58:

4) 1 spherical bearing spacer at the rear bracket is slightly bent.

5) The pipe clamp spacers are loose. The dimension between the ears of the pipe clamp is 1 1/2" and the spacers are approximately 1/4" short. One corner of the manufacturer's data plate is pulled loose from the rivet.

11) The "L" dimension was found at 24 1/2" and the drawing indicated that it should be between 24 3/4" to 27". The snubber I.D. tag attachment wire is placed between the ears of the rear bracket and snubber end cap.

Condition Report CR 95-864 was written to address 4, 5, and 11. The disposition of CR 95-864 will be implemented by projects under PWO 95026339. Condition report 95-769 required the inspection of this snubber and provide the results to engineering if loose spherical bearings are found. No additional problems were encountered as a result of this inspection. Item 4 can be reused as it does not affect the operability of the snubber. Bolts removed from the transition tube assembly for handstoking were required to be replaced. The condition report identified



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		S	Date	S	S
	Visual	T	of	T	T
Tag	Serial	Inspection	A	Functional	A "L" A
Number	Number	Date	T	Test	T Dimension T

Visual and Functional Summary

these bolts as A325 and A307 will be reinstalled. PMAI 9510013 was issued to engineering to update the drawing. The original nuts were reused. Bolts were retorqued by projects to 500 ft/lbs using torque wrench M-A47 cal due date 02/27/96. Engineering will be issued a PMAI to track this change and update the drawing. Projects will complete installation per CR 95-864. The snubber I.D. tag was moved to the telescoping end of the snubber as shown on the as left data. The ISI group will relocate the tag to the transition tube end where it will not affect the operation of the snubber. The tag relocation occurred on 10/02/95 by Frank Rihl.

REPLACEMENT ITEMS:	M&S
2 Cotter Pins	031-49200-2
2 Spacer Washer	006-70907-9
6 bolts	377928/0197413-1

3-1094 4388 09/15/95 P 09/16/95 P 15.0000 P Snubber 3-1094 visual inspection revealed the following items described in Deviation Report 042-TP-95-46:

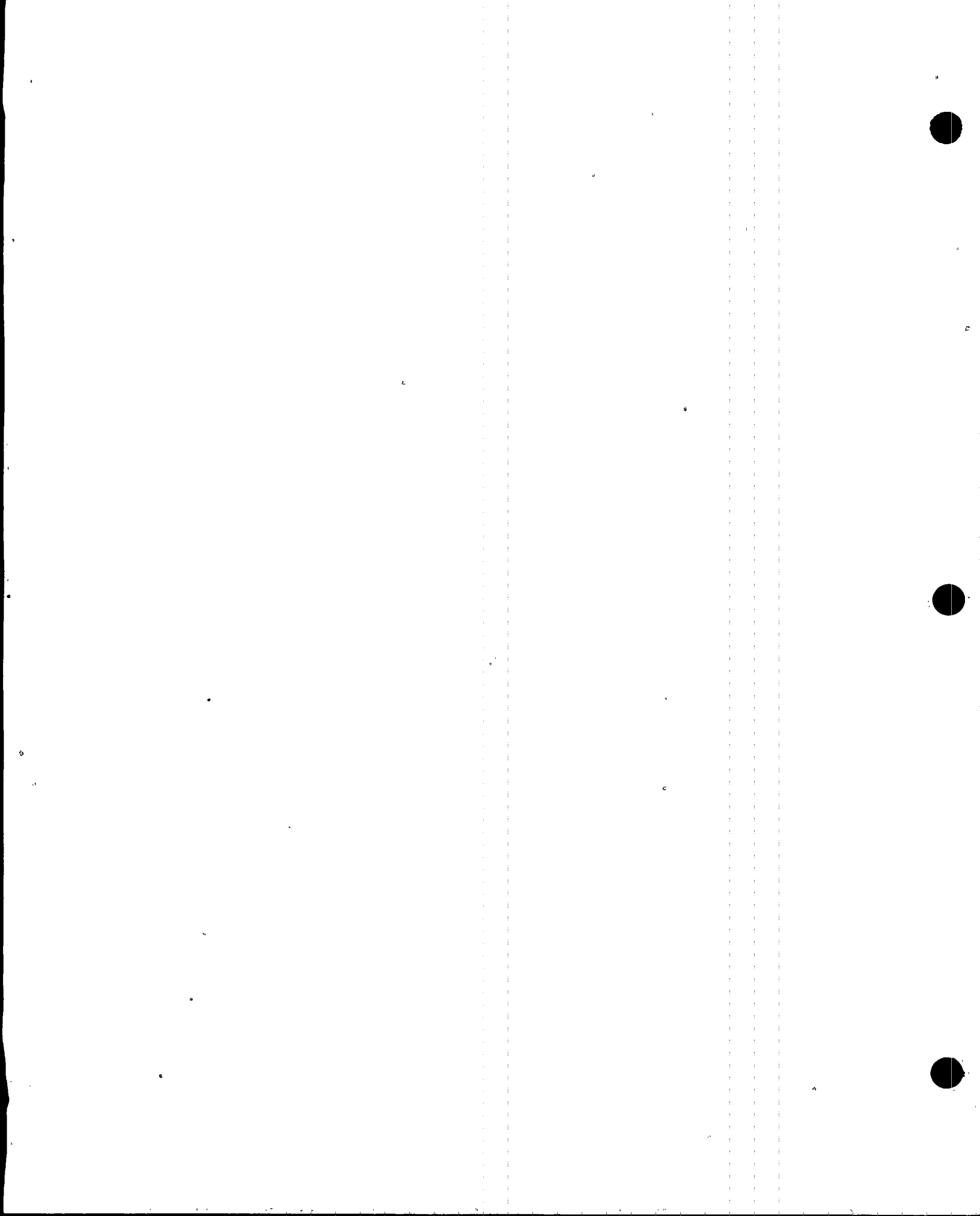
- 5) No spacer installed at the pipe clamp at pipe clamp bolt adjacent to load pin.
- 10) Unable to rotate snubber on spherical bearings which may be due to light rust and dirt. Will verify upon reinstallation.
- 11) Cap screws are installed at the transition tube assembly and lack full thread engagement by 1/32". The transition tube plate is 1/2" thick and the cap screw diameter is 5/16". The drawing indicates that the width of item 18 is 3" and the actual width is 2 1/2". Also, there are 4 7/16" diameter holes drilled. Spacers welded in place.

Condition report 95-848 was written to address spacer and drawing concerns. Final disposition of CR 95-848 accepted all the items as acceptable as is and PMAI 9509108 was issued to engineering to update the drawing. Condition report 95-581 previously addressed the thread engagement for this snubber location. Spherical bearings were cleaned and lubricated under PWO 95024339 and are free to rotate. This snubber was functionally tested as part of the post rebuild test program and passed.

FUNCTIONAL TEST DATA

	TENSION	COMPRESSION	CRITERIA
1)	20.85	11.50	300.00
2)	33.01	17.03	300.00
3)	.006	.007	.02
4)	28.04	17.51	300.00

REPLACEMENT ITEM	M&S
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Turkey Point
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Tag	Serial	Visual	Inspection	A	Date	S	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T			

Visual and Functional Summary

2 cotter pins 031-46301-1

3-1123 6484 09/09/95 P / /

27.7500 P Snubber 3-1123 visual inspection report TP-95-10 revealed the following conditions described in Deviation Report 009-TP-95-010.

2, 3, 4, 7, 15, 18, and 20) Has heavy rust and corrosion from trapped water due to configuration, some pitting of the steel has occurred. Minor rust on pin and bearings.

Rear bracket is not PSA, they have a 7" pin.

5) No snubber I.D. tag attached.

Pipe Insulated.

Condition Report CR 95-756 was written to address rust on items, 2, 3, 4, 7, 15, 18, 20. PHAI 9509141 was issued to engineering to update the drawing and PHAI 9509142 to mechanical maintenance to drill holes to disperse rainwater. Condition Report CR 95-738 was written to address the load pin which does not appear to be PSA as specified on drawing. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PHAI 9509074 going to engineering to update the drawings. Cleaned minor rust from pins and spherical bearings as stated in PWO 95024339. The snubber I.D. tag will be ordered by the ISI group and will be installed during the next inspection (TS-95-10-001). The insulated pipe does not affect operability of the snubber.

REPLACEMENT ITEMS:

M&S

2 Cotter Pins

031-46500-5

3-1124 12991 09/09/95 P / /

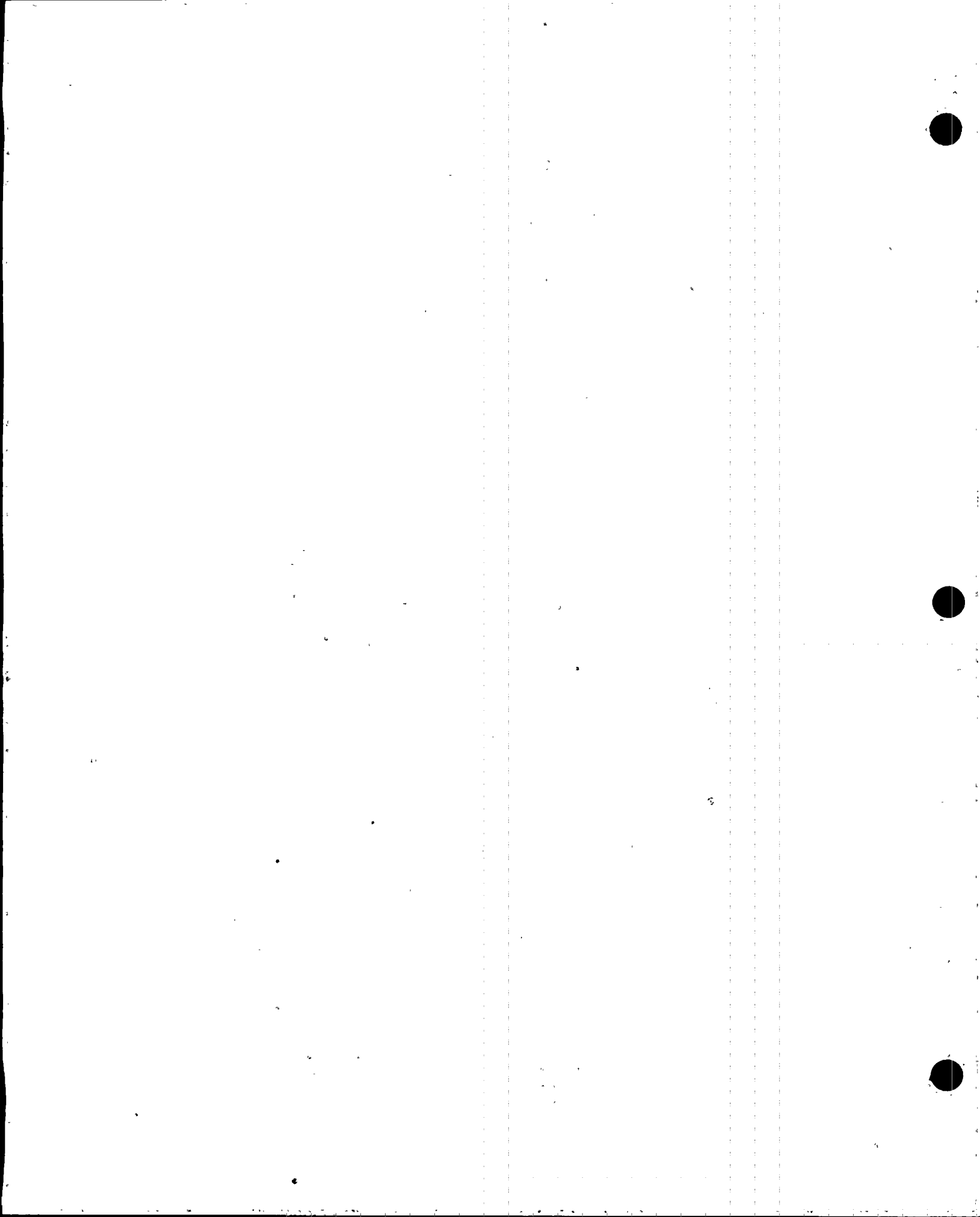
27.7500 P Snubber 3-1124 visual inspection report TP-95-09 revealed the following conditions described in Deviation Report 008-TP-95-09:

5) Missing lower spacer at the rear bracket snubber end and there is sufficient room for additional one. No snubber ID tag installed.

10) Items 2, 3, 4, 7, 15, 18 & 20 have heavy rust and corrosion from trapped water due to configuration, some pitting of the tube steel has occurred.

7) Load pin has .003" wear. End brackets are not PSA - 7" pin.

Item 5, lower spacer was replaced per engineering evaluation JPN-PTP-SECS-95-037, rev. 0, step 1.2. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Spherical bearings were cleaned and lubricated under PWO 95024339. Condition Report 95-755 was written to address the rear bracket load pin wear with PHAI 9509095 to engineering to update the drawing and CR 95-756



Turkey Point
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Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

was written to address the pooling of water with PMAI 9509141 going to engineering to update the drawing and PMAI 9509142 to mechanical maintenance to drill holes to disperse the rainwater.

REPLACEMENT ITEMS:

M&S

1 spacer washer

006-70907-9

3-1125 12986 09/09/95 P / /

26.6250 P Snubber 3-1125 visual inspection report TP-95-11 revealed the following items described in Deviation Report 011-TP-95-11:

5) Missing upper spacer at the rear bracket extension piece end and there's sufficient room for additional one. No snubber I.D. tag attached.

10) Items 2, 3, and 4 have heavy rust and corrosion from trapped water due to configuration, some pitting of the steel has occurred. One snubber end cap is painted. Brackets are not PSA supplied, they have a 7" pin. Pipe is insulated. Minor rust on pin and bearings.

Replaced missing upper spacer at rear bracket as stated in JPN-PTN-SECS-95-037, rev. 1., step 1.2. Condition Report CR 95-756 was written addressing corrosion due to pooling of water with PMAI 9509141 going to engineering to update the drawing and PMAI 9509142 to mechanical maintenance to drill holes to disperse the rainwater. Condition Report CR 95-738 was written to address load pins which do not appear to be PSA supplied as specified in drawings. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PMAI 9509074 going to engineering to update the drawings. Cleaned minor rust on pins and bearings and lubricated as stated in JPN-PTN-SECS-95-037, rev. 1. Insulated pipe does not affect operability of snubber. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). The painted end cap does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable for use as is.

REPLACEMENT ITEMS:

M&S

1 Spacer Washer

AN-960-2616

006-70907-9

2 Cotter Pins

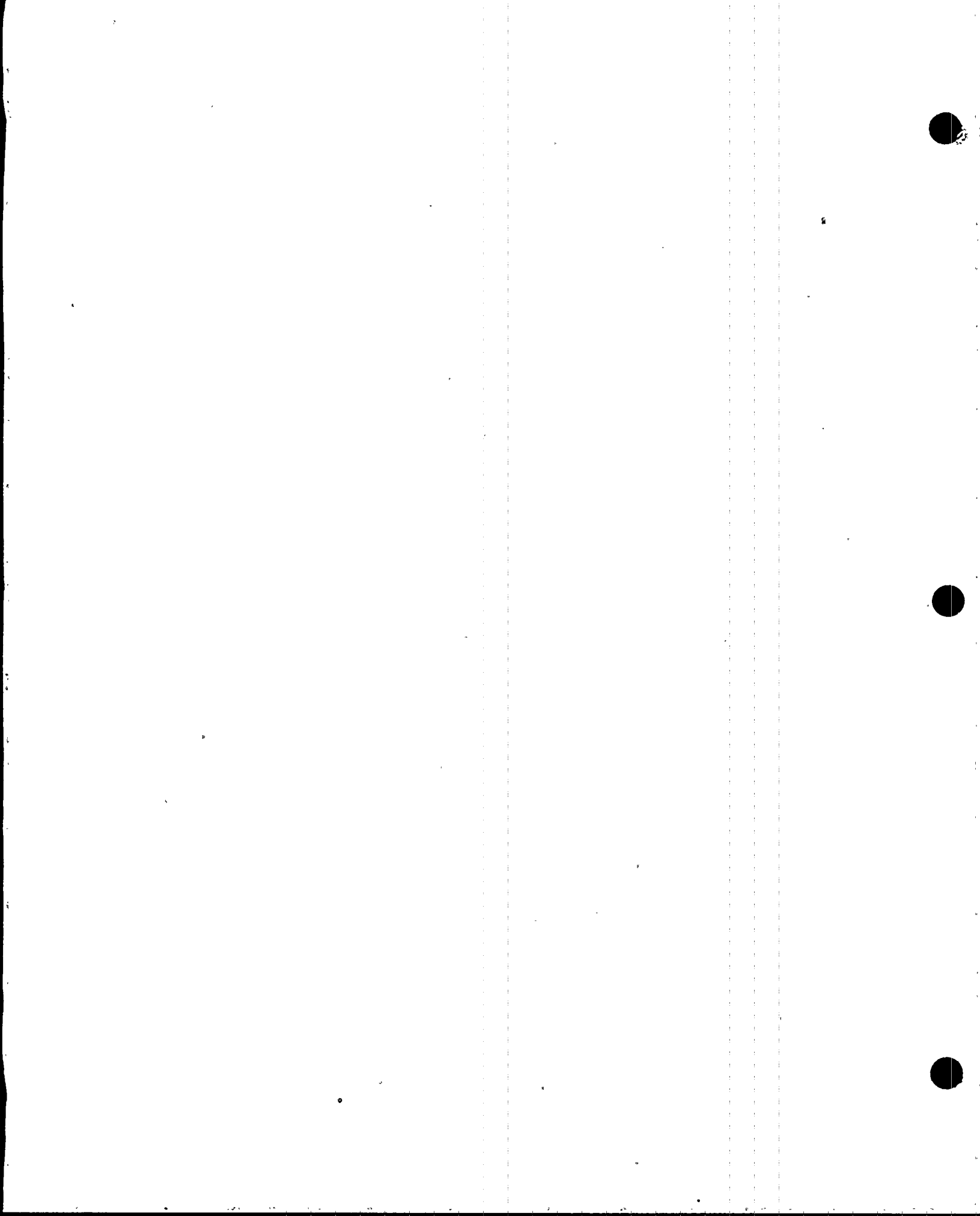
031-46500-5

3-1126 12989 09/09/95 P / /

27.0000 P Snubber 3-1126 visual inspection report TP-95-12 revealed the following items described in Deviation Report 006-TP-95-12:

5) No I.D. tag installed.

10) Items 2, 3, and 4 have heavy rust and corrosion from trapped water due to configuration, some pitting of the steel has occurred. Light surface rust was found on snubber cylinder. End caps are painted. End brackets are not PSA brackets, 7" pin.



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Tag	Serial	Visual	Inspection	A	Date	S	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T			

Visual and Functional Summary

Condition Report CR 95-756 written addressing rust due to pooling of water with PHAI 9509141 going to engineering to update the drawing and PHAI 9509142 going to mechanical maintenance to drill holes to disperse the rainwater. Condition Report CR 95-738 written addressing load pins which do not appear to be PSA as specified on drawing. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PHAI 9509074 going to engineering to update the drawings. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Painted end caps do not affect the operability of the snubber as evidenced by the satisfactory handstroke and the snubber is acceptable as is. The light rust on the snubber cylinder does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.

REPLACEMENT ITEMS:

M&S

1 Spacer Washer	AN-960-2616	006-70907-9
1 Cotter Pin		031-46500-5

3-1127 12990 09/09/95 P / /

27.2500 P Snubber 3-1127 visual inspection report TP-95-13 revealed the following conditions described in Deviation Report 010-TP-95-13:

5) No snubber ID tag.

10) Snubber end caps are painted. Rear brackets are not PSA.

The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Condition report 95-738 was written to address the rear bracket and load pin drawing discrepancies. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PHAI 9509074 going to engineering to update the drawings. Painted end caps do not affect the operability of the snubber as evidenced by the satisfactory handstroke and are acceptable for use as is.

REPLACEMENT ITEMS:

M&S

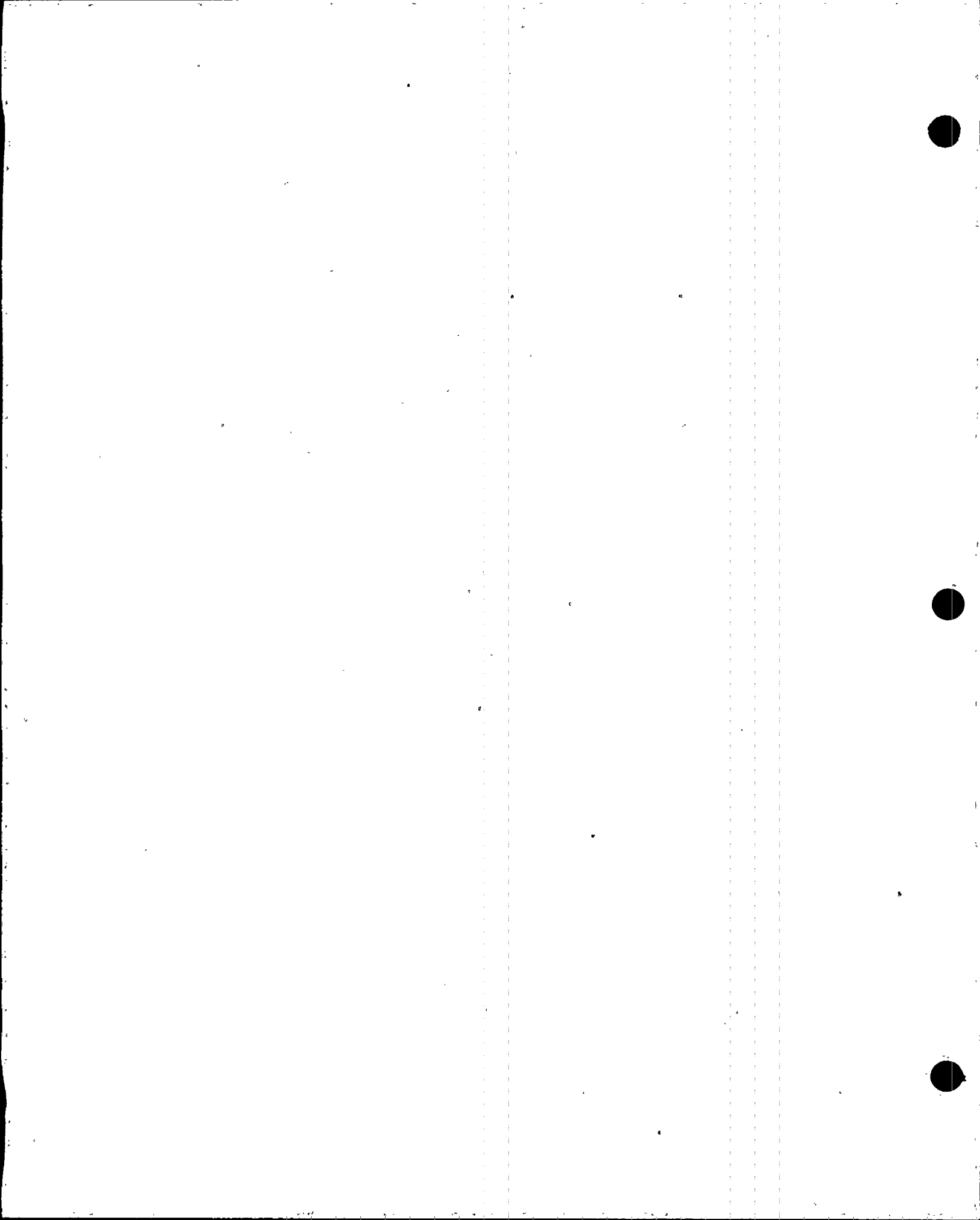
2 cotter pins	031-46500-5
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3-1128 12985 09/09/95 P / /

27.1250 P Snubber 3-1128 visual inspection report TP-95-14 revealed the following conditions described in Deviation Report 012-TP-95-14:

10) Snubber end caps are painted. Rear and snubber brackets are not PSA. 0" & 1/2" marks are worn off indicator tube.

Condition report 95-738 was written to address the load pins and rear bracket which are not PSA as indicated on the drawing. Final engineering



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Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

disposition of condition report 95-738 shows the rear brackets are acceptable as is with a PHAI 9509074 going to engineering to update the drawings. Spherical bearings were cleaned and lubricated under PWO 95024339. The scale marks worn off the indicator tube do not affect the operation of the snubber and the condition is acceptable as is. The hot/cold setting can still be obtained by physical measurement.

REPLACEMENT ITEMS:

M&S

2 cotter pins

031-46500-5

3-1129 12987 09/09/95 P / /

26.5000 P Snubber 3-1129 visual inspection report TP-95-15 revealed the following conditions described in Deviation Report 013-TP-95-15:

5) 1 spacer missing from lower side of the rear bracket at extension piece.

10) End caps are painted. Light rust on spherical bearings and load pin.

11) Snubber rear bracket is not a PSA.

Replace missing spacer washers in accordance with engineering evaluation JPN-PTP-SECS-95-037, rev 0, step 1.2. The painted end cap does not affect the operability of the snubber as evidenced by the satisfactory handstroke. Spherical bearings were cleaned and lubricated under PWO 95024339. Condition report 95-738 was written to address the rear bracket and load pin drawing discrepancies. Final engineering evaluation was acceptable as is and PHAI 9509074 issued to engineering to update the drawings. Vendor torqued pipe clamp to 800 ft lbs using B-5191, cal due date 01/21/96.

REPLACEMENT ITEMS:

M&S

2 cotter pins

031-46500-5

1 spacer washer

006-70907-9

3-1130 17840 09/10/95 P / /

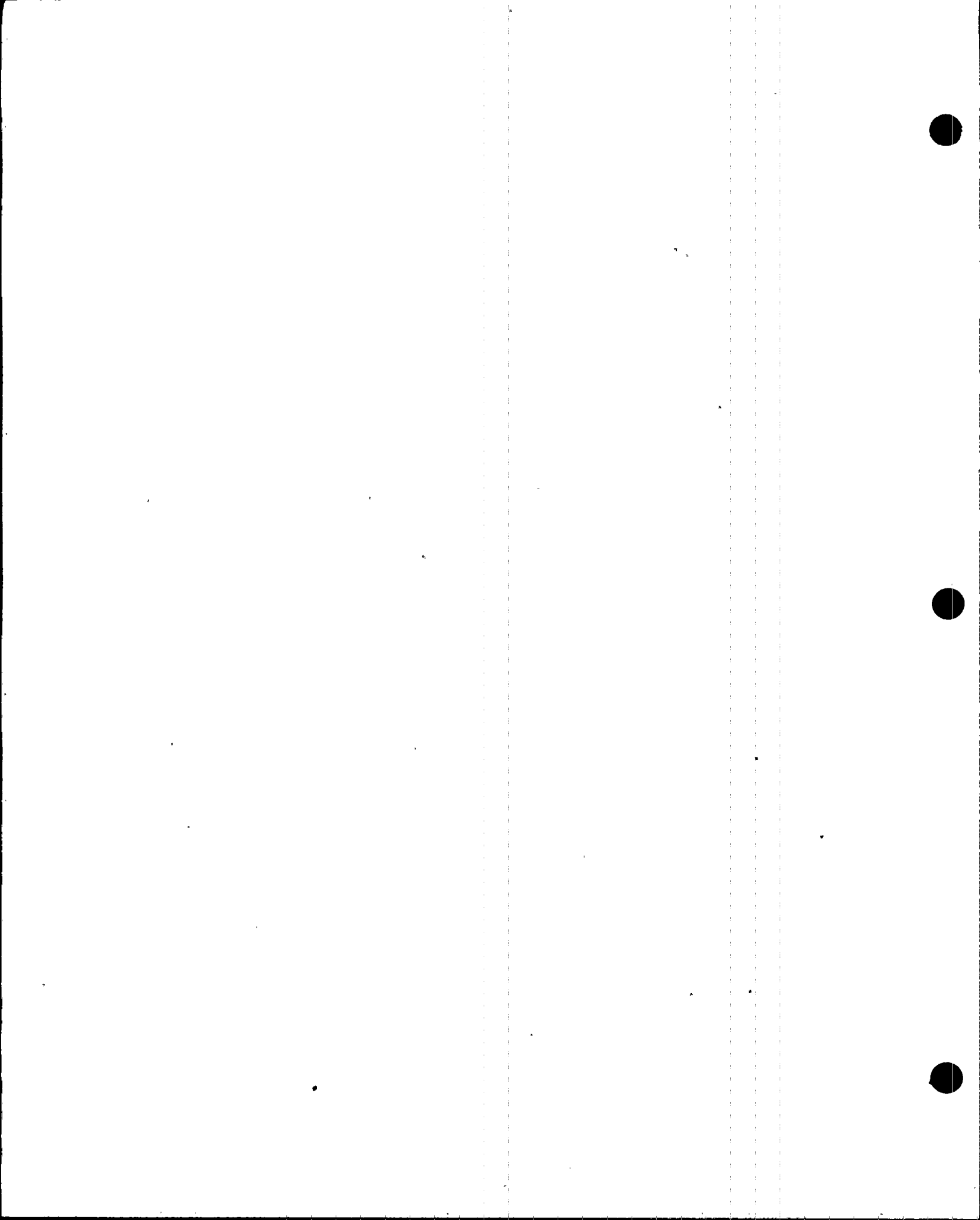
19.7500 P Snubber 3-1130 visual inspection report TP-95-16 revealed the following conditions described in Deviation Report 018-TP-95-16:

5) Missing lower spacer at extension piece rear bracket and there's sufficient room for an additional one.

10) Light rust on spherical bearings.

11) Light surface rust on snubber due to exposure to the weather. The load pins do not appear to be supplied by PSA as indicated on the drawing. No snubber ID tag supplied.

The spacer washers were replaced in accordance with engineering evaluation



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Tag	Serial	Visual	Inspection	S	Date	S	of	T	S	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T						

Visual and Functional Summary

JPN-PTP-SECS-95-037, rev. 0, step 1.2. Spherical bearings were cleaned and lubricated under PWO 95024339. Condition report 95-738 to address the rear bracket and load pins. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PMAI 9509074 going to engineering to update the drawings. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). The light rust on the snubber does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.

REPLACEMENT ITEMS: M&S

4 spacer washers 006-70906-1/R90-5711

3-1131 17837 09/10/95 P / /

19.0875 P Snubber 3-1131 visual inspection report TP-95-17 revealed the following conditions described in Deviation Report 019-TP-95-17:

10) Light rust on spherical bearings.

11) Light surface rust on snubber due to exposure to the weather. Snubber end cap are painted and minor paint spots on the snubber. The load pins do not appear to be supplied by PSA as indicated on the drawing. No snubber ID tag attached.

Spherical bearings were cleaned and lubricated under PWO 95024339. Condition report 95-738 was written to address the rear brackets and load pins. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PMAI 9509074 going to engineering to update the drawings. Light rust and paint spots does not affect the operability of the snubber as evidenced by the satisfactory handstroke. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001).

REPLACEMENT ITEMS: M&S

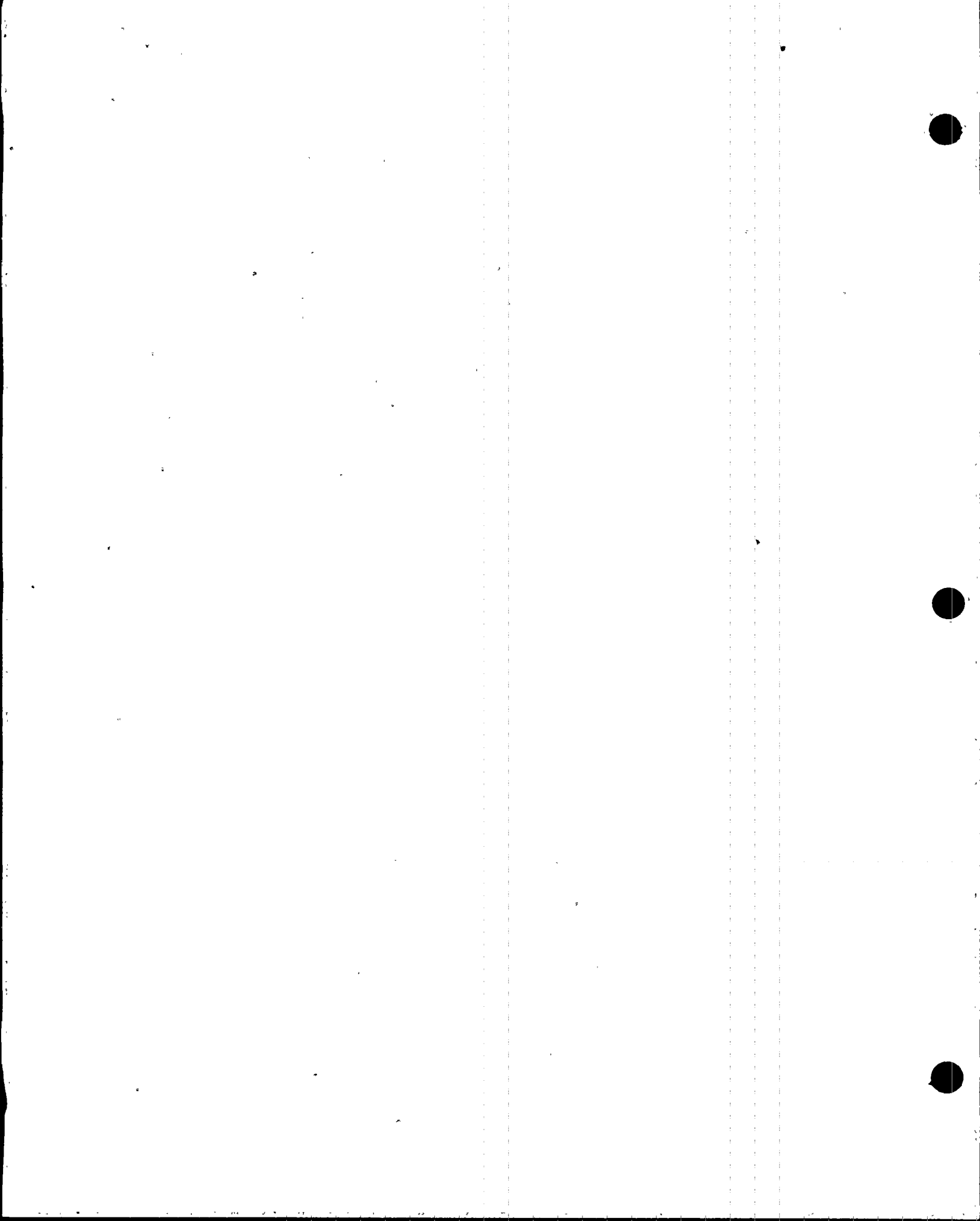
4 sapcer washers 006-70906-1/R90-8711

3-1132 17838 09/10/95 P / /

19.5000 P Snubber 3-1132 visual inspection report TP-95-18 revealed the following conditions described in Deviation Report 020-TP-95-18:

5) Missing both spacers at extension piece end rear bracket and the lower spacer at the snubber end rear bracket and there's sufficient room for an installation.

10) Light rust on spherical bearing. Snubber end cap painted. Light surface rust on snubber due to exposure to the weather. The load pins do not appear to be supplied by PSA as indicated on the drawing. No snubber ID tag.



Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

Replaced spacer washers in accordance with JPN-PTP-SECS-95-037, rev 0, step 1.2. Spherical bearings were cleaned and lubricated under PWO 95024339. Snubber end cap paint does not effect the operability of the snubber as evidenced by the satisfactory handstroke. Condition report 95-738 was written to address the load pins and rear bracket. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PHAI 9509074 going to engineering to update the drawings. The light rust on the snubber does not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001).

REPLACEMENT ITEMS:

M&S

4 spacer washers

006-70906-1/R90-5711

3-1133 13695 09/10/95 P / /

19.8125 P Snubber 3-1133 visual inspection report TP-95-19 revealed the following conditions described in Deviation Report 017-TP-95-19:

5) Missing lower spacer at extension piece rear bracket and there's sufficient room for an additional one.

10) Light rust on spherical bearing.

11) Items 2, 3 & 4 as shown on the support drawing have heavy rust and corrosion from trapped water due to configuration. Some pitting has occurred. Light surface rust on snubber due to exposure to the weather. Snubber end cap is painted. The load pins do not appear to be supplied by PSA as indicated on the drawing. No snubber ID tag installed.

Condition report 95-738 was written to address the load pins and rear brackets which do not appear to be PSA supplied as indicated on the drawing. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PHAI 9509074 going to engineering to update the drawings. Pacific Scientific replaced the spacer washers in accordance with JPN-PTP-SECS-95-037, rev 0, step 1.2. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Spherical bearings were cleaned and lubricated under PWO 95024339. The painted snubber end cap and light surface rust are acceptable for use as is as it does not impede the operability of the snubber as evidenced by the satisfactory handstroke.

REPLACEMENT ITEMS:

M&S

4 spacer washers

006-70907-9/R89-2582

34 17836 09/10/95 P / /

19.4375 P Snubber 3-1134 visual inspection report TP-95-20 revealed the following conditions described in Deviation Report 016-TP-95-20:

Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

5) Missing lower spacer at extension piece rear bracket and there's sufficient room for an additional one.

10) Light rust on spherical bearings.

11) Snubber end cap painted. Light rust on snubber due to exposure to the weather. No snubber ID tag installed. The load pins do not appear to be PSA supplied as indicated on the drawing.

Replace 4 spacer washers in accordance with engineering evaluation JPN-PTP-SECS-95-037, rev 0, step 1.2. Spherical bearings were cleaned and lubricated under PWO 95024339. The snubber ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001). Condition Report 95-738 written to address the snubber rear bracket and load pins which do not appear to be PSA supplied as indicated on the drawing. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PMAI 9509074 going to engineering to update the drawings. The light rust on the snubber and painted end cap do not affect the operability of the snubber as evidenced by the satisfactory handstroke and the condition is acceptable as is.

REPLACEMENT ITEMS:

M&S

4 spacer washers

006-70906-1/R90-5711

3-1135 17839 09/10/95 P / /

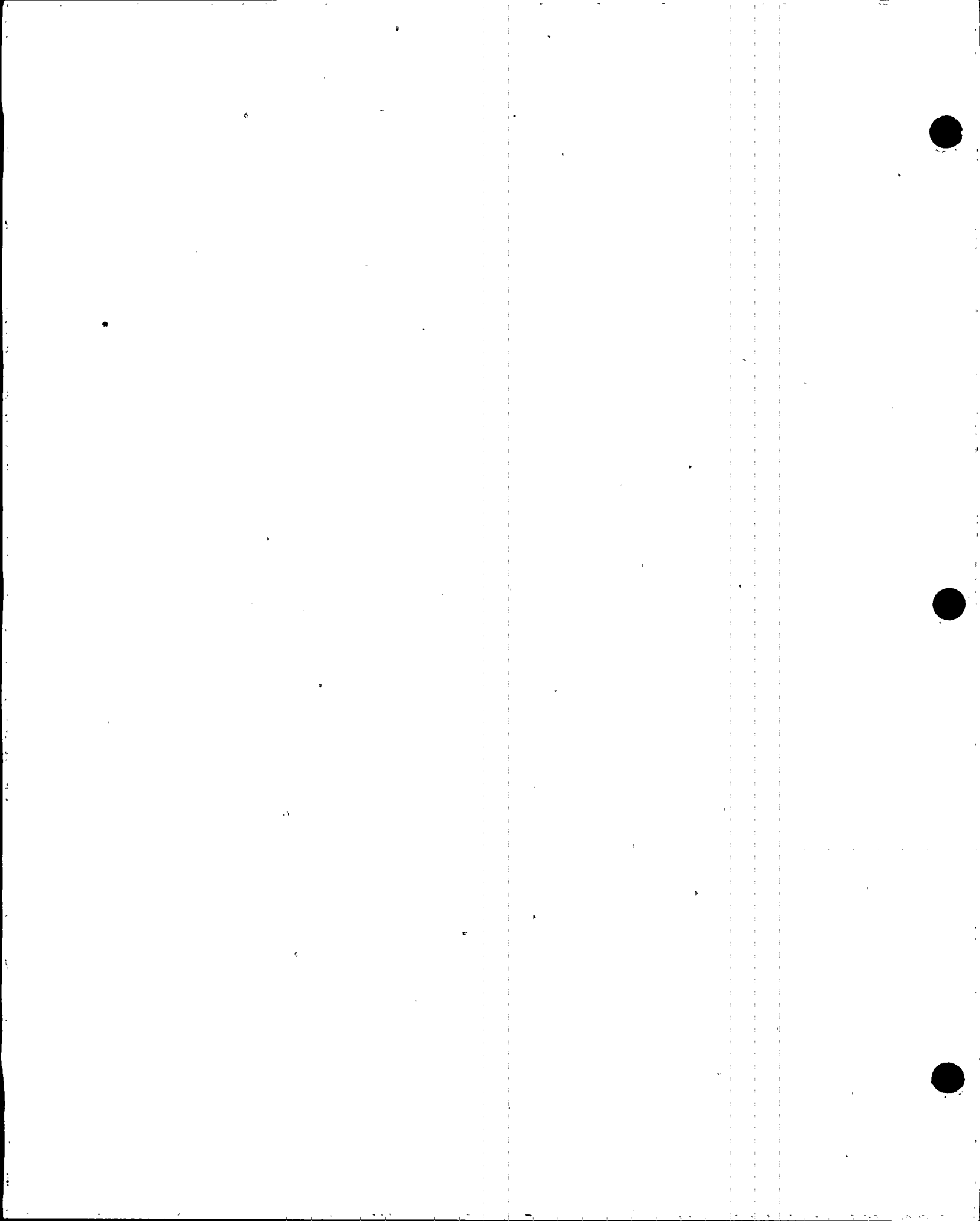
19.5625 P Snubber 3-1135 visual inspection report TP-95-21 revealed the following items described in Deviation Report 014-TP-95-21:

5) Missing upper spacer at rear bracket (snubber end) and there's sufficient room for additional one. No snubber ID tag.

10) Snubber end cap spherical bearing painted. Snubber has light rust due to exposure to the weather, no metal loss.

11) Snubber end cap painted. at items 2, 3 & 4 as shown on the support drawing there's standing water (upper side) due to the configuration. The load pins do not appear to be supplied by PSA as indicated on the drawing.

Vendor replaced upper spacer washers at rear bracket in accordance with Engineering evaluation JPN-PTP-SECS-95-037, rev 0, step 1.2. Condition report 95-738 was written to address load pins and rear brackets that do not appear to be PSA. Final engineering disposition of condition report 95-738 shows the rear brackets are acceptable as is with PMAI 9509074 going to engineering to update the drawing. Condition report 95-756 was written to address the standing water with PMAI 9509141 going to engineering to update the drawing and PMAI 9509142 to mechanical maintenance to drill holes to disperse the rainwater. Spherical bearings were cleaned and lubricated in accordance with PWO 95024339. The snubbed



Turkey Point
Outage Summary
Report
Unit 3

Tag	Serial	Visual	Inspection	A	Functional	A	"L"	A
Number	Number	Date	T	Test	T	Dimension	T	

Visual and Functional Summary

ID tag will be ordered by the ISI group and installed during the next inspection (TS-95-10-001).

REPLACEMENT ITEMS:

M&S

4 spacer washers

006-70906-1/R90-5711

