



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60515

April 6, 1992

Mr. A. Bert Davis  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Subject: CECo Braidwood Unit 1 First Outage  
Steam Generator Inservice Inspection Results  
NRC Docket No. 50-456

Dear Mr. Davis:

Attached is the report of the Steam Generator Eddy Current Examination performed at Braidwood Station. In accordance with Braidwood Technical Specification 4.4.5.5.b and 6.9.2, the complete steam generator tube inservice inspection results shall be submitted to the Commission within 12 months following completion of the inspection. The Steam Generator Eddy Current Surveillance was completed April 9, 1991.

Fifty percent of the tubing received a full length bobbin coil inspection with the remainder of the tubes being inspected through the U-Bend from the hot leg side. A rotating pancake coil was used to confirm and characterize all distorted indications found through the bobbin examinations.

Attached is a report summarizing the inspection results. Included in the report are indication lists and maps, a guide to abbreviations used in the indication list, and a list of certified personnel performing the eddy current examinations.

If there are any questions regarding this information, please contact this office.

Sincerely,

T.W. Simpkin  
Nuclear Licensing Administrator

Attachment

cc: R. Pulsifer - NRR  
B. Clayton - RIII  
Resident Inspector - Braidwood  
NRC Document Control Desk

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PDR ADOCK 05000456  
G PDR

13000  
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COMMONWEALTH EDISON COMPANY  
BRAIDWOOD UNIT 1 SECOND REFUELING OUTAGE  
STEAM GENERATOR INSERVICE INSPECTION RESULTS

## 1.0 INTRODUCTION

Braidwood Unit 1 is a four loop PWR with four Westinghouse Model D-4 steam generators. There are 4,578 tubes in each generator. The tubes are Inconel 600 U-tubes with outside diameter of 0.750 in. and a nominal thickness of 0.043 in.

During the scheduled Braidwood Unit 1 second refuel outage of February through March 1991 steam generator eddy current examinations were conducted by Westinghouse Nuclear Services Division in compliance with Braidwood Station Technical Specification 3/4.4.5 and ASME Section XI.

## 2.0 INSPECTION PLAN

All four steam generators were tested in parallel from the hot and cold leg sides. Fifty percent of the tubes in all four steam generators were inspected full length. The remainder of the tubes were inspected thru the U-Bend from the hot leg side. All in service tubes that previously contained indications were inspected full length.

## 3.0 INSPECTION TECHNIQUE

The eddy current examinations were conducted from the hot leg side for Row 4 and above with a 0.610 in. bobbin coil probe and examination frequencies of 550 Khz, 300 Khz, 130 Khz, and 10 Khz. Approximately 300 tubes in Rows 1, 2, and 3 were tested from the cold leg side using a 0.590 in. bobbin coil probe with the same examination frequencies. The bobbin coil probe withdrawal speed was 24 in. per second. The U-Bends of Row 1 tubes were inspected with a U-Bend RPC probe only. All other tubes were inspected to their required extents using a bobbin probe.

As a result of the bobbin coil eddy current inspection, distorted indications and percent thru wall indications at various support plates and top of tubesheet locations in the hot legs of all four generators were identified. Subsequent RPC inspections were performed from the hot leg side to confirm and better characterize these indications. RPC examinations were conducted at test frequencies of 550 Khz, 300 Khz, 130 Khz, and 10 Khz. The withdrawal rate was 0.4 in. per second with a rotational speed of 300 RPM.

## 4.0 INSPECTION RESULTS

A primary and secondary analysis was performed of all

eddy current data by Westinghouse. Forty four tubes were plugged as result of eddy current examination indications found during this refuel outage. In general, the indications were a result of anti-vibration bar wear and degradation within the tube support plate. The TSP indications were initially characterized as Distorted Indications when inspected by bobbin coil eddy current. RPC inspections of all DI's and percent calls at TSP's were conducted and the indication dispositioned on the basis of the RPC results. All indications from RPC were characterized either NDD(no detectable degradation), SAI(single axial indication) or MAI(multiple axial indication). The table below is a summary of the indications found and tubes plugged during this outage.

STEAM GENERATOR	A	B	C	D
INDICATIONS > 40% THRU-WALL	2	2	1	0
INDICATIONS 20 - 39% T-W	9	3	7	9
INDICATIONS < 20 % T-W	3	5	1	0
SAI	6	0	17	4
MAI	2	0	0	0
TUBES PLUGGED	10	1	19	4

A tube was mistakenly plugged in steam generator A and the tube at row 12 col 5 in B steam generator was plugged after installing a cable dampener in accordance with NRC Bulletin 88-02. Specific details of the examination results are included in the Appendix section of this report.



APPENDIX 1

EDDY CURRENT INDICATION DISTRIBUTION MAPS

# INDICATION DISTRIBUTION - COLD LEG

D : 1 DISTORTED INDICATION  
P : 1 INDICATION NOT REPORTABLE  
□ : 9 EXISTING PLUGGED TUBES

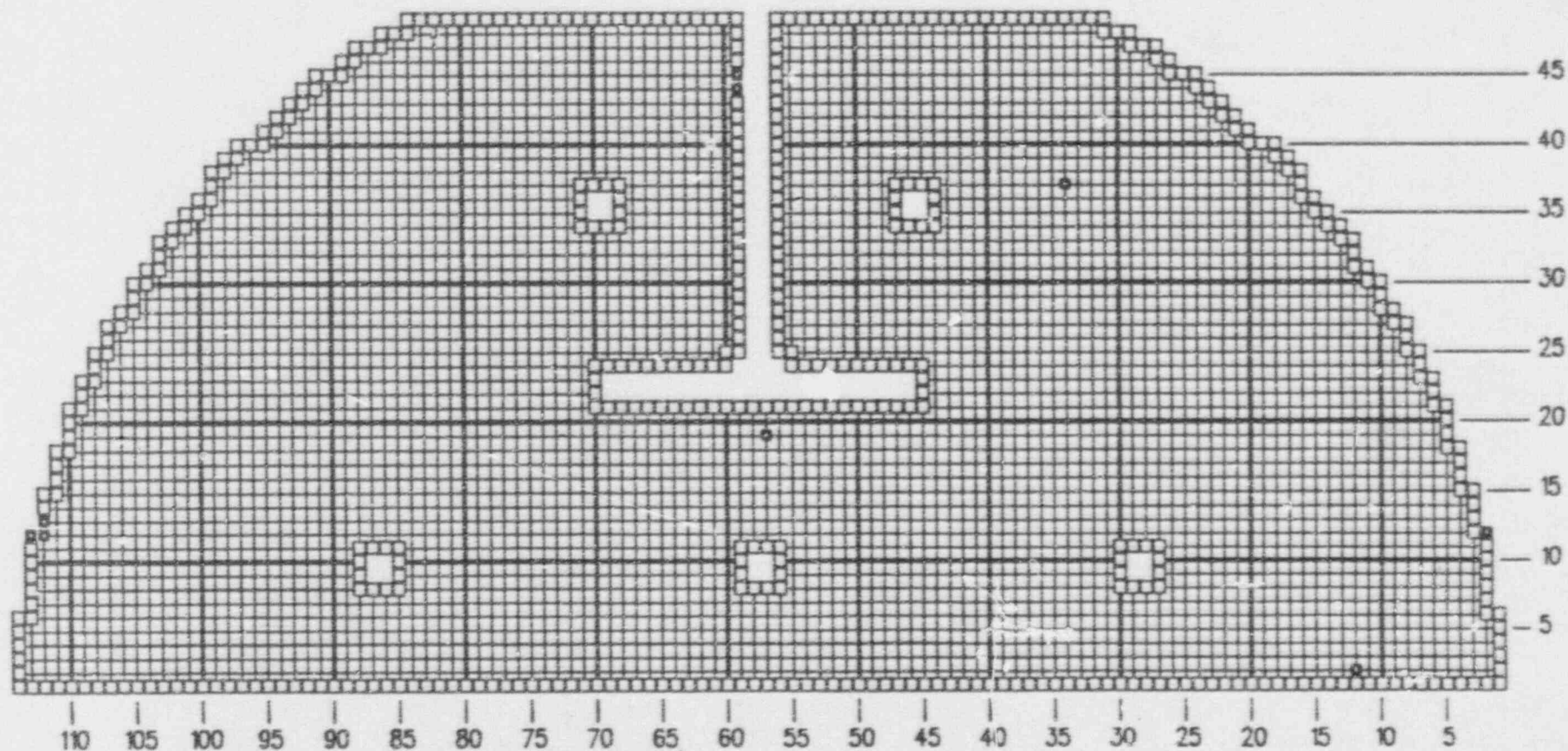
Braidwood Unit 1

CCE-A SERIES D4

05-02-1991

10:11 HRS.

SUPERTUBIN



# INDICATION DISTRIBUTION - HOT LEG

Braidwood Unit 1

CCE-A SERIES D4

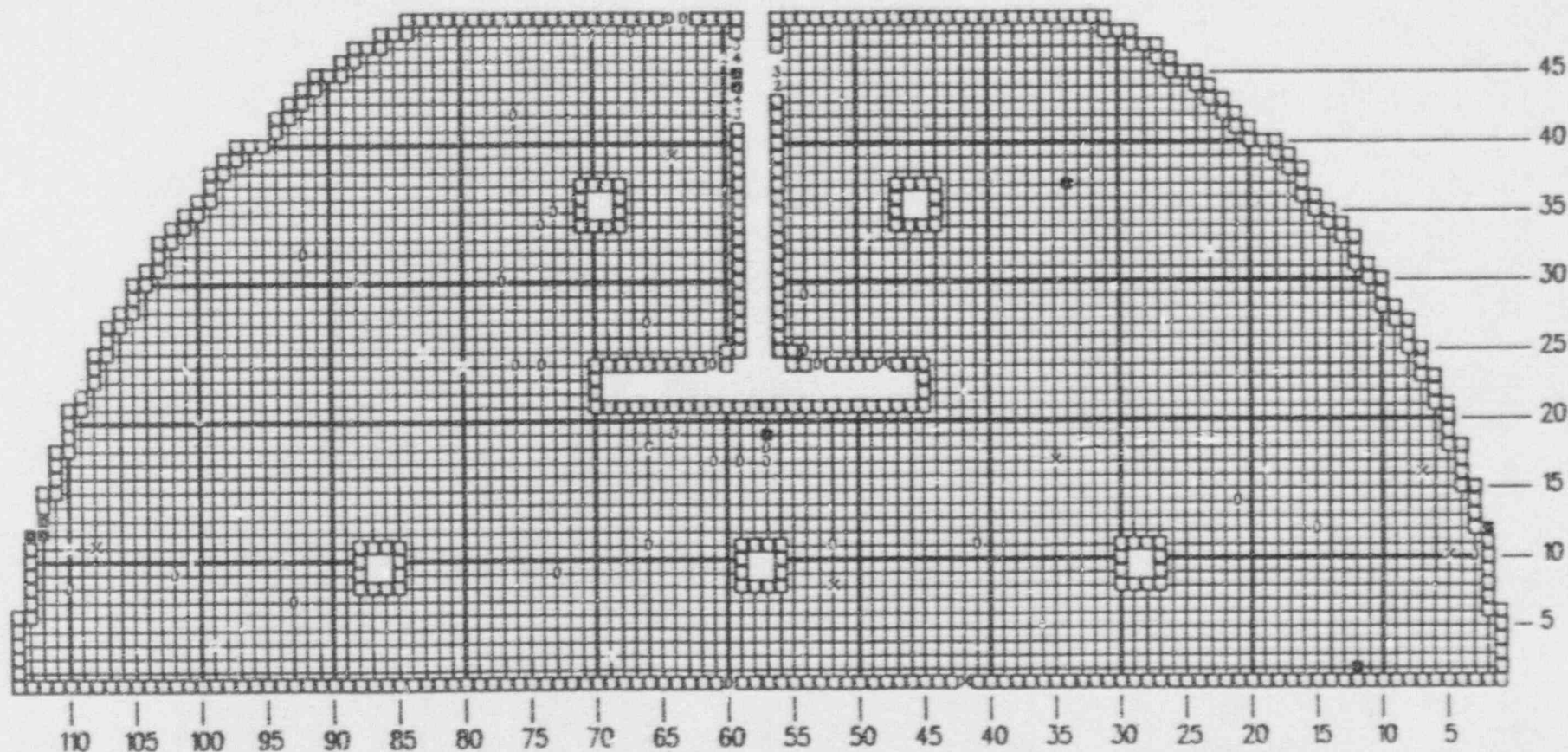
05-02-1991

10:09 HRS.

SUPERTUBIN



- X : 8 PLUGGABLE INDICATION SAI, MAI
- 4 : 2 40% TO 49% INDICATION
- 3 : 3 30% TO 39% INDICATION
- 2 : 3 20% TO 29% INDICATION
- 1 : 1 10% TO 19% INDICATION
- C : 1 SINGLE CIRCUMFERENTIAL IND.
- D : 31 DISTORTED INDICATION
- E : 4 MANUFACTURING BUFF MARK
- F : 3 INDICATION NOT REPORTABLE
- : 9 EXISTING PLUGGED TUBES



# INDICATION DISTRIBUTION - COLD LEG

Braidwood Unit 1

CCE-B SERIES D4

05-02-1991

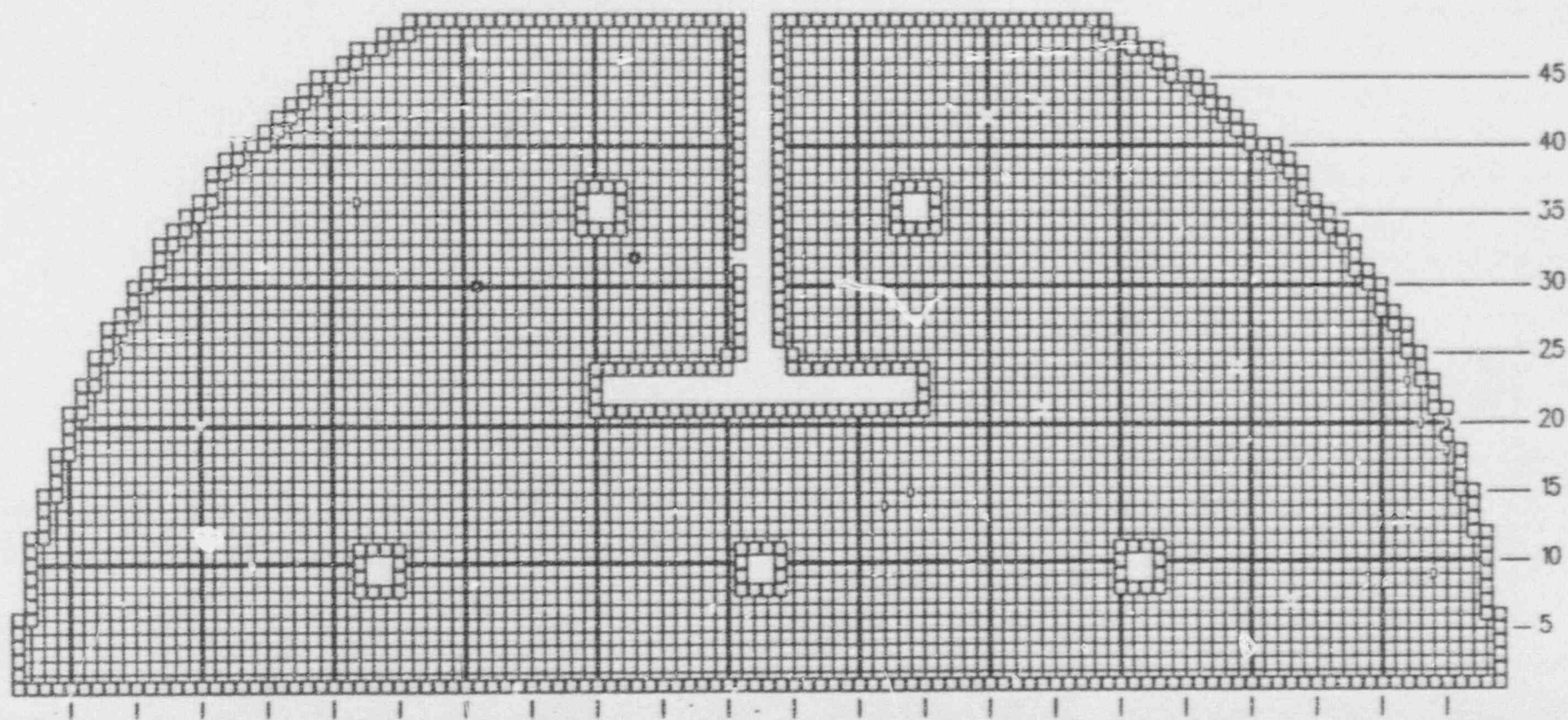
10:31 HRS.

SUPERTUBIN

D : 8 DISTORTED INDICATION

E : 10 EXISTING INDICATION  
F : 10 EXISTING INDICATION  
G : 10 EXISTING INDICATION  
H : 10 EXISTING INDICATION  
I : 10 EXISTING INDICATION  
J : 10 EXISTING INDICATION  
K : 10 EXISTING INDICATION  
L : 10 EXISTING INDICATION  
M : 10 EXISTING INDICATION  
N : 10 EXISTING INDICATION  
O : 10 EXISTING INDICATION  
P : 10 EXISTING INDICATION  
Q : 10 EXISTING INDICATION  
R : 10 EXISTING INDICATION  
S : 10 EXISTING INDICATION  
T : 10 EXISTING INDICATION  
U : 10 EXISTING INDICATION  
V : 10 EXISTING INDICATION  
W : 10 EXISTING INDICATION  
X : 10 EXISTING INDICATION  
Y : 10 EXISTING INDICATION  
Z : 10 EXISTING INDICATION

■ : 2 EXISTING PLUGGED TUBES





# INDICATION DISTRIBUTION - HOT LEG

Braidwood Unit 1

CCE-B SERIES D4

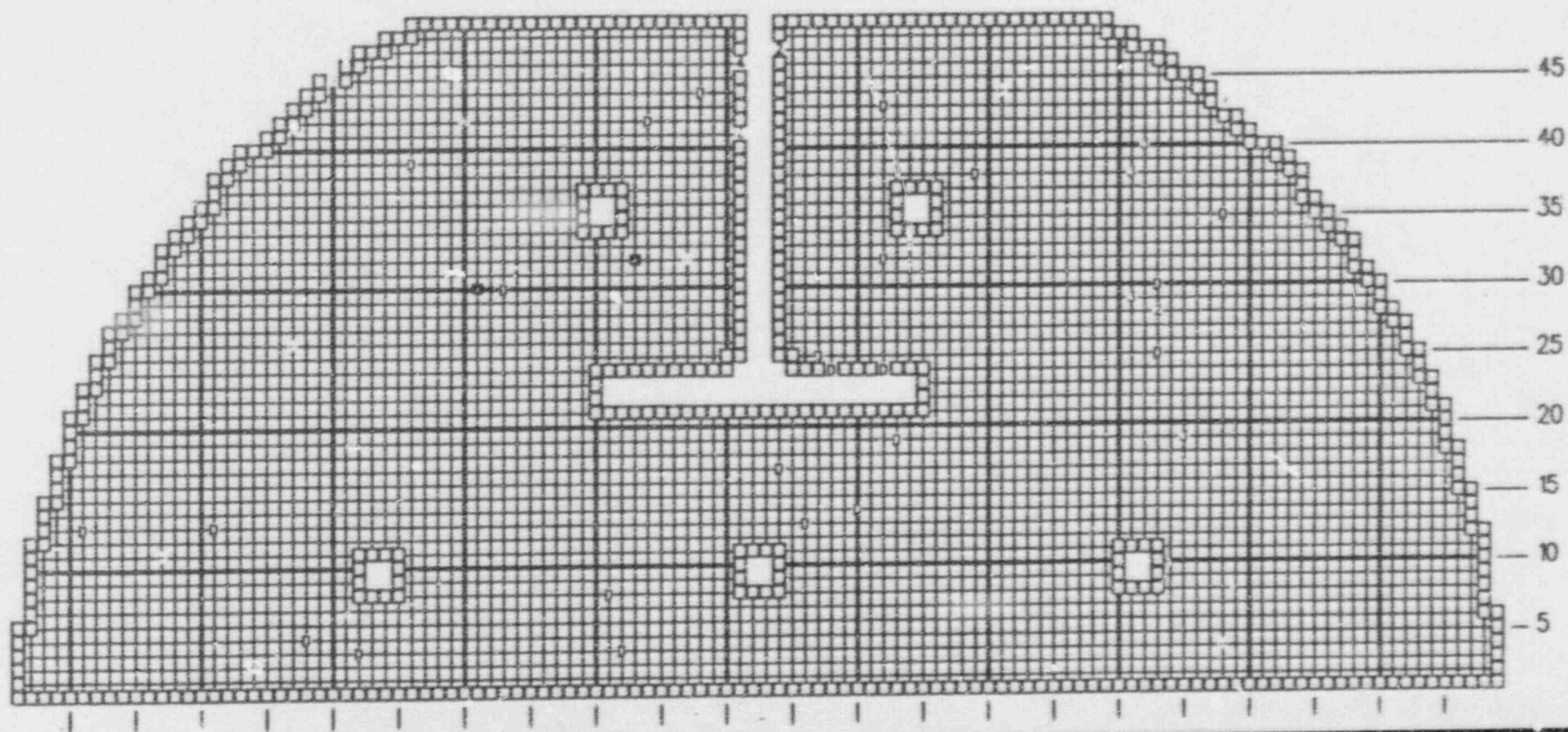
05-02-1991

10:29 HRS.

SUPERTUBIN



- 4 : 1 40% TO 49% INDICATIONS
- 3 : 4 30% TO 39% INDICATIONS
- 2 : 4 20% TO 29% INDICATIONS
- D : 23 DISTORTED INDICATIONS
- R : 5 INDICATION NOT REPORTABLE
- P : 4 MANUFACTURING BUFF MARK
- : 2 EXISTING PLUGGED TUBES



# INDICATION DISTRIBUTION - COLD LEG

Braidwood Unit 1

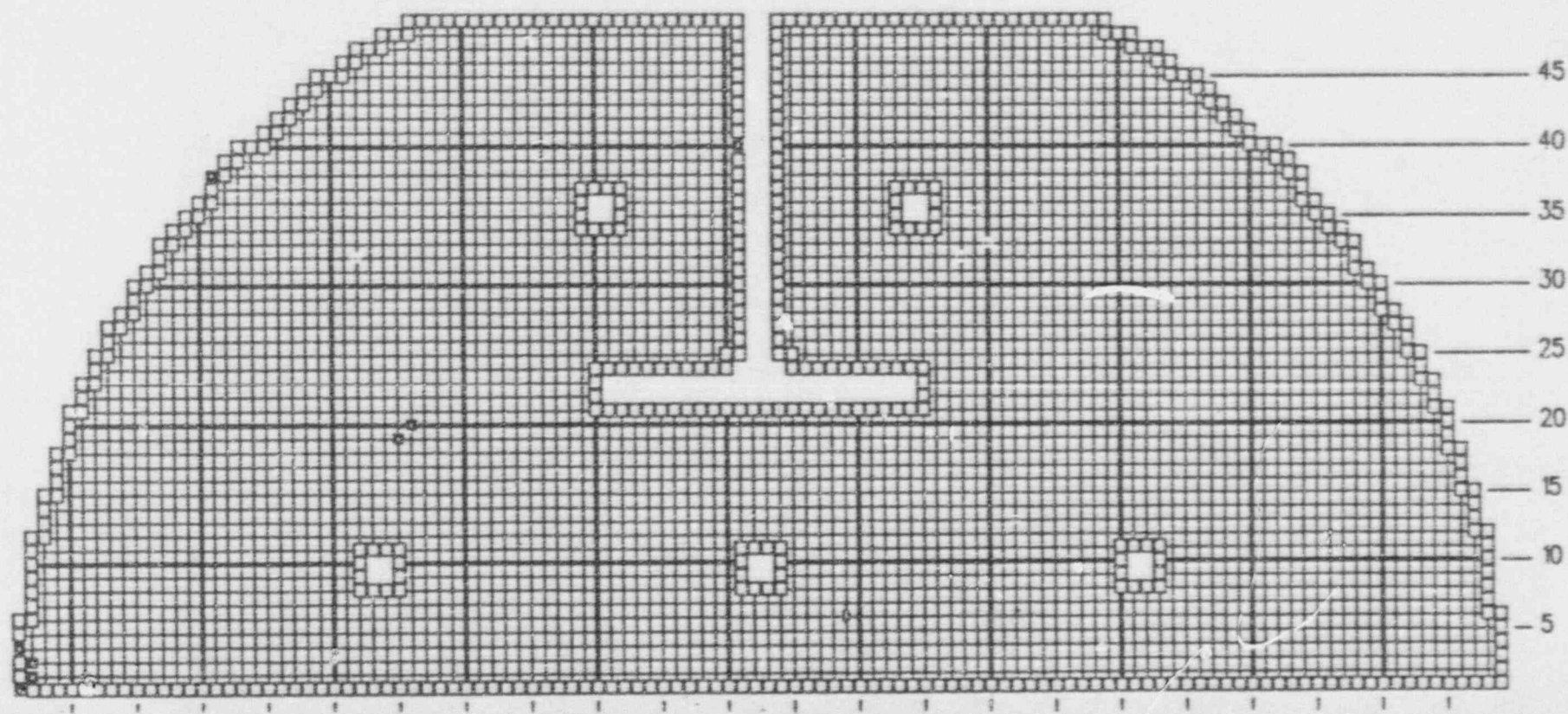
CCE-C SERIES D4

05-02-1991

09:51 HRS.

SUPERTUBIN

D : 1 DISTORTED INDICATION  
E : 1 MANUFACTURING BUFF MARK  
F : 2 INDICATION NOT REPORTABLE  
■ : 8 EXISTING PLUGGED TUBES



# INDICATION DISTRIBUTION - HOT !EG

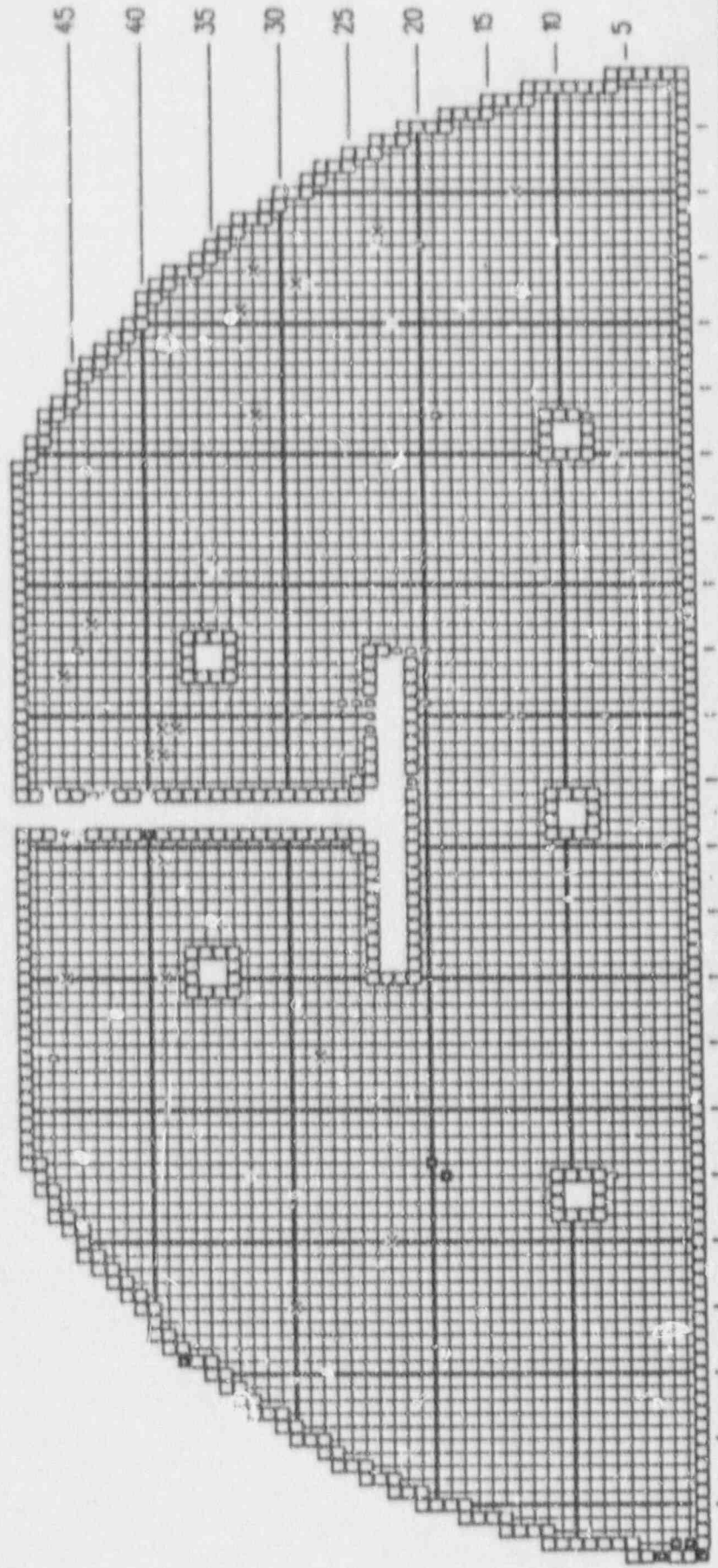
Braidwood Unit 1 COE-C SERIES D4

05-02-1991 09:49 HRS. SUPERTUBIN



18 PLUGGABLE INDICATIONS MAI,SAI  
 1 40% TO 49% INDICATIONS  
 1 50% TO 59% INDICATIONS  
 4 20% TO 29% INDICATIONS  
 1 60% TO 69% INDICATIONS  
 20 DISTORTED INDICATIONS  
 3 INDICATION NOT REPORTABLE  
 8 EXISTING PLUGGED TUBES

X 4 5 2 1 D B





# INDICATION DISTRIBUTION - COLD LEG

F : INDICATION NOT FOUND  
F : INDICATION NOT REPORTABLE  
■ : 1 EXISTING PLUGGED TUBE'S

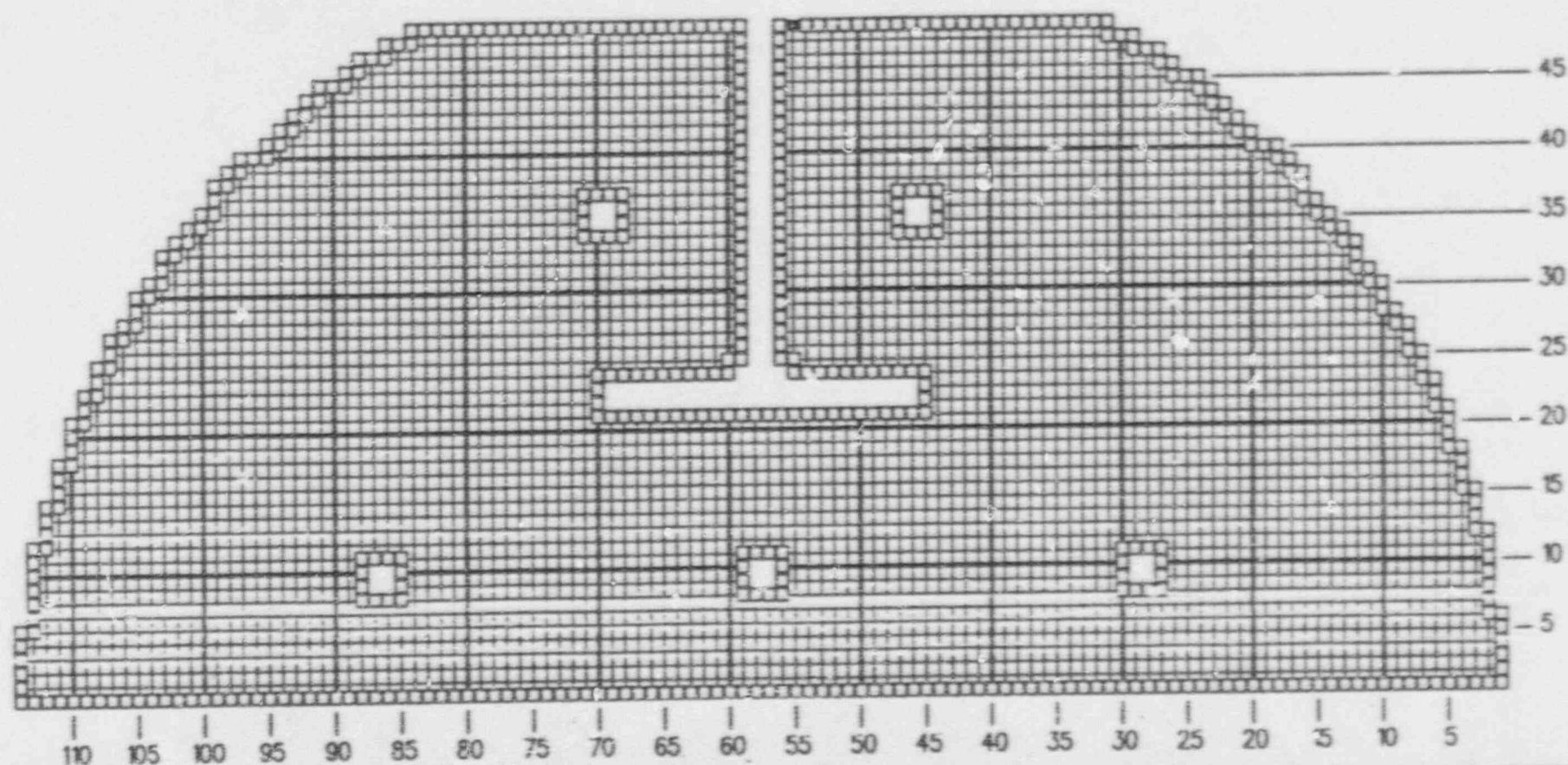
Braidwood Unit 1

CCE-D SERIES D4

05-02-1991

11:03 HRS.

SUPERTUBIN





# INDICATION DISTRIBUTION - HOT LEG

Braidwood Unit 1

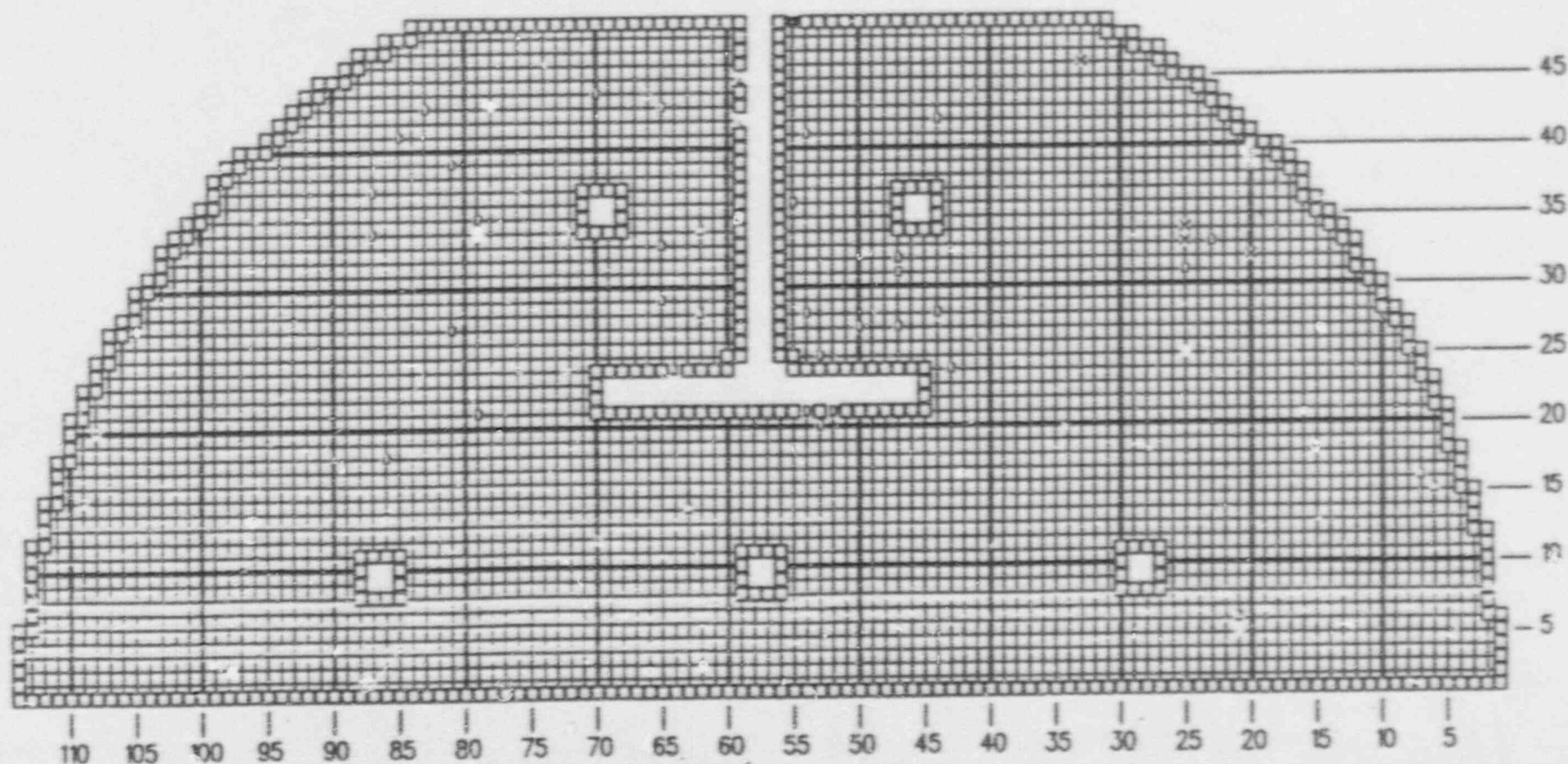
CCE-D SERIES D4

05-02-1991

10:57 HRS.

SUPERTUBIN

- X : 4 PLUGGABLE INDICATIONS MAI,SAI
- 3 : 7 30% TO 39% INDICATIONS
- 2 : 2 20% TO 29% INDICATIONS
- 1 : 1 10% TO 19% INDICATIONS
- D : 29 DISTORTED INDICATIONS
- : INDICATION NOT REPORTABLE
- : INDICATION NOT FOUND
- : 1 EXISTING PLUGGED TUBES



APPENDIX 2

SUPERTUBIN REPORT USER'S GUIDE

## SUPERTUBIN REPORT USERS' GUIDE

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### REPORT RECORD FIELD DESCRIPTIONS

1. LEG - origin of the test - the S/G bowl the fixture was in when the test was conducted
2. ROW, COL - COLUMN - tube identifier numbers - an X-Y coordinate system
3. PLAN - a number representing a set or sets of test extents and tube locations that define which tubes and what sections of these tubes will be tested \*
4. RE-B - REQUIRED BEGIN TEST - tube location where the tape recorder is to be turned on and the test is to begin - defined by PLAN
5. RE-E - REQUIRED END TEST - tube location where the tape recorder is to be turned off and the test is to end; typically one of the tube ends - defined by PLAN
6. CE-B - COMPLETED BEGIN TEST - tube location where the test actually began - tape recorder turned on
7. CE-E - COMPLETED END TEST - tube location where the test actually ended - tape recorder turned off
8. PROBE - diameter of probe used in test
9. TYPE - characters representing the TYPE of PROBE used, e.g., BBM, SFRM, etc.
10. IND - INDICATION - character codes and numerics that represent the analysis results of the data for the tube, e.g., NDD, 25%, etc. - this is the key field in the data record
11. LOCN - LOCATION - the location in the tube of the INDICATION called

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12. INCH1 - distance above or below LOCATION where the INDICATION is found
13. INCH2 - typically the distance above INCH1 that a particular INDICATION extends as in a copper deposit extending over a portion of a tube above a support plate - in special cases, INCH2 may represent other measurements as in F Star, and Cracking algorithm applications
14. CHAN - CHANNEL - describes the data channel used in determining the indication value listed in the INDICATION field
15. VOLTS and DEG - DEGREES - these describe the signal characteristics of the analysis result in the INDICATION field
16. MILS - thousandths of inches - used for tube dimension information, e.g., denting studies
17. TAPE - sequential number of the data cartridge containing the data that the INDICATION was called from
18. ANAL - ANALYST INITIALS - the initials of the analyst who analyzed the data reported in this record
19. COMMENTS - holds 50 character phrases that provide further meaning to the INDICATION in the record, e.g., retest extent remarks, etc.

### INDICATION TERM DESCRIPTIONS

The following are brief descriptions of the terms that can be found in the INDICATION field of SUPERTUBIN data records. These terms generally impart the key meaning to the data record. This meaning is supported by information in the other fields. These descriptions are not intended to be comprehensive from a technical analysis point of view. For further information concerning the meaning and use of these terms, you may consult the



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lead analyst on the job or the Westinghouse data analysis guidelines.

It is important to note the following definitions of terms used in these descriptions:

ANOMALY - A REPORTED TUBE CHARACTERISTIC THAT DOES NOT DEPICT POSSIBLE TUBE WALL LOSS OR TUBE WALL INTEGRITY DEGRADATION, E.G., D

INDICATION - AN ANALYSIS RESULT THAT DEPICTS A POSSIBLE TUBE WALL LOSS CONDITION OR TUBE WALL INTEGRITY DEGRADATION

DEFECT - AN INDICATION WHOSE VOLUME EQUALS OR EXCEEDS AN ESTABLISHED PLUGGING LIMIT

### TERMS:

1. 0AV, 1AV, 2AV, ... 8AV - # OF AVBS PRESENT - describes how many avb tube intersection signals were detected during avb geometry analysis - can also be used in describing signal arc length measured from a top support plate to the term used, e.g., 1AV, 2AV, etc.
2. <20 - LESS THAN 20% - (this term is made up of the characters "<", "2", and "0") - it means the "range" of tube wall loss from 1% to 19%
3. ADR - ABSOLUTE DRIFT RESPONSE - a condition where the absolute frequencies display drift into the indication plane - can at times be associated with IGA
4. ANF - ANOMALY NOT FOUND - indicates that a previously reported ANOMALY, from current inspection data or historical data, is not found in the data being analyzed
5. ANR - ANOMALY NOT REPORTABLE - indicates that an anomaly condition exists in the data being analyzed that is below the

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reportable criteria threshold for this specific inspection - can be used to address anomalies called in previous inspections that are still detectable but fall below current criteria

6. BDA - BAD DATA (retest) - the data for the specified tube is not acceptable for analysis due to poor signal quality - the tube will be retested to the required extent
7. BLG - BULGE - the tube has been deformed outward to an increased diameter condition from that of a nominal tube diameter expected in that area
8. COR - CORROSION - used in conjunction with avb geometry analysis to describe that based on signal characteristics, corrosion of the support plate appears to exist
9. CUD - COPPER DEPOSIT - the presence of copper deposits on the outside of the tube has been detected
10. DNT - DENT - the tube has been deformed inward to a reduced diameter condition from that of a nominal tube - often located at an interface such as a tube support plate
11. DI - DISTORTED INDICATION - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the existing signal characteristics
12. DRI - DISTORTED ROLL TRANSITION INDICATION - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the signal characteristics and is located at the roll transition
13. DRT - DISTORTED ROLL TRANSITION - a roll transition signal that is abnormal due to possible indication influence but that does not yet display clear DRI characteristics - it is noted for future reference
14. HAZ - HEAT AFFECTED ZONE - used to indicate the presence of the support plate heat treat zone - usually associated with a length measurement

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15. INC - INCOMPLETE - indicates that the test extent is incomplete - the actual extents, (CE-B) and/or (CE-E) do not meet the extents specified for the tube-test in the (RE-B) and (RE-E) fields
16. INF - INDICATION NOT FOUND - indicates that a previously reported INDICATION, from current inspection data or historical data, is not found in the data being analyzed - also used to address the case where a tube/signal is being retested for positive identification (PID) and the retest data does not show any signal present
17. INR - INDICATION NOT REPORTABLE - indicates that a very small tube wall loss condition exists in the data being analyzed that is below the reportable criteria threshold for this specific inspection - can be used to address indications called in previous inspections that are still detectable but fall below current criteria
18. IR - INCOMPLETE ROLL (sleeving) - condition where mandrel "slips" downward during the hard-rolling process - reported during sleeve geometry analysis
19. MAG - MAGNETITE - generally used in avb geometry analysis to describe support plate conditions where, based on signal characteristics, magnetite is believed to be present - magnetite may be related to the onset of corrosion and subsequent denting
20. MAI - MULTIPLE AXIAL INDICATION - describes multiple axially oriented indication signals from Rotating Pancake probe data
21. MBM - MANUFACTURING BUFF MARK - a tube wall loss condition due to a tube manufacturing process step - generally a relatively long and shallow loss area - remains constant and does not present any operating problems for the tube - noted for reference only
22. MCI - MULTIPLE CIRCUMFERENTIALLY ORIENTED INDICATION - describes multiple circumferentially oriented indication signals from Rotating Pancake probe data

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- 23. MMB - MULTIPLE MANUFACTURING BUFF MARKS - multiple MBM's over a length of tube - see definition above
- 24. NDD - NO DETECTABLE DEGRADATION - no tube wall loss or wall integrity degradation has been detected
- 25. NNL - NEW NULL LENGTH - used to indicate the presence of the support plate heat treat zone - usually associated with a length measurement
- 26. NT - NO TEST (retest) - for this tube, there is no data available for analysis on this data tape; however, the tube ROW, COLUMN is encoded on the tape
- 27. NTE - NO TUBE EXPANSION - used in analysis verification of the full tubesheet expansion process to describe a condition where the tubesheet is not expanded above the tack roll/lower roll - generally used in S/G preservice inspections
- 28. PDS - PILGERING DRIFT SIGNAL - a drift in the absolute signals at random elevations and generally only in one leg of a tube. These signals have been determined to result from the tube Pilgering process: stopping the process, removing the ID mandrel, loading a new tube hollow, reloading the ID mandrel, and restarting the process. This results in a minor change in the tube ID, approximately 1 to 1.5 mils on the diameter, and thus a change in tube wall thickness when the OD is surface ground. The signals always show an increase in wall thickness (negative drift) but may exhibit a decrease in wall thickness (positive drift) at the beginning of the signal. The signals are always long, from several inches to several feet, depending on how long it takes the Pilger process to return to the proper nominal ID.
- 29. PI - POSSIBLE INDICATION (retest) - generally used with 8X1 analysis, sometimes with bobbin analysis - describes a potential tube wall loss condition signal that typically requires a retest for verification - sometimes retested with a special probe, e.g., MRPC, etc.
- 30. PID - POSITIVE IDENTIFICATION - verification of a previously reported tube ROW COL identifier and signal - achieved through analysis of a second set of test data - typically



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used to verify pluggable tube signals - INF is used to describe the condition where a signal is not detectable upon analysis of the second set of data

31. PLG - PLUG - the tube is plugged from previous maintenance work and a plug has been visually verified as being in the tube end
32. PLP - POSSIBLE LOOSE PART - any eddy current signal that occurs in a section of tubing where such a signal is not expected. These signals are typically located above the top of the tubesheet in a tube near the periphery of the tube bundle. The tube signal may have dent, indication, or wear thinning characteristics. This signal may result from a foreign object contacting the tube during plant operation. If a foreign object is still near the tube it may be detectable with a low frequency.
33. PTE - PARTIAL TUBE EXPANSION - used in analysis verification of the full tubesheet expansion process to describe a condition where less than 100% of the tubesheet is expanded - generally used in S/G preservice inspections - this term is not to be used with the location of the expand transition with respect to the top of tubesheet - see TTH and TTL below
34. PTF - PARENT TUBE FLAW (sleeving) - a flaw detected by crosswound probe within the original tube (outside the sleeve) - reported during sleeve integrity analysis
35. PVN - PERMEABILITY VARIATION - a variance in the tube permeability that produces a signal that can mask other signals of interest
36. RST - RESTRICTED - indicates that the probe listed in the record would not physically pass the location specified
37. SAI - SINGLE AXIAL INDICATION - describes a single axially oriented indication signal from Rotating Pancake probe data
38. SCI - SINGLE CIRCUMFERENTIALLY ORIENTED INDICATION - describes a single circumferentially oriented indication signal from Rotating Pancake probe data

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- 39. SCM - SEE COMMENTS - instructs the reader to derive the meaning of the record from the text phrases in the COMMENTS field of the SUPERTUBIN data record - typically used for new and non-standard analysis results, e.g., avb geometry analysis that can not be handled with existing terms in this document
  
- 40. SLF - SLEEVE FLAW (sleeving) - a flaw detected by crosswound probe within an inserted sleeve - reported during sleeve integrity analysis
  
- 41. SLG - SLLDGE - secondary side feedwater deposits typically located on the top of the tubesheet and/or the top of support plates or baffles
  
- 42. SQR - SQUIRREL (pluggable) - describes a specific class of signals located in unexpanded tubesheet crevices that are unquantifiable with numeric percent values - can be associated with IGA
  
- 43. TIU - TUBE I.D. UNCERTAIN (retest) - indicates that the ROW and/or COL identifier for a given tube is in doubt and that the tube must be retested
  
- 44. TRN - TRANSITION - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet and signifies an acceptable transition height - generally used in S/G preservice inspections
  
- 45. TTH - TRANSITION TOO HIGH - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet - generally used in S/G preservice inspections
  
- 46. TTL - TRANSITION TOO LOW - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet - generally used in S/G preservice inspections
  
- 47. UDS - UNDEFINED SIGNAL - a signal that in the analyst's opinion does not at present represent tube wall loss - the

signal is reported for future review purposes

48. XHR - EXTRA SLEEVE HARD ROLL (sleeving) - pertains to sleeve analysis and describes a situation where more than the nominal number of hard rolls are detected

LOCATION TERMS DESCRIPTION

TERMS:

1. TEH, TEC - TUBE END HOT and COLD
2. TRH, TRC - TOP OF ROLL HOT and COLD (tube end roll)
3. TSH, TSC - TOP OF TUBESHEET HOT and COLD
4. BPH, BPC - BAFFLE PLATE HOT and COLD - (in certain S/G series, e.g., 51-F, 44-F, D, F, etc.)
5. SLEEVE LOCATIONS
  - LXH, LXC - lower expansion hot/cold
  - LRH, LRC - lower roll hot/cold
  - URH, URC - upper roll hot/cold
  - UXH, UXC - upper expansion hot/cold
  - STH, STC - sleeve top hot/cold
6. #H, #C - (# = NUMBER) of SUPPORT PLATE HOT and COLD, e.g., 3H, 4C, 7H, etc
7. TH, TC - TANGENT POINT HOT and COLD (location just above top support plate where bending begins)
8. AV1, AV2, AV3, AV4, AV5, AV6, ... - ANTI-VIBRATION BARS
9. V14, V23 - used in AVB geometry analysis to refer to the two AVB bars respectively
10. BW1, BW2, BW3 ... - BAT WINGS - CE S/G'S
11. VS1, VS2, VS3 ... - VERTICAL STRAPS - CE S/G'S
12. UB - describes area from TOP SUPPORT PLATE HOT to TOP SUPPORT



# SUPERTUBIN REPORT USERS' GUIDE

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PLATE COLD

## PROBE TYPE CODE DESCRIPTION TABLE

CODE	DESCRIPTION
EB	ECHORAM - xxx-BBM(S)
EJ	ECHORAM - xxx-BJFM
EF	ECHORAM - xxx-FSBM
ER	ECHORAM - xxx-RPC/URPC/2XRPC
EB	ECHORAM - xxx-BX1
ZS	ZETFC - A-xxx-SFRM
ZJ	ZETEC - A-xxx-BJRFM
ZR	ZETEC - B-xxx-FHPP/MRPC U-BEND
ZW	ZETEC - Hot Probe
ZB	ZETEC - 8C-xxxx (BX1 PROBE)

note: "xxx" represents the numeric diameter  
of the probe, e.g., .720, 680, etc.

END

REPORT RECORD FIELD DESCRIPTIONS

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INDICATION - AN ANALYSIS RESULT THAT DEPICTS A POSSIBLE TUBE WALL LOSS CONDITION OR TUBE WALL INTEGRITY DEGRADATION

DEFECT - AN INDICATION WHOSE VALUE EQUALS OR EXCEEDS AN ESTABLISHED PLUGGING LIMIT

### TERMS:

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reportable criteria threshold for this specific inspection - can be used to address anomalies called in previous inspections that are still detectable but fall below current criteria

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9. CUD - COPPER DEPOSIT - the presence of copper deposits on the outside of the tube has been detected
10. DNT - DENT - the tube has been deformed inward to a reduced diameter condition from that of a nominal tube - often located at an interface such as a tube support plate
11. DI - DISTORTED INDICATION - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the existing signal characteristics
12. DRI - DISTORTED ROLL TRANSITION INDICATION - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the signal characteristics and is located at the roll transition
13. DRT - DISTORTED ROLL TRANSITION - a roll transition signal that is abnormal due to possible indication influence but that does not yet display clear DRI characteristics - it is noted for future reference
14. HAZ - HEAT AFFECTED ZONE - used to indicate the presence of the support plate heat treat zone - usually associated with a length measurement

15. INC - INCOMPLETE - indicates that the test extent is incomplete - the actual extents, (CE-B) and/or (CE-E) do not meet the extents specified for the tube-test in the (RE-B) and (RE-E) fields
16. INF - INDICATION NOT FOUND - indicates that a previously reported INDICATION, from current inspection data or historical data, is not found in the data being analyzed - also used to address the case where a tube/signal is being retested for positive identification (PID) and the retest data does not show any signal present
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32. PLP - POSSIBLE LOOSE PART - any eddy current signal that occurs in a section of tubing where such a signal is not expected. These signals are typically located above the top of the tubesheet in a tube near the periphery of the tube bundle. The tube signal may have dent, indication, or wear thinning characteristics. This signal may result from a foreign object contacting the tube during plant operation. If a foreign object is still near the tube it may be detectable with a low frequency.
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36. RST - RESTRICTED - indicates that the probe listed in the record would not physically pass the location specified
37. SAI - SINGLE AXIAL INDICATION - describes a single axially oriented indication signal from Rotating Pancake probe data
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- 39. SCM - SEE COMMENTS - instructs the reader to derive the meaning of the record from the text phrases in the COMMENTS field of the SUPERTUBIN data record - typically used for new and non-standard analysis results, e.g., avb geometry analysis that can not be handled with existing terms in this document
  
- 40. SLF - SLEEVE FLAW (sleeving) - a flaw detected by crosswound probe within an inserted sleeve - reported during sleeve integrity analysis
  
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- 42. SQR - SQUIRREL (pluggable) - describes a specific class of signals located in unexpanded tubesheet crevices that are unquantifiable with numeric percent values - can be associated with IGA
  
- 43. TIU - TUBE I.D. UNCERTAIN (retest) - indicates that the ROW and/or COL identifier for a given tube is in doubt and that the tube must be retested
  
- 44. TRN - TRANSITION - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet and signifies an acceptable transition height - generally used in S/G preservice inspections
  
- 45. TTH - TRANSITION TOO HIGH - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet - generally used in S/G preservice inspections
  
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signal is reported for future review purposes

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## SUPERTUBIN REPORT USERS' GUIDE

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### LOCATION TERMS DESCRIPTION

#### TERMS:

1. TEH, TEC - TUBE END HOT and COLD
2. TRH, TRC - TOP OF ROLL HOT and COLD (tube end roll)
3. TSH, TSC - TOP OF TUBESHEET HOT and COLD
4. BPH, BPC - BAFFLE PLATE HOT and COLD - (in certain S/G series, e.g., 51-F, 44-F, D, F, etc.)
5. SLEEVE LOCATIONS
  - LXH, LXC - lower expansion hot/cold
  - LRH, LRC - lower roll hot/cold
  - URH, URC - upper roll hot/cold
  - UXH, UXC - upper expansion hot/cold
  - STH, STC - sleeve top hot/cold
6. #H, #C - (# = NUMBER) of SUPPORT PLATE HOT and COLD, e.g., 3H, 4C, 7H, etc
7. TH, TC - TANGENT POINT HOT and COLD (location just above top support plate where bending begins)
8. AV1, AV2, AV3, AV4, AV5, AV6, ... - ANTI-VIBRATION BARS
9. V14, V23 - used in AVB geometry analysis to refer to the two AVB bars respectively
10. BW1, BW2, BW3 ... - BAT WINGS - CE S/G'S
11. VS1, VS2, VS3 ... - VERTICAL STRAPS - CE S/G'S
12. UB - describes area from TOP SUPPORT PLATE HOT to TOP SUPPORT

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PLATE COLD

PROBE TYPE CODE DESCRIPTION TABLE

CODE	DESCRIPTION
EB	ECHORAM - xxx-BBM(S)
EJ	ECHORAM - xxx-BJFM
EF	ECHORAM - xxx-FSBM
ER	ECHORAM - xxx-RPC/URPC/2XRPC
EB	ECHORAM - xxx-BX1
ZS	ZETEC - A-xxx-SFRM
ZJ	ZETEC - A-xxx-BJRFM
ZR	ZETEC - B-xxx-FHPH/MRPC U-BEND
ZW	ZETEC - Hot Probe
ZB	ZETEC - BC-xxxx (BX1 PROBE)

note: "xxx" represents the numeric diameter of the probe, e.g., .720, 680, etc.

END



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### REPORT RECORD FIELD DESCRIPTIONS

1. LEG - origin of the test - the S/G bowl the fixture was in when the test was conducted
2. ROW, COL - COLUMN - tube identifier numbers - an X-Y coordinate system
3. PLAN - a number representing a set or sets of test extents and tube locations that define which tubes and what sections of these tubes will be tested
4. RE-B - REQUIRED BEGIN TEST - tube location where the tape recorder is to be turned on and the test is to begin - defined by PLAN
5. RE-E - REQUIRED END TEST - tube location where the tape recorder is to be turned off and the test is to end; typically one of the tube ends - defined by PLAN
6. CE-B - COMPLETED BEGIN TEST - tube location where the test actually began - tape recorder turned on
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8. PROBE - diameter of probe used in test
9. TYPE - characters representing the TYPE of PROBE used, e.g., BBM, SFRM, etc.
10. IND - INDICATION - character codes and numerics that represent the analysis results of the data for the tube, e.g., NDD, 25%, etc. - this is the key field in the data record
11. LOCN - LOCATION - the location in the tube of the INDICATION called

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12. INCH1 - distance above or below LOCATION where the INDICATION is found
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14. CHAN - CHANNEL - describes the data channel used in determining the indication value listed in the INDICATION field
15. VOLTS and DEG - DEGREES - these describe the signal characteristics of the analysis result in the INDICATION field
16. MILS - thousandths of inches - used for tube dimension information, e.g., denting studies
17. TAPE - sequential number of the data cartridge containing the data that the INDICATION was called from
18. ANAL - ANALYST INITIALS - the initials of the analyst who analyzed the data reported in this record
19. COMMENTS - holds 50 character phrases that provide further meaning to the INDICATION in the record, e.g., retest extent remarks, etc.

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The following are brief descriptions of the terms that can be found in the INDICATION field of SUPERTUBIN data records. These terms generally impart the key meaning to the data record. This meaning is supported by information in the other fields. These descriptions are not intended to be comprehensive from a technical analysis point of view. For further information concerning the meaning and use of these terms, you may consult the

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It is important to note the following definitions of terms used in these descriptions:

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TERMS:

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PLATE COLD

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ZR	ZETEC - B-xxx-FHPH/MRPC U-BEND
ZW	ZETEC - Hot Probe
ZB	ZETEC - 8C-xxxx (BX1 PROBE)

note: "xxx" represents the numeric diameter  
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DEFECT - AN INDICATION WHOSE VALUE EQUALS OR EXCEEDS AN ESTABLISHED PLUGGING LIMIT

### TERMS:

1. 0AV, 1AV, 2AV, ... 8AV - # OF AVBS PRESENT - describes how many avb tube intersection signals were detected during avb geometry analysis - can also be used in describing signal arc length measured from a top support plate to the term used, e.g., 1AV, 2AV, etc.
2. <20 - LESS THAN 20% - (this term is made up of the characters "<", "2", and "0") - it means the "range" of tube wall loss from 1% to 19%
3. ADR - ABSOLUTE DRIFT RESPONSE - a condition where the absolute frequencies display drift into the indication plane - can at times be associated with IGA
4. ANF - ANOMALY NOT FOUND - indicates that a previously reported ANOMALY, from current inspection data or historical data, is not found in the data being analyzed
5. ANR - ANOMALY NOT REPORTABLE - indicates that an anomaly condition exists in the data being analyzed that is below the

## SUPERTUBIN REPORT USERS' GUIDE

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reportable criteria threshold for this specific inspection - can be used to address anomalies called in previous inspections that are still detectable but fall below current criteria

6. BDA - BAD DATA (retest) - the data for the specified tube is not acceptable for analysis due to poor signal quality - the tube will be retested to the required extent
7. BLG - BULGE - the tube has been deformed outward to an increased diameter condition from that of a nominal tube diameter expected in that area
8. COR - CORROSION - used in conjunction with avb geometry analysis to describe that based on signal characteristics, corrosion of the support plate appears to exist
9. CUD - COPPER DEPOSIT - the presence of copper deposits on the outside of the tube has been detected
10. DNT - DENT - the tube has been deformed inward to a reduced diameter condition from that of a nominal tube - often located at an interface such as a tube support plate
11. DI - DISTORTED INDICATION - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the existing signal characteristics
12. DRI - DISTORTED ROLL TRANSITION INDICATION - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the signal characteristics and is located at the roll transition
13. DRT - DISTORTED ROLL TRANSITION - a roll transition signal that is abnormal due to possible indication influence but that does not yet display clear DRI characteristics - it is noted for future reference
14. HAZ - HEAT AFFECTED ZONE - used to indicate the presence of the support plate heat treat zone - usually associated with a length measurement

15. INC - INCOMPLETE - indicates that the test extent is incomplete - the actual extents, (CE-B) and/or (CE-E) do not meet the extents specified for the tube-test in the (RE-D) and (RE-E) fields
16. INF - INDICATION NOT FOUND - indicates that a previously reported INDICATION, from current inspection data or historical data, is not found in the data being analyzed - also used to address the case where a tube/signal is being retested for positive identification (PID) and the retest data does not show any signal present
17. INR - INDICATION NOT REPORTABLE - indicates that a very small tube wall loss condition exists in the data being analyzed that is below the reportable criteria threshold for this specific inspection - can be used to address indications called in previous inspections that are still detectable but fall below current criteria
18. IR - INCOMPLETE ROLL (sleeving) - condition where mandrel "slips" downward during the hard-rolling process - reported during sleeve geometry analysis
19. MAG - MAGNETITE - generally used in avb geometry analysis to describe support plate conditions where, based on signal characteristics, magnetite is believed to be present - magnetite may be related to the onset of corrosion and subsequent denting
20. MAI - MULTIPLE AXIAL INDICATION - describes multiple axially oriented indication signals from Rotating Pancake probe data
21. MBM - MANUFACTURING BUFF MARK - a tube wall loss condition due to a tube manufacturing process step - generally a relatively long and shallow loss area - remains constant and does not present any operating problems for the tube - noted for reference only
22. MCI - MULTIPLE CIRCUMFERENTIALLY ORIENTED INDICATION - describes multiple circumferentially oriented indication signals from Rotating Pancake probe data



## SUPERTUBIN REPORT USERS' GUIDE

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23. MMB - MULTIPLE MANUFACTURING BUFF MARKS - multiple MBM's over a length of tube - see definition above
24. NDD - NO DETECTABLE DEGRADATION - no tube wall loss or wall integrity degradation has been detected
25. NNL - NEW NULL LENGTH - used to indicate the presence of the support plate heat treat zone - usually associated with a length measurement
26. NT - NO TEST (retest) - for this tube, there is no data available for analysis on this data tape; however, the tube ROW, COLUMN is encoded on the tape
27. NTE - NO TUBE EXPANSION - used in analysis verification of the full tubesheet expansion process to describe a condition where the tubesheet is not expanded above the tack roll/lower roll - generally used in S/G preservice inspections
28. PDS - PILGERING DRIFT SIGNAL - a drift in the absolute signals at random elevations and generally only in one leg of a tube. These signals have been determined to result from the tube Pilgering process: stopping the process, removing the ID mandrel, loading a new tube hollow, reloading the ID mandrel, and restarting the process. This results in a minor change in the tube ID, approximately 1 to 1.5 mils on the diameter, and thus a change in tube wall thickness when the OD is surface ground. The signals always show an increase in wall thickness (negative drift) but may exhibit a decrease in wall thickness (positive drift) at the beginning of the signal. The signals are always long, from several inches to several feet, depending on how long it takes the Pilger process to return to the proper nominal ID.
29. PI - POSSIBLE INDICATION (retest) - generally used with 8X1 analysis, sometimes with bobbin analysis - describes a potential tube wall loss condition signal that typically requires a retest for verification - sometimes retested with a special probe, e.g., MRPC, etc.
30. PID - POSITIVE IDENTIFICATION - verification of a previously reported tube ROW COL identifier and signal - achieved through analysis of a second set of test data - typically

used to verify pluggable tube signals - INF is used to describe the condition where a signal is not detectable upon analysis of the second set of data

31. PLG - PLUG - the tube is plugged from previous maintenance work and a plug has been visually verified as being in the tube end
32. PLP - POSSIBLE LOOSE PART - any eddy current signal that occurs in a section of tubing where such a signal is not expected. These signals are typically located above the top of the tubesheet in a tube near the periphery of the tube bundle. The tube signal may have dent, indication, or wear thinning characteristics. This signal may result from a foreign object contacting the tube during plant operation. If a foreign object is still near the tube it may be detectable with a low frequency.
33. PTE - PARTIAL TUBE EXPANSION - used in analysis verification of the full tubesheet expansion process to describe a condition where less than 100% of the tubesheet is expanded - generally used in S/G preservice inspections - this term is not to be used with the location of the expand transition with respect to the top of tubesheet - see TTH and TTL below
34. PTF - PARENT TUBE FLAW (sleeving) - a flaw detected by crosswound probe within the original tube (outside the sleeve) - reported during sleeve integrity analysis
35. PVN - PERMEABILITY VARIATION - a variance in the tube permeability that produces a signal that can mask other signals of interest
36. RST - RESTRICTED - indicates that the probe listed in the record would not physically pass the location specified
37. SAI - SINGLE AXIAL INDICATION - describes a single axially oriented indication signal from Rotating Pancake probe data
38. SCI - SINGLE CIRCUMFERENTIALLY ORIENTED INDICATION - describes a single circumferentially oriented indication signal from Rotating Pancake probe data

## SUPERTUBIN REPORT USERS' GUIDE

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- 39. SCM - SEE COMMENTS - instructs the reader to derive the meaning of the record from the text phrases in the COMMENTS field of the SUPERTUBIN data record - typically used for new and non-standard analysis results, e.g., avb geometry analysis that can not be handled with existing terms in this document
- 40. SLF - SLEEVE FLAW (sleeving) - a flaw detected by crosswound probe within an inserted sleeve - reported during sleeve integrity analysis
- 41. SLG - SLUDGE - secondary side feedwater deposits typically located on the top of the tubesheet and/or the top of support plates or baffles
- 42. SQR - SQUIRREL (pluggable) - describes a specific class of signals located in unexpanded tubesheet crevices that are unquantifiable with numeric percent values - can be associated with IGA
- 43. TIU - TUBE I.D. UNCERTAIN (retest) - indicates that the ROW and/or COL identifier for a given tube is in doubt and that the tube must be retested
- 44. TRN - TRANSITION - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet and signifies an acceptable transition height - generally used in S/G preservice inspections
- 45. TTH - TRANSITION TOO HIGH - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet - generally used in S/G preservice inspections
- 46. TTL - TRANSITION TOO LOW - used in analysis verification of the full tubesheet expansion process to describe the location of the tube expansion transition with respect to the top of tubesheet - generally used in S/G preservice inspections
- 47. UDS - UNDEFINED SIGNAL - a signal that in the analyst's opinion does not at present represent tube wall loss - the

signal is reported for future review purposes

48. XHR - EXTRA SLEEVE HARD ROLL (sleeving) - pertains to sleeve analysis and describes a situation where more than the nominal number of hard rolls are detected



## SUPERTUBIN REPORT USERS' GUIDE

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### LOCATION TERMS DESCRIPTION

#### TERMS:

1. TEH, TEC - TUBE END HOT and COLD
2. TRH, TRC - TOP OF ROLL HOT and COLD (tube end roll)
3. TSH, TSC - TOP OF TUBESHEET HOT and COLD
4. BPH, BPC - BAFFLE PLATE HOT and COLD - (in certain S/G series, e.g., 51-F, 44-F, D, F, etc.)
5. SLEEVE LOCATIONS
  - LXH, LXC - lower expansion hot/cold
  - LRH, LRC - lower roll hot/cold
  - URH, URC - upper roll hot/cold
  - UXH, UXC - upper expansion hot/cold
  - STH, STC - sleeve top hot/cold
6. #H, #C - (# = NUMBER) of SUPPORT PLATE HOT and COLD, e.g., 3H, 4C, 7H, etc
7. TH, TC - TANGENT POINT HOT and COLD (location just above top support plate where bending begins)
8. AV1, AV2, AV3, AV4, AV5, AV6, ... - ANTI-VIBRATION BARS
9. V14, V23 - used in AVB geometry analysis to refer to the two AVB bars respectively
10. BW1, BW2, BW3 ... - BAT WINGS - CE S/G'S
11. VS1, VS2, VS3 ... - VERTICAL STRAPS - CE S/G'S
12. UB - describes area from TOP SUPPORT PLATE HOT to TOP SUPPORT

# SUPERTUBIN REPORT USERS' GUIDE

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PLATE COLD

PROBE TYPE CODE DESCRIPTION TABLE

CODE	DESCRIPTION
EB	ECHORAM - xxx-BBM(S)
EJ	ECHORAM - xxx-BJFM
EF	ECHORAM - xxx-FSBM
ER	ECHORAM - xxx-RPC/URPC/2XRPC
EB	ECHORAM - xxx-8X1
ZS	ZETEC - A-xxx-SFRM
ZJ	ZETEC - A-xxx-BJRFM
ZR	ZETEC - B-xxx-FHPPH/URPC U-BEND
ZW	ZETEC - Hot Probe
Z8	ZETEC - 8C-xxxx (8X1 PROBE)

note: "xxx" represents the numeric diameter  
of the probe, e.g., .720, 680, etc.

END

APPENDIX 3

EDDY CURRENT INDICATION LISTING

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: Apr-93

1-May-93 11:28

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE	COMMENTS
89-Sep	13	10	1	TEC	TEH	610-EF	62	3H	.00	.00	1	1.39	110	0	RESULT OF DISCREPANCY RESOLUTION
	13	10													IRETEST FOR POSITIVE I.D.
	13	10	1	TEC	TEH	610-EF	PID	3H	.00	.00	R1	1.40	75	50	RESULT OF DISCREPANCY RESOLUTION
	13	10													)))) POSITIVE I.D. ESTABLISHED <<<<
	13	10	4	3H	3H	RPC-2R	SAI	3H	.00	.00	1	1.19	130	52	IRETEST FOR POSITIVE I.D.
	13	10	4	3H	3H	RPC-2R	LXW	3H	400.0	195.0	R1	100.00	33	52	
	13	10	4	3H	3H	RPC-23	SAI	3H	.02	.00	1	.86	247	55	IRETEST FOR POSITIVE I.D.
89-Sep	13	10	0	TEH	TEC	610-EF	2AV				6			13	
89-Sep	23	13	1	10C	TEH	610-EF	53	3H	.00	.00	R1	.59	99	27	RESULT OF DISCREPANCY RESOLUTION
	23	13													IRETEST FOR POSITIVE I.D.
	23	13	1			610-EF	PID	3H	.00	.00	R1	.60	98	50	)))) POSITIVE I.D. ESTABLISHED <<<<
	23	13	4	3H	3H	RPC-2R	SAI	3H	.00	.00	2	2.16	103	52	IRETEST FOR POSITIVE I.D.
	23	13	4	3H	3H	RPC-2R	LXW	3H	352.0	204.0	R1	100.00	48	52	
	23	13	4	3H	3H	RPC-23	SAI	3H	.00	.00	1	.28	111	55	IRETEST FOR POSITIVE I.D.
	23	13	4	3H	3H	RPC-23	LXW	3H	150.0	139.0	1	100.00	24	55	
89-Sep	23	13	0	TEH	TEC	610-2A	NDD				1			51	
89-Sep	20	14	1	TEC	TEH	610-EF	DI	3H	.00	.00	1	.45	100	0	
	20	14	4	3H	3H	RPC-2R	NDD				1			52	
	20	14	0	TEH	TEC	610-2A	NDD				1			51	
89-Sep	23	14	1	TEC	TEH	610-EF	24	3H	.00	.00	1	.56	148	0	RESULT OF DISCREPANCY RESOLUTION
	23	14	4	3H	3H	RPC-2R	NDD				1			52	
	23	14	4	3H	3H	RPC-23	NDD				1			55	
	23	14	0	TEH	TEC	610-2A	NDD				1			51	
89-Sep	32	16	1	TEC	TEH	610-EF	37	3H	.00	.00	1	.64	137	0	RESULT OF DISCREPANCY RESOLUTION
	32	16	4	3H	3H	RPC-2R	SAI	3H	.00	.00	2	3.53	104	52	IRETEST FOR POSITIVE I.D.
	32	16	4	3H	3H	RPC-2R	LXW	3H	399.0	273.0	R1	100.00	47	52	
	32	16	4	3H	3H	RPC-2R	PID	3H	.00	.00	2	3.23	61	54	)))) POSITIVE I.D. ESTABLISHED <<<<
	32	16	4	3H	3H	RPC-23	SAI	3H	.00	.00	1	.68	282	55	IRETEST FOR POSITIVE I.D.
	32	16	4	3H	3H	RPC-23	LXW	3H	692.0	172.0	1	100.00	29	55	
89-Sep	32	16	0	TEH	TEC	610-2A	NDD				1			52	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: Apr-91

1-Nov 91 11:20

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEL	TAPE1	COMMENTS
	28	17	1	TEC	TEH	610-EF INR	TEH		20.12	.00	M1				RESULT OF LAB
89-Sep	28	17	0	TEH	TEC	610-2A DI	TEH		20.12	.00	M1	3.12	33	52	
89-Sep	28	17	0	TSH	TEH	RPC-EB MDD					1			93	
=====															
	29	17	1	11C	TEH	610-EF	86	3H	.00	.00	1	9.30	73	26	RESULT OF DISCREPANCY RESOLUTION
	29	17													IRETEST FOR POSITIVE I.D.
	29	17	1	11C	TEH	610-EF PID	3H		.00	.00	M1	9.73	52	50	)))) POSITIVE I.D. ESTABLISHED <<<<
	29	17	4	3H	3H	RPC-2R S&I	3H		.00	.00	1	5.20	64	52	IRETEST FOR POSITIVE I.D.
	29	17	4	3H	3H	RPC-2R LXW	3H	598.0	239.0	M1	100.00	41	52		
	29	17	4	3H	3H	RPC-23 S&I	3H		.00	.00	1	5.37	41	55	IRETEST FOR POSITIVE I.D.
	29	17	4	3H	3H	RPC-23 LXW	3H	500.0	256.0	1	100.00	44	55		
89-Sep	29	17	0	TEH	TEC	610-2A MDD					1			52	
=====															
	33	19	1	11C	TEH	610-EF	43	3H	.00	.00	M1	.75	100	26	RESULT OF DISCREPANCY RESOLUTION
	33	19													IRETEST FOR POSITIVE I.D.
	33	19	1	11C	TEH	610-EF PID	3H		.00	.00	M1	.79	114	50	RESULT OF DISCREPANCY RESOLUTION
	33	19													)))) POSITIVE I.D. ESTABLISHED <<<<
	33	19	4	3H	3H	RPC-2R S&I	3H		.00	.00	2	2.81	52	52	IRETEST FOR POSITIVE I.D.
	33	19	4	3H	3H	RPC-2R LXW	3H	376.0	217.0	M1	100.00	37	52		
	33	19	4	3H	3H	RPC-23 S&I	3H		.00	.00	1	.77		55	IRETEST FOR POSITIVE I.D.
	33	19	4	3H	3H	RPC-23 LXW	3H		.00	156.0	1	100.00	24	55	
89-Sep	33	19	0	TEH	TEC	610-2A MDD					1			53	
=====															
	22	20	1	11C	TEH	610-EF	18	3H	.00	.00	1	.42	155	26	
	22	20	4	3H	3H	RPC-2R MDD					1			52	
	22	20	4	3H	3H	RPC-23 MDD					1			55	
89-Sep	22	20	0	TEH	TEC	610-2S MDD					1			55	
=====															
	8	27	1	TEC	TEH	610-EF DI	3H		.00	.00	1	.57	115	11	
	8	27	4	3H	3H	RPC-2R MDD					1			52	
89-Sep	8	27	0	TEH	TEC	610-EB OHU					6			14	
=====															
	19	27	1	11C	TEH	610-EF DI	5H		.00	.00	M1	.65	68	26	RESULT OF DISCREPANCY RESOLUTION
	19	27	5	5H	5H	RPC-2R MDD					1			53	
	19	27	4	3H	3H	RPC-2R MDD					1			53	
	19	27	10	1H	TSH	RPC-2R MDD					1			53	
89-Sep	19	27	0	TEH	TEC	610-2A MDD					1			50	
=====															
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEL	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: No. 91

1-Nov 91 11120

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	32	27	1	11C	TEH	610-EF	74	3H	.00	.00	1	.77	94	25	RESULT OF DISCREPANCY RESOLUTION
	32	27													IRETEST FOR POSITIVE I.D.
	32	27	1	11C	TEH	610-EF	50	5H	.00	.00	1	.59	116	25	RESULT OF DISCREPANCY RESOLUTION
	32	27													IRETEST FOR POSITIVE I.D.
	32	27	1	11C	TEH	610-EF	PI0	3H	.00	.00	N1	1.00	00	50	RESULT OF DISCREPANCY RESOLUTION
	32	27													))))> POSITIVE I.D. ESTABLISHED <<<<
	32	27	5	5H	5H	RPC-2R	N00				1			53	
	32	27	10	1H	TSH	RPC-2R	N00				1			53	
	32	27	4	3H	3H	RPC-2R	N01	3H	.00	.00	2	2.10	65	53	IRETEST FOR POSITIVE I.D.
	32	27	4	3H	3H	RPC-2R	LXW	3H	416.0	417.0	N1	100.00	72	53	
	32	27	5	5H	5H	RPC-23	N00				1			55	
	32	27	4	3H	3H	RPC-23	N01	3H	.00	.00	4	1.91	331	55	IRETEST FOR POSITIVE I.D.
	32	27	4	3H	3H	RPC-23	LXW	3H	600.0	172.0	1	100.00	29	55	
89-Sep	32	27	0	TEH	TEC	610-2A	N00				1			58	

	35	39	1	TEC	TEH	610-EF	IMR	TEH	18.00	.00	1			15	RESULT OF LAR
89-Sep	35	39	0	TEH	TEC	610-EB	DI	TEH	10.00	.00	N1	3.01	142	65	RESULT OF DISCREPANCY RESOLUTION
89-Sep	35	39	0	TSH	TEH	RPC-EB	N00				1			93	

	33	40	1	TEC	TEH	610-EF	IMR	TEC	19.33	.00	N1			14	
89-Sep	33	40	0	TEH	TEC	610-EB	DI	TEC	19.30	.00	N1	1.16	113	66	RESULT OF DISCREPANCY RESOLUTION
89-Sep	33	40	0	TSC	TEC	RPC-2A	N00				1			79	

	32	42	1	TEC	TEH	610-EF	IMR	TEC	10.38	.00	1			15	RESULT OF LAR
89-Sep	32	42	0	TEH	TEC	610-EB	DI	TEC	10.38	.00	N1	2.15	42	67	RESULT OF DISCREPANCY RESOLUTION
89-Sep	32	42	0	TSC	TEC	RPC-2A	N00				1			79	

	44	43	1	TEC	TEH	610-EF	DI	3H	.00	.00	N1	.89	100	15	RESULT OF DISCREPANCY RESOLUTION
	44	43	4	3H	3H	RPC-2R	SAI	3H	.00	.00	1	1.00	102	53	IRETEST FOR POSITIVE I.D.
	44	43	4	3H	3H	RPC-2R	LXW	3H	506.0	200.0	N1	100.00	34	53	
	44	43	4	3H	3H	RPC-2R	PI0	3H	.00	.00	1	.82	20	54	))))> POSITIVE I.D. ESTABLISHED <<<<
	44	43	4	3H	3H	RPC-23	SAI	3H	.00	.00	1	19.61	95	55	IRETEST FOR POSITIVE I.D.
	44	43	4	3H	3H	RPC-23	LXW	3H	526.0	172.0	1	100.00	29	55	
89-Sep	44	43	0	TEH	TEC	610-EB	N00				1			60	

	20	45	1	TEC	TEH	610-EF	DI	TEH	10.77	.00	N1	11.75	11	16	RESULT OF DISCREPANCY RESOLUTION
	20	45	11	TSH	TEH	RPC-2R	N00				1			52	
89-Sep	20	45	0	TEH	TEC	610-EB	N00				1			69	

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
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## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: Apr-91

1-Aug-91 11:23

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCM	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	21	45	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.59	99	16		RESULT OF DISCREPANCY RESOLUTION
	21	45	4	3H	3H	RPC-ZR MDD					1		52	1	
89-Sep	21	45	0	TEH	TEC	610-EB MDD					1		69	1	
	22	45	1	TEC	TEH	610-EF DI	5H	.00	.00	N1	.38	147	16		RESULT OF DISCREPANCY RESOLUTION
	22	45	5	5H	5H	RPC-ZR MDD					1		53	1	
	22	45	4	3H	3H	RPC-ZR MDD					1		53	1	
	22	45	9	TSH	TSH	RPC-ZR MDD					1		53	1	
	22	45	8			RPC-ZR MT					1		53	1	
	22	45	8	1H	1H	RPC-ZR SCH	1H	.00	.00	1			53		IND SUPPORT VISIBLE AT 1H
89-Sep	22	45	0	TEH	TEC	610-EB MDD					1		69	1	
	45	45	1	TEC	TEH	610-EF DI	TEH	17.32	.00	N1	12.14	11	16		RESULT OF DISCREPANCY RESOLUTION
	45	45	11	TSH	TEH	RPC-ZR MDD					1		53	1	
89-Sep	45	45	0	TEH	TEC	610-EB MDD					1		69	1	
	46	47	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.86	85	16		RESULT OF DISCREPANCY RESOLUTION
	46	47	4	3H	3H	RPC-ZR SAI	3H	.00	.00	1	.38	84	53		IRETEST FOR POSITIVE I.D.
	46	47	4	3H	3H	RPC-ZR LXW	3H	390.0	278.0		100.00	48	53	1	
	46	47	4	3H	3H	RPC-ZR PEB	3H	.00	.00	1	.54	80	54		1>>>> POSITIVE I.D. ESTABLISHED <<<<
	46	47	4	3H	3H	RPC-Z3 SAI	3H	.00	.00	1	.45	86	55		IRETEST FOR POSITIVE I.D.
	46	47	4	3H	3H	RPC-Z3 LXW	3H	348.0	289.0	1	100.00	49	55	1	
89-Sep	46	47	0	TEH	TEC	610-EB MDD					1		70	1	
	20	49	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.70	57	17		RESULT OF DISCREPANCY RESOLUTION
	20	49	4	3H	3H	RPC-ZR MDD					1		52	1	
89-Sep	20	49	0	TEH	TEC	610-EB MDD					1		70	1	
	24	49	1	TEC	TEH	610-EF DI	7H	.00	.00	N1	.88	48	17		RESULT OF DISCREPANCY RESOLUTION
	24	49	6	7H	7H	RPC-ZR MDD					1		53	1	
	24	49	5	5H	5H	RPC-ZR MDD					1		53	1	
	24	49	4	3H	3H	RPC-ZR MDD					1		53	1	
	24	49	9	TSH	TSH	RPC-ZR MDD					1		53	1	
	24	49	8			RPC-ZR MT					1		53	1	
	24	49	8	1H	1H	RPC-ZR SCH	1H	.00	.00	1			53		IND SUPPORT VISIBLE AT 1H
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCM	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: Apr-91

1-Aug-91 11:23

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
89-Sep	24	49	0	TEH	TEC	610-EB MDD					1		71		
	25	49	1	TEC	TEH	610-EF BI	3H		.00	.00	M1	.52	113	17	RESULT OF DISCREPANCY RESOLUTION
	25	49	4	3H	3H	RPC-ZR MDD					1		53		
89-Sep	25	49	0	TEH	TEC	610-EB MDD					1		71		
	26	49	1	TEC	TEH	610-EF BI	5H		.00	.00	3	.88	36	17	RESULT OF DISCREPANCY RESOLUTION
	26	49	5	5H	5H	RPC-ZR MDD					1		53		
	26	49	4	3H	3H	RPC-ZR MDD					1		53		
	26	49	9	TSH	TSH	RPC-ZR MDD					1		53		
	26	49	8			RPC-ZR MT					1		53		
	26	49	8	1H	1H	RPC-ZR SCH	1H		.00	.00	1		53		IND SUPPORT VISIBLE AT 1H
89-Sep	26	49	0	TEH	TEC	610-EB MDD					1		71		
	7	50	1	TEC	TEH	610-EF BI	TEH		11.43	.00	M1	.18	17	17	RESULT OF DISCREPANCY RESOLUTION
	7	50	11	TSH	TEH	RPC-ZR MDD					1		52		
89-Sep	7	50	0	TEH	TEC	610-3H MDD					1		54		
	13	50	1	TEC	TEH	610-EF BI	TEH		10.47	.00	M1	14.74	10	17	RESULT OF DISCREPANCY RESOLUTION
	13	50	11	TSH	TEH	RPC-ZR MDD					1		52		
89-Sep	13	50	0	TEH	TEC	610-EB 2AU					6		17		
	14	50	1	TEC	TEH	610-EF BI	TEH		15.26	.00	M1	10.64	22	17	RESULT OF DISCREPANCY RESOLUTION
	14	50	11	TSH	TEH	RPC-ZR MDD					1		52		
89-Sep	14	50	0	TEH	TEC	610-EB MDD					1		71		
	24	50	1	TEC	TEH	610-EF BI	3H		.00	.00	M1	.68	94	17	RESULT OF DISCREPANCY RESOLUTION
	24	50	4	3H	3H	RPC-ZR MDD					1		53		
89-Sep	24	50	0	TEH	TEC	610-EB MDD					1		71		
	29	50	1	TEC	TEH	610-EF BI	3H		.00	.00	M1	.96	64	17	RESULT OF DISCREPANCY RESOLUTION
	29	50	4	3H	3H	RPC-ZR MDD					1		53		
89-Sep	29	50	0	TEH	TEC	610-EB MDD					1		71		
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: Apr-91

1-Haw-91 11123

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	6	51	1	TEC	TEH	610-EF	DI	TEC	19.30	.00	M1	2.01	107	17	RESULT OF DISCREPANCY RESOLUTION
	6	51	1	11C	TEH	610-EF	WDO				1			20	RESULT OF DISCREPANCY RESOLUTION
89-Sep	6	51	0	TEH	TEC	610-ZA	DI	TEC	19.26	.00	M1	1.35	102	54	RESULT OF DISCREPANCY RESOLUTION
89-Sep	6	51	0	TSC	TEC	RPC-ZA	WDO				1			79	
=====															
	24	51	1	TEC	TEH	610-EF	DI	3H	.00	.00	M1	.65	86	17	RESULT OF DISCREPANCY RESOLUTION
	24	51	4	3H	3H	RPC-ZR	WDO				1			53	
89-Sep	24	51	0	TEH	TEC	610-EB	WDO				1			71	
=====															
	38	51	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.40	107	20	RESULT OF DISCREPANCY RESOLUTION
	38	51	4	3H	3H	RPC-ZR	SAI	3H	.00	.00	2	2.30	40	53	IRETEST FOR POSITIVE I.D.
	38	51	4	3H	3H	RPC-ZR	LXW	3H	370.0	239.0	M1	100.00	41	53	
	38	51	4	3H	3H	RPC-ZR	LXW	3H	416.0	228.0	M1	100.00	39	53	
	38	51	4	3H	3H	RPC-ZR	PID	3H	.00	.00	2	2.36	35	54	)))))) POSITIVE I.D. ESTABLISHED <<<<<
	38	51	4	3H	3H	RPC-Z3	SAI	3H	.00	.00	1	.32	89	55	IRETEST FOR POSITIVE I.D.
	38	51	4	3H	3H	RPC-Z3	LXW	3H	295.0	122.0	1	100.00	21	55	
89-Sep	38	51	0	TEH	TEC	610-EB	WDO				1			72	
=====															
	39	51	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	2.79	75	20	IRETEST FOR POSITIVE I.D.
	39	51	1	11C	TEH	610-EF	PID	3H	.00	.00	M1	2.58	65	50	)))))) POSITIVE I.D. ESTABLISHED <<<<<
	39	51	4	3H	3H	RPC-ZR	SAI	3H	.00	.00	1	2.87	71	53	IRETEST FOR POSITIVE I.D.
	39	51	4	3H	3H	RPC-Z3	SAI	3H	.00	.00	1	1.82	77	55	IRETEST FOR POSITIVE I.D.
	39	51	4	3H	3H	RPC-Z3	LXW	3H	351.0	234.0	1	100.00	40	55	
89-Sep	39	51	0	TEH	TEC	610-EB	WDO				1			72	
=====															
	39	53	1	10C	TEH	610-EF	DI	3H	.00	.00	M1	.73	88	19	
	39	53	4	3H	3H	RPC-ZR	SAI	3H	.00	.00	1	.70	84	53	IRETEST FOR POSITIVE I.D.
	39	53	4	3H	3H	RPC-ZR	LXW	3H	196.0	206.0	M1	100.00	35	53	
	39	53	4	3H	3H	RPC-ZR	PID	3H	.00	.00	1	.69	94	54	)))))) POSITIVE I.D. ESTABLISHED <<<<<
	39	53	4	3H	3H	RPC-Z3	SAI	3H	.00	.00	1	.63	91	55	IRETEST FOR POSITIVE I.D.
	39	53	4	3H	3H	RPC-Z3	LXW	3H	457.0	245.0	1	100.00	42	55	
89-Sep	39	53	0	TEH	TEC	610-EB	WDO				1			72	
=====															
	40	53	1	10C	TEH	610-EF	DI	3H	.00	.00	M1	1.01	75	19	
	40	53	4	3H	3H	RPC-ZR	SAI	3H	.00	.00	1	.81	105	53	IRETEST FOR POSITIVE I.D.
	40	53	4	3H	3H	RPC-ZR	LXW	3H	307.0	223.0	M1	100.00	38	53	
	40	53	4	3H	3H	RPC-ZR	PID	3H	.00	.00	1	.65	51	54	)))))) POSITIVE I.D. ESTABLISHED <<<<<
	40	53	4	3H	3H	RPC-Z3	SAI	3H	.05	.00	1	.67	80	55	IRETEST FOR POSITIVE I.D.
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: Apr 91

1-Hsu-P1 11111

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	40	53	4	3H	3H	RPC-23 LXM	3H	304.0	172.0		1	100.00	29	55	
89-Sep	40	53	0	TEH	TEC	610-EB RDD					1			73	
	21	55	1	TEC	TEH	610-EF D1	3H	.00	.00	K1	.71	04	18		RESULT OF DISCREPANCY RESOLUTION
	21	55	4	3H	3H	RPC-2R RDD					1			52	
89-Sep	21	55	0	TEH	TEC	610-EB RDD					1			73	
	40	56	1	TEC	TEH	610-EF P1	AV2	.00	.00	K1	1.19	41	19		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	40	56	1	11C	TEH	610-EF 22	AV2	.00	.00	K2	1.23		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
89-Sep	40	56	0	11C	TEC	610-EB RDD					1			4	
89-Sep	40	56	0	11C	TEH	610-EB RDD					1			81	RESULT OF DISCREPANCY RESOLUTION
	43	56	1	TEC	TEH	610-EF P1	AV3	.00	.00	K1	.61	90	12		RESULT OF DISCREPANCY RESOLUTION
	43														1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	43			11C	TEH	610-EF 16	AV2	.00	.00	K2	.70		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	43	56	1	11C	TEH	610-EF 21	AV3	.00	.00	K2	1.11		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
89-Sep	43	56	0	11C	TEC	610-EB RDD					1			4	
89-Sep	43	56	0	11C	TEH	610-EB RDD					1			81	
	44	56	1	TEC	TEH	610-EF P1	AV2	.00	.00	K1	1.91	102	19		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	44	56	1	TEC	TEH	610-EF P1	AV3	.00	.00	K1	2.85	20	19		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	44	56	1	11C	TEH	610-EF 25	AV2	.00	.00	K2	1.54		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	44	56	1	11C	TEH	610-EF 32	AV3	.00	.00	K2	2.40		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
89-Sep	44	56	0	11C	TEC	610-EB RDD					1			4	
89-Sep	44	56	0	10C	TEH	610-EB 27	AV3	.00	.00	K2	1.03		81		
	47	56	1	TEC	TEH	610-EF P1	AV3	.00	.00	K1	.49		12		RESULT OF DISCREPANCY RESOLUTION
	47	56													1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	47	56	1	11C	TEH	610-EF 11	AV3	.00	.00	K2	.41		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
89-Sep	47	56	0	11C	TEC	610-EB RDD					1			4	
89-Sep	47	56	0	10C	TEH	610-EB RDD					1			81	
	45	59	1	TEC	TEH	610-EF P1	AV3	.00	.00	K1	.60	94	20		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	45	59	1	TEC	TEH	610-EF P1	AV4	.00	.00	K1	.76	119	28		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	45	59	1	11C	TEH	610-EF 23	AV3	.00	.00	K2	1.27	266	50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	45	59	1	11C	TEH	610-EF 25	AV4	.00	.00	K2	1.52		50		1-THIS TUBE MANUALLY REMOVED FROM RETEST LI
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/M

INSPECTION: Apr-91

1-Nov-91 11100

DATE	REL	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS
89-Sep	45	59	0	11C	TEC	610-EB MD0						1		4	
89-Sep	45	59	0	11C	TEH	610-EB MD0						1		82	
=====															
	46	59	1	TEC	TEH	610-ET PI AV1			.00	.00	N1	2.34	97	20	RESULT OF DISCREPANCY RESOLUTION
	46	59													-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	46	59	1	TEC	TEH	610-ET PI AV2			.00	.00	N1	.92	149	20	RESULT OF DISCREPANCY RESOLUTION
	46	59													-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	46	59	1	TEC	TEH	610-ET PI AV3			.00	.00	N1	1.60	113	20	RESULT OF DISCREPANCY RESOLUTION
	46	59													-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	46	59	1	11C	TEH	610-ET 42 AV1			.00	.00	N2	4.86		50	IRETEST FOR POSITIVE I.D.
	46	59													-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	46	59	1	11C	TEH	610-ET 24 AV2			.00	.00	N2	1.36		50	-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	46	59	1	11C	TEH	610-ET 35 AV3			.00	.00	N2	3.25		50	-THIS TUBE MANUALLY REMOVED FROM RETEST LI
	46	59	1	11C	10H	610-ET PID AV1			.00	.00	N1	2.56		51	)))) POSITIVE I.D. ESTABLISHED <<<<
	46	59													-THIS TUBE MANUALLY REMOVED FROM RETEST LI
89-Sep	46	59	0	11C	TEC	610-EB MD0						1		4	
89-Sep	46	59	0	10C	TEH	610-EB 24 AV1			.00	.00	N2	.74		82	RESULT OF DISCREPANCY RESOLUTION
89-Sep	46	59	0	10C	TEH	610-EB 25 AV3			.00	.00	N2	.79		82	RESULT OF DISCREPANCY RESOLUTION
=====															
	39	61	1	TEC	TEH	610-ET 72 3H			.00	.00	N1	1.77	84	29	IRETEST FOR POSITIVE I.D.
	39	61													IRETEST - TEST FULL LENGTH
	39	61	1	TEC	TEH	610-ET PID 3H			.00	.00	N1	1.00	76	50	)))) POSITIVE I.D. ESTABLISHED <<<<
	39	61	4	3H	3H	RPC-ZR SAI 3H			.04	.00	1	20.00	23	53	IRETEST FOR POSITIVE I.D.
	39	61	4	3H	3H	RPC-ZR LXW 3H			207.0	204.0	N1	100.00	40	53	
	39	61	4	3H	3H	RPC-Z3 SAI 3H			.00	.00	1	1.09	69	55	IRETEST FOR POSITIVE I.D.
	39	61	4	3H	3H	RPC-Z3 LXW 3H			357.0	220.0	1	100.00	39	55	
89-Sep	39	61	0	TEH	TEC	610-EB MD0						1		75	
=====															
	39	70	1	TEC	TEH	610-ET DI 3H			.00	.00	N1	.92	100	31	
	39	70	4	3H	3H	RPC-ZR SAI 3H			.00	.00	2	2.34	77	53	IRETEST FOR POSITIVE I.D.
	39	70	4	3H	3H	RPC-ZR LXW 3H			246.0	328.0	N1	100.00	56	53	
	39	70	4	3H	3H	RPC-ZR PID 3H			.00	.00	2	1.97	00	54	)))) POSITIVE I.D. ESTABLISHED <<<<
	39	70	4	3H	3H	RPC-Z3 SAI 3H			.00	.00	1	.32	00	55	IRETEST FOR POSITIVE I.D.
	39	70	4	3H	3H	RPC-Z3 LXW 3H			423.0	239.0	1	100.00	41	55	
89-Sep	39	70	0	TEH	TEC	610-EB MD0						1		20	RESULT OF DISCREPANCY RESOLUTION
=====															
	46	70	1	TEC	TEH	610-ET DI 3H			.00	.00	N1	.50	97	31	
	46	70	4	3H	3H	RPC-ZR SAI 3H			.00	.00	1	.66	80	53	IRETEST FOR POSITIVE I.D.
	46	70	4	3H	3H	RPC-ZR LXW 3H			220.0	195.0	N1	100.00	33	53	
	46	70	4	3H	3H	RPC-ZR PID 3H			.00	.00	1	.61	72	54	)))) POSITIVE I.D. ESTABLISHED <<<<
DATE	REL	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -C/D4

INSPECTION: MAR-91

1-MAR-91 11123

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TACE1	COMMENTS
	46	76	4	3H	3H	RPC-Z3 SAI	3H	.00	.00	1	.50	89	55		IRETEST FOR POSITIVE I.D.
	46	76	4	3H	3H	RPC-Z3 LXW	3H	303.0	206.0	1	100.00	37	55		
89-Sep	46	76	0	TEH	TEC	610-EB RDD				1			20		
=====															
	28	76	1	11C	TEH	610-EF		.00	.00	N1	1.31	98	46		IRETEST FOR POSITIVE I.D.
	28	76	1	11C	TEH	610-EF PID	5H	.00	.00	N1	1.43	71	50		155555 POSITIVE I.D. ESTABLISHED <<<<<
	28	76	4	3H	3H	RPC-ZR RDD				1			53		
	28	76	10	1H	TSH	RPC-ZR RDD				1			53		
	28	76	5	5H	5H	RPC-ZR SAI	5H	.00	.00	1	.75	83	53		IRETEST FOR POSITIVE I.D.
	28	76	4	5H	5H	RPC-ZR LXW	5H	293.0	217.0	N1	100.00	37	53		
	28	76	5	5H	5H	RPC-Z3 SAI	5H	.00	.00	1	.73	76	55		IRETEST FOR POSITIVE I.D.
	28	76	5	5H	5H	RPC-Z3 LXW	5H	314.0	150.0	1	100.00	25	55		
89-Sep	28	76	0	TEH	TEC	610-EB RDD				1			37		
=====															
	47	76	1	TEC	TEH	610-EF DI	5H	.00	.00	N1	.67	63	33		RESULT OF DISCREPANCY RESOLUTION
	47	76	5	5H	5H	RPC-ZR RDD				1			53		
	47	76	4	3H	3H	RPC-ZR RDD				1			53		
	47	76	10	1H	TSH	RPC-ZR RDD				1			53		
89-Sep	47	76	0	TEH	TEC	610-EB RDD				1			37		
=====															
	7	85	1	11C	TEH	610-EF DI	3H	.00	.00	N1	.37	72	44		RESULT OF DISCREPANCY RESOLUTION
	7	85	4			RPC-ZR RT							52		
	7	85	4	3H	3H	RPC-ZR RDD				1			54		
	7	85	4	3H	3H	RPC-Z3 RDD				1			55		
89-Sep	7	85	0	TEH	TEC	610-ZR RDD				1			48		
=====															
	33	85	1	TEC	TEH	610-EF IMR	TEH	12.50	.00	N1			35		
	33	85	1	11C	TEH	610-EF IMR	TEH	12.57	.00	N1			44		
89-Sep	33	85	0	TEH	TEC	610-EB DI	TEH	12.54	.00	N1	2.64	34	42		RESULT OF DISCREPANCY RESOLUTION
89-Sep	33	85	0	TSH	TEH	RPC-EB RDD				1			93		
=====															
	32	88	1	TEC	TEH	610-EF NBM	7C	3.40	.00	1	1.43	157	36		RESULT OF DISCREPANCY RESOLUTION
89-Sep	32	88	0	TEH	TEC	610-ZA 31	7C	3.30	.00	1	.00	141	43		
89-Sep	32	88	0	7H	7H	RPC-ZA SCA							79		REMOVAL FROM PLUG LIST BASED ON DISCREPANCY
89-Sep	32	88	0	7H	7H	RPC-ZA SAI	7C	3.75	.00	1	1.24	146	79		RESULT OF LAR
89-Sep	32	88													-THIS TUBE MANUALLY REMOVED FROM PLUG LI
89-Sep	32	88													-THIS TUBE MANUALLY REMOVED FROM RETEST L
=====															
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TACE1	COMMENTS



1-800-225-5333

=====															
1															
	30	95		11C	TEH	610-EF	77	3H	.00	.00	M1	3.00	77	42	PRETEST FOR POSITIVE I.D.
	30	95													PRETEST - TEST FROM 11C1 TO TEH
	30	95	1	11C	TEH	610-EF	PID	3H	.00	.00	M1	2.60	67	50	133333 - POSITIVE I.D. ESTABLISHED (4444
	30	95	4	3H	3H	RPC-2R	SAI	3H	.00	.00	1	2.27	79	83	PRETEST FOR POSITIVE I.D.
	30	95	4	3H	3H	RPC-2R	LXW	3H	400.0	320.0	M1	100.00	56	53	1
	30	95	4	3H	3H	RPC-23	SAI	3H	.00	.00	1	1.83	73	55	PRETEST FOR POSITIVE I.D.
	30	95	4	3H	3H	RPC-23	LXW	3H	460.0	250.0	1	100.00	43	55	1
1 09-Sep	30	95	0	TEH	TEC	610-2A	MDU				1			46	1

7076L TH

## INDICATION LISTING - BOTH LESS CUMULATIVE

Braidwood Unit 1

OCE -B/D4

INSPECTION: APR-91

1-SEP-91 11122

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS
89-Sep	18	5	1	TEC	TEH	610-EF	DI	TEC	10.05	.00	N1	9.40	15	0	RESULT OF DISCREPANCY RESOLUTION
89-Sep	18	5	0	TEH	TEC	610-EB	MDD				1		27	1	
89-Sep	20	5	1	TEC	TEH	610-EF	DI	TEC	9.51	.00	N1	4.63	27	0	RESULT OF DISCREPANCY RESOLUTION
89-Sep	20	5	1	TEC	TEH	610-EF	DI	TEC	12.00	10.24	N1	6.71	20	0	RESULT OF LAR
89-Sep	20	5	0	TEH	TEC	610-EB	SQW	TEC	12.00	10.24	N1	1.54	50	27	RESULT OF LAR
89-Sep	20	5													1-THIS TUBE MANUALLY REMOVED FROM PLUG LIST
89-Sep	20	5													1-TEST - TEST FROM IOL TO TEC
89-Sep	20	5	0	2C	TEC	610-EB	PID	TEC	14.76	.00	N1	1.63	63	69	RESULT OF DISCREPANCY RESOLUTION
89-Sep	20	5													1-TEST - TEST FROM IOL TO TEC
89-Sep	20	5	0	1C	TEC	RPC-2A	MDD				1			71	REMOVAL FROM PLUG LIST BASED ON NMIC RESULT
89-Sep	9	6	1	TEC	TEH	610-EF	DI	TEC	9.89	.00	N1	3.15	120	7	RESULT OF DISCREPANCY RESOLUTION
89-Sep	9	6	1	TEC	TEH	610-EF	DI	TEC	9.54	.00	N1	4.80	22	7	RESULT OF DISCREPANCY RESOLUTION
89-Sep	9	6	0	TEH	TEC	610-EB	QAV				1			11	
89-Sep	20	7	1	TEC	TEH	610-EF	DI	TEC	.74	.00	N1	2.96	110	0	RESULT OF DISCREPANCY RESOLUTION
89-Sep	20	7	1	TEC	TEH	610-EF	DI	TEC	1.57	.00	N1	1.89	24	0	RESULT OF DISCREPANCY RESOLUTION
89-Sep	20	7	1	TEC	TEH	610-EF	DI	TEC	2.20	.00	N1	4.41	60	0	RESULT OF DISCREPANCY RESOLUTION
89-Sep	20	7	0	TEH	TEC	610-EB	MDD				1			28	
89-Sep	23	8	1	TEC	TEH	610-EF	DI	TEC	5.32	.00	N1	2.97	27	7	RESULT OF DISCREPANCY RESOLUTION
89-Sep	23	8	0	TEH	TEC	610-EB	MDD				1			28	
89-Sep	7	17	1	TEC	TEH	610-EF	IMR	TEC	17.25	.00	N1			9	RESULT OF LAR
89-Sep	7	17	0	TEH	TEC	610-EB	DI	TEC	17.25	.00	N1	2.22	50	44	RESULT OF DISCREPANCY RESOLUTION
89-Sep	7	17	0	YSC	TEC	RPC-2A	MDD				1			71	
89-Sep	24	21	1	TEC	TEH	610-EF	IMR	TEC	19.91	.00	N1	1.56	89	10	RESULT OF LAR
89-Sep	24	21	1	TEC	TEH	610-EF	IMR	TEC	19.91	.00	N1			22	RESULT OF LAR
89-Sep	24	21	0	TEH	TEC	610-EB	DI	TEC	19.91	.00	N1	1.33	85	32	RESULT OF DISCREPANCY RESOLUTION

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS
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## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -B/44

INSPECTION: RPT-93

1-100 93 11122

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
89-Sep	24	21	0	TSC	TEC	RPC-ZR MDD					1			71	
	4	22	1	11C	TEH	610-EF MDM	1H	13.52	.00	1		.70	163	26	
	4	22	1	11C	TEH	610-EF MDM	3H	22.37	.00	1		.82	167	26	
89-Sep	4	22	0	11H	TEC	610-EB MDD					1			2	
89-Sep	4	22	0	11H	TEH	610-EB MDD					1			80	
	35	22	1	TEC	TEH	610-EF MDD					1			10	
	35	22	1	11C	TEH	610-EF DI	5H	.00	.00	M1		.74	126	26	RESULT OF DISCREPANCY RESOLUTION
	35	22	5	5H	5H	RPC-ZR MDD					1			65	
	35	22	4	3H	1H	RPC-ZR MDD					1			65	
	35	22	6	1H	TSH	RPC-ZR MDD					1			65	
89-Sep	35	22	0	TEH	TEC	610-EB MDD					1			32	
	43	22	1	TEC	TEH	610-EF DMR	TEH	15.23	.00	M1		2.45	40	10	RESULT OF LAR
89-Sep	43	22	0	TEH	TEC	610-EB DI	TEH	15.23	.00	M1		1.74	45	33	RESULT OF DISCREPANCY RESOLUTION
89-Sep	43	22	1	TSH	TEH	RPC-EB MDD					1			85	
	19	25	1	11C	TEH	610-EF	32	TEH	16.19	.00	1	15.79	13	27	RESULT OF LAR
	19	25	7	TSH	TEH	RPC-ZR MDD					1			65	
89-Sep	19	25	0	TEH	TEC	610-EB MDD					1			34	
	25	27	1	11C	TEH	610-EF DI	3H	.00	.00	M1		.35	105	27	
	25	27	4	3H	3H	RPC-ZR MDD					1			65	
89-Sep	25	27	0	TEH	TEC	610-EB MDD					1			35	
	28	27	1	11C	TEH	610-EF	27	TEH	20.38	.00	1	20.21	11	27	RESULT OF LAR
	28	27	7	TSH	TEH	RPC-ZR MDD					1			65	
89-Sep	28	27	0	TEH	TEC	610-EB MDD					1			35	
	30	27	1	11C	TEH	610-EF DI	3H	.00	.00	M1		.80	40	27	
	30	27	4	3H	3H	RPC-ZR MDD					1			65	
89-Sep	30	27	0	TEH	TEC	610-EB MDD					1			35	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

# INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -8/14

INSPECTION: Apr-91

I-haw-91 11122

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS
	40	28	1	11C	TEH	610-EF	32	TEH	16.35	.00	1	17.60	13	27	RESULT OF LAR
	40	28	7	TSH	TEH	RPC-ZR	MDD				1			25	
89-Sep	40	28	0	TEH	TEC	610-EB	MDD				1			35	
	29	29	1	11C	TEH	610-EF	32	TEH	16.27	.00	1	10.63	14	27	RESULT OF LAR
	29	29	1	11C	TEH	610-EF	30	TEH	13.37	.00	1	10.01	12	27	RESULT OF LAR
	29	29	7	TSH	TEH	RPC-ZR	MDD				1			65	
89-Sep	29	29	1	TEH	TEC	610-EB	MDD				1			36	
	38	29	1	11C	TEH	610-EF	30	TEH	15.10	.00	1	23.30	12	27	RESULT OF LAR
	38	29	7	TSH	TEH	RPC-ZR	MDD				1			65	
89-Sep	38	29	0	TEH	TEC	610-EB	MDD				1			35	
	21	36	1	TEC	TEH	610-EF	IMR	TEC	6.15	.00	M1			14	
89-Sep	21	36	0	TEH	TEC	610-EB	DI	TEC	6.15	.00	M1	1.37	92	39	
89-Sep	21	36	0	TSC	TEC	RPC-ZR	MDD				1			71	
	43	36	1	TEC	TEH	610-EF	IMR	TEC	19.90	.00	1			14	
89-Sep	43	36	0	TEH	TEC	610-EB	DI	TEC	19.99	.00	M1	2.57	36	39	RESULT OF DISCREPANCY RESOLUTION
89-Sep	43	36	0	TSC	TEC	RPC-ZR	MDD				1			71	
	44	39	1	TEC	TEH	610-EF	IMR	TEH	19.14	.00	M1			15	
89-Sep	44	39	0	TEH	TEC	610-EB	DI	TEH	19.13	.00	M1	1.40	53	40	RESULT OF DISCREPANCY RESOLUTION
89-Sep	44	39	0	TSH	TEH	RPC-EB	MDD				1			85	
	42	40	1	TEC	TEH	610-EF	IMR	TEC	12.17	.00	M1			15	
	42	40	1	TEC	TEH	610-EF	IMR	TEC	13.42	.00	M1			15	
89-Sep	42	40	0	TEH	TEC	610-EB	DI	TEC	12.10	.00	M1	3.05	39	41	RESULT OF DISCREPANCY RESOLUTION
89-Sep	42	40	0	TEH	TEC	610-EB	DI	TEC	13.14	.00	M1	1.17	93	41	RESULT OF DISCREPANCY RESOLUTION
89-Sep	42	40	0	TSC	TEC	RPC-ZR	MDD				1			71	
	38	41	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.74	42	30	RESULT OF DISCREPANCY RESOLUTION
	38	41	4	3H	3H	RPC-ZR	MDD				1			64	
89-Sep	38	41	0	TEH	TEC	610-EB	MDD				1			41	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

COL -B/D4

INSULATION: RPT-91

1-Nov-71 11122

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	15	46	1	TEC	TEH	610-EF	DI	TEC	13.23	.00	H1	2.56	46	16	RESULT OF LAR
89-Sep	15	46	0	TEH	TEC	610-EB	DI	TEC	13.23	.00	1	1.75	61	45	RESULT OF DISCREPANCY RESOLUTION
89-Sep	15	46	0	TSC	TEC	RPC-2A	NDD				1		71		
	19	47	1	TEC	TEH	610-EF	DI	SH	.00	.00	H1	.42	96	17	RESULT OF DISCREPANCY RESOLUTION
	19	47	5	SH	SH	RPC-2R	NDD				1		65		
	19	47	4	SH	SH	RPC-2R	NDD				1		65		
	19	47	8	TSH	TSH	RPC-2R	NDD				1		65		
	19	47	8	TSH	TSH	RPC-2R	SCN						65		ISN'T PART NOT VISIBLE AT 1H
89-Sep	19	47	0	TEH	TEC	610-EB	NDD				1		40		
	14	48	1	TEC	TEH	610-EF	DI	TEC	12.09	.00	H1	2.68	34	17	RESULT OF DISCREPANCY RESOLUTION
89-Sep	14	48	0	TEH	TEC	610-EB	DI	TEC	12.16	.00	1	1.77	53	46	RESULT OF DISCREPANCY RESOLUTION
89-Sep	14	48	0	TSC	TEC	RPC-2A	NDD				1		71		
	24	48	1	TEC	TEH	610-EF	DI	SH	.00	.00	H1	.37	65	19	RESULT OF DISCREPANCY RESOLUTION
	24	48	4	SH	SH	RPC-2R	NDD				1		65		
89-Sep	24	48	0	TEH	TEC	610-EB	NDD				1		46		
	32	48	1	TEC	TEH	610-EF	DI	SH	.00	.00	H1	.77	32	19	RESULT OF DISCREPANCY RESOLUTION
	32	48	4	SH	SH	RPC-2R	NDD				1		64		
89-Sep	32	48	0	TEH	TEC	610-EB	NDD				1		46		
	43	48	1	TEC	TEH	610-EF	DI	TSH	.21	.00	H1	2.74	16	18	RESULT OF DISCREPANCY RESOLUTION
	43	48	6	1H	TSH	RPC-2R	NDD				1		64		
89-Sep	43	48	0	TEH	TEC	610-EB	NDD				1		46		RESULT OF LAR
	14	50	1	TEC	TEH	610-EF	DI	SH	.00	.00	H1	.37	113	17	RESULT OF DISCREPANCY RESOLUTION
	14	50	5	SH	SH	RPC-2R	NDD				1		65		
	14	50	4	SH	SH	RPC-2R	NDD				1		65		
	14	50	6	1H	TSH	RPC-2R	NDD				1		65		
89-Sep	14	50	0	TEH	TEC	610-EB	NDD				1		47		
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -B/D4

INSPECTION: APR-73

1-Rev-73 11127

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	24	52	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.63	54	12		RESULT OF DISCREPANCY RESOLUTION
	24	52	4	3H	3H	RPC-ZR RDD					1		65	1	
89-Sep	24	52	0	TEH	TEC	610-ED RDD					1		48	1	
	25	53	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.65	54	12		RESULT OF DISCREPANCY RESOLUTION
	25	53	4	3H	3H	RPC-ZR RDD					1		65	1	
89-Sep	25	53	0	TEH	TEC	610-ED RDD					1		48	1	
	13	54	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.46	78	17		RESULT OF DISCREPANCY RESOLUTION
	13	54	4	3H	3H	RPC-ZR RDD					1		65	1	
89-Sep	13	54	0	TEH	TEC	610-ED 2AV					1		16	1	
	17	56	1	TEC	TEH	610-EF DI	5H	.00	.00	N1	.25	97	17		RESULT OF DISCREPANCY RESOLUTION
	17	56	5	5H	5H	RPC-ZR RDD					1		65	1	
	17	56	4	3H	3H	RPC-ZR RDD					1		65	1	
	17	56	6	1H	15H	RPC-ZR RDD					1		65	1	
89-Sep	17	56	0	TEH	TEC	610-ED RDD					1		49	1	
	25	56	1	TEC	TEH	610-EF MEH	2C	7.91	.00	6	.64	150	21		RESULT OF LAR
89-Sep	25	56	0	TEH	TEC	610-ED RDD					1		50	1	
	47	56	1	TEC	TEH	610-EF PI AV2		.00	.00	N1	.66	145	21		RESULT OF DISCREPANCY RESOLUTION
	47	56	1	TEC	TEH	610-EF PI AV3		.00	.00	N1	.66		21		RESULT OF DISCREPANCY RESOLUTION
	47	56													IRETEST - TEST FULL LENGTH
	47	56	1	TEC	TEH	610-EF 16 AV2		.00	.00	N2	.68		61	1	
	47	56	1	TEC	TEH	610-EF 23 AV3		.00	.00	N2	1.23		61	1	
89-Sep	47	56	0	11C	TEC	610-EB RDD					1		6	1	
89-Sep	47	56	0	11C	TEH	610-EB RDD					1		7	1	
	32	59	1	TEC	TEH	610-EF 19 2C		.00	.00	1	1.00	156	47	1	
89-Sep	32	59	0	TEH	TEC	610-ED RDD					1		50	1	
	41	59	1	TEC	TEH	610-EF PI AV2		.00	.00	N1	1.14	57	47	1	
	41	59	1	TEC	TEH	610-EF PI AV3		.00	.00	N1	1.49	160	47		IRETEST - TEST FULL LENGTH
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -B/D4

INSPECTION: Apr-91

1-Nov-91 11:12

DATE	ROW	COL	PLAN	CE-F	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEL	TAPE	COMMENTS
	41	59	1	TEC	TEH	610-EF	25	WU2	.00	.00	N2	1.44	61	1	
	41	59	1	TEC	TEH	610-EF	18	WU3	.00	.00	N2	.02	61	1	RESULT OF DISCREPANCY RESOLUTION
89-Sep	41	59	0	11C	TEC	610-EB	MDO					1	61	1	
89-Sep	41	59	0	11C	TEH	610-EB	MDO					1	77	1	
=====															
	46	59	1	TEC	TEH	610-EF	PI	WU2	.00	.00	1	3.30	117	47	1
	46	59	1	TEC	TEH	610-EF	PI	WU3	.00	.00	1	3.08	121	47	1
	46	59	1	TEC	TEH	610-EF	42	WU2	.00	.00	N2	4.08	61	1	IRETEST - TEST FULL LENGTH
	46	59	1	TEC	TEH	610-EF	41	WU3	.00	.00	N2	4.63	61	1	IRETEST FOR POSITIVE I.D.
	46	59	1	11C	TEH	610-EF	PI	WU2	.00	.00	N1	3.11	99	62	1
	46	59	1	11C	TEH	610-EF	PI	WU3	.00	.00	N1	2.89	96	62	1
89-Sep	46	59	0	11C	TEC	610-EB	MDO					1	61	1	62 >>>> POSITIVE I.D. ESTABLISHED <<<<
89-Sep	46	59	0	11C	TEH	610-EB	35	WU2	.00	.00	N2	1.52	77	1	62 >>>> POSITIVE I.D. ESTABLISHED <<<<
89-Sep	46	59	0	11C	TEH	610-EB	33	WU3	.00	.00	N2	1.38	77	1	
=====															
	44	62	1	TEC	TEH	610-EF	DI	TSH	.00	.00	N1			48	1
	44	62	6	1H	TSH	RPC-ZR	MDO					1		64	1
89-Sep	44	62	0	TEH	TSC	610-EB	MDO					1		51	1
89-Sep	44	62	0	11H	TEC	610-EB	MDO					1		51	1
=====															
	32	63	1	11C	TEH	610-EF	MDO	BH	2.63	.00	1	1.71	166	34	1
89-Sep	32	63	0	TEH	TEC	610-EB	IMR	BH	2.70	.00	1			52	1
=====															
	42	66	1	11C	TEH	610-EF	DI	TEH	10.50	.00	N1	4.17	16	34	1
	42	66	7	1H	TSH	RPC-ZR	MDO					1		64	1
	42	66	7	TSH	TEH	RPC-ZR	MDO					1		65	1
89-Sep	42	66	0	TEH	TEC	610-EB	MDO					1		53	1
=====															
	4	68	1	11C	TEH	610-EF	DI	TEH	13.25	.00	N1	14.55	2	36	1
	4	68	7	1H	1H	RPC-ZR	MDO					1		64	1
	4	68	7	TSH	TEH	RPC-ZR	MDO					1		65	1
89-Sep	4	68	0	11C	TEC	610-EB	MDO					1		7	1
89-Sep	4	68	0	11H	TEC	590-EB	MDO					1		10	1
89-Sep	4	68	0	11H	TEH	610-EB	MDO					1		84	1
=====															
	8	69	1	11C	TEH	610-EF	DI	3H	.00	.00	N1	1.20	55	36	1
=====															
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEL	TAPE	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -B/D4

INSPECTION: APR-91

1-Nov-91 11122

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IMD	LOCK	IMCH1	IMCH2	CHAN	VOLTS	DEG	TAPE	COMMENTS
	8	69	4	3H	3H	RPC-ZR MDD					1		64		
89-Sep	8	69	0	TEH	TEC	610-EB 24V					1		20		
89-Sep	8	69	0	3H	3H	RPC-EB MDD					1		85		
=====															
	30	77	1	11C	TEH	610-EF DI 3H	.00	.00	M1		.55	76	40		RESULT OF DISCREPANCY RESOLUTION
	30	77	4	3H	3H	RPC-ZR MDD					1		64		
89-Sep	30	77	0	TEH	TEC	610-EB MDD					1		58		
=====															
	42	80	1	11C	TEH	610-EF PI WU3	.00	.00	M1		.94	59	41		RESULT OF DISCREPANCY RESOLUTION
	42	80													INTEST - TEST FROM 11C1 TO TEH
	42	80	1	10C	TEH	610-EF 27 WU3	.00	.00	M2		1.73		61		
89-Sep	42	80	0	TEH	TEC	610-EB MDD					1		60		
=====															
	39	84	1	TEC	TEH	610-EF DI 3H	.00	.00	M1		.61	45	55		RESULT OF DISCREPANCY RESOLUTION
	39	84	4	3H	3H	RPC-ZR MDD					1		64		
89-Sep	39	84	0	TEH	TEC	610-EB MDD					1		62		
=====															
	4	88	1	11C	TEH	610-EF DI 5H	.00	.00	M1		1.92	23	37		RESULT OF DISCREPANCY RESOLUTION
	4	88	5	5H	5H	RPC-ZR MDD					1		64		
	4	88	4	3H	3H	RPC-ZR MDD					1		64		
	4	88	6	1H	TSH	RPC-ZR MDD					1		64		
89-Sep	4	88	0	11H	TEC	610-EB MDD					1		8		
89-Sep	4	88	0	11H	TEH	610-EF MDD					1		83		
=====															
	36	88	1	TEC	TEH	610-EF DI TEC	8.16	.00	M1		2.25	37	56		RESULT OF LAR
89-Sep	36	88	0	TEH	TEC	610-EB DI TEC	8.35	.00	M1		1.60	48	64		
89-Sep	36	88	0	TSC	TEC	RPC-ZR MDD					1		71		
=====															
	45	90	1	TEC	TEH	610-EF DIH 7H	17.30	.00	1		.36	125	57		RESULT OF DISCREPANCY RESOLUTION
89-Sep	45	90	0	TEH	TEC	610-EB MDD					1		65		
=====															
	5	92	1	11C	TEH	610-EF DI 5H	.00	.00	M1		1.34	31	38		RESULT OF DISCREPANCY RESOLUTION
	5	92													INTEST - TEST FULL LENGTH
	5	92	1	TEC	TEH	610-EF MDD					1		57		
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IMD	LOCK	IMCH1	IMCH2	CHAN	VOLTS	DEG	TAPE	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -B/D4

INSPECTION: MON-91

1-Rev 91 11122

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE	COMMENTS
	5	92	5	5H	5H	RPC-ZR HDD					1			60	
	5	92	4	3H	3H	RPC-ZR HDD					1			63	
	5	92	6	1H	1H	RPC-ZR HDD					1			63	
	5	92	5	5H	5H	RPC-ZR HDD					1			64	
	5	92	4	3H	3H	RPC-ZR HDD					1			64	
	5	92	6	1H	TSH	RPC-ZR HDD					1			64	
89-Sep	5	92	0	11H	TEC	610-EB HDD					1			80	
89-Sep	5	92	0	11H	TEH	610-EB HDD					1			80	
=====															
	26	93	1	11C	TEH	610-EF HPM 11H	16.36		.00		6	4.57	26	44	RESULT OF DISCREPANCY RESOLUTION
89-Sep	26	93	0	TEH	TEC	610-EB HDD					1			67	
=====															
	13	99	1	11C	TEH	610-EF DI 3H	.00		.00		N1	.81	64	45	RESULT OF LAR
	13	99	1	11C	TEH	610-EF PID 3H	.00		.00		N1	.65	71	61	1) >>>> POSITIVE I.D. ESTABLISHED <<<<
	13	99	4	3H	3H	RPC-ZR HDD					1			64	
89-Sep	13	99	0	TEH	TEC	610-EB 2AV					6			18	
=====															
	11	103	1	TEC	TEH	610-EF IAP 3H	.00		.00		N1			60	
89-Sep	11	103	0	TEH	TEC	610-EB 2AV					6			17	
89-Sep	11	103	0	TEH	TEC	610-EB DI 3H	.00		.00		N1	.62	58	17	RESULT OF LAR
89-Sep	11	103	0	3H	3H	RPC-EB HDD					1			85	
=====															
	13	109	1	11C	TEH	610-EF DI 5H	.00		.00		N1	.51	70	40	
	13	109	5	5H	5H	RPC-ZR HDD					1			63	
	13	109	4	3H	3H	RPC-ZR HDD					1			63	
	13	109	6	1H	TSH	RPC-ZR HDD					1			63	
89-Sep	13	109	0	TEH	TEC	610-EB 2AV					1			16	
=====															
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE	COMMENTS

PAGE 8

TOTAL 7

## INDICATION LISTING - BOTH LESS CUMULATIVE

Braidwood Unit 1

CCE -4/04

INDICATION: MPT 91

1-Aug 81 11:21

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS
	10	3	1	TEC	TEH	610-EF SFA TSH	2.34	.00	1	.76	14	2			RESULT OF LAD
	10	3	1	TEC	TEH	610-EF DMT 5H	.56	.00	N1	20.31	181	2			
	10	3	1	TEC	TEH	610-EF DMT 5H	.53	.00	N1	6.03	181	2			
	10	3	1	TEC	TEH	610-EF DI 7H	.00	.00	1	.50	90	2			RESULT OF DISCREPANCY RESOLUTION
	10	3	6	7H	7H	RPC-ZR NDO						54			
	10	3	5	5H	5H	RPC-ZR NDO						54			
	10	3	4	3H	3H	RPC-ZR NDO						54			
	10	3	10	1H	TSH	RPC-ZR NDO						54			
89-Sep	10	3	0	TEH	TEC	610-EB 28V				6		10			
89-Sep	10	3	0	TEH	TEC	610-EB DMT 5H	.19	.00	N1	19.85	181	18			
	10	5	1	11C	TEH	610-EF DI 3H	.00	.00	N1	.76	66	45			
	10	5	4	3H	3H	RPC-ZR SAI 3H	.00	.00	1	53.00	124	54			INTEST FOR POSITIVE I.D.
	10	5													)))))) POSITIVE I.D. ESTABLISHED ())))
	10	5													RPC INDICATION PID FROM BUBBLE TEST
89-Sep	10	5	4	3H	3H	RPC-ZR LXH 3H	445.0	284.0	1	100.00	40	54			
89-Sep	10	5	0	TEH	TEC	610-EB 16V				6		18			
	16	7	1	11C	TEH	610-EF DI 3H	.00	.00	N1	1.14	127	45			RESULT OF DISCREPANCY RESOLUTION
	16	7	4	3H	3H	RPC-ZR MVI 3H	.00	.00	1	43.00	150	54			INTEST FOR POSITIVE I.D.
	16	7													)))))) POSITIVE I.D. ESTABLISHED ())))
	16	7													RPC INDICATION PID FROM BUBBLE TEST
89-Sep	16	7	4	3H	3H	RPC-ZR LXH 3H	210.0	256.0	1	100.00	44	54			
89-Sep	16	7	0	TEH	TEC	610-EB NDO				1		23			
	12	15	1	11C	TEH	610-EF DI 3H	.00	.00	N1	.72	67	44			
	12	15	4	3H	3H	RPC-ZR NDO				1		54			
89-Sep	12	15	0	TEH	TEC	610-EB 28V				-6		19			
	14	21	1	TEC	TEH	610-EF DI TEH	17.06	.00	N1	1.09	54	5			RESULT OF DISCREPANCY RESOLUTION
	14	21	11	TSH	TEH	RPC-ZR NDO				1		54			
89-Sep	14	21	0	TEH	TEC	610-EB NDO				1		20			
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -4/04

INSPECTION: N4-91

1 Nov-91 11123

DATE	ROW	COL	PLAN	CE-D	CE-E	PRIME	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TYPE1	COMMENTS
89-Sep	32	23	1	11C	TEH	611-EF	NRA	AV3	6.27	.00	6	2.61	170	45	RESULT OF DISCREPANCY RESOLUTION
89-Sep	32	23	0	TEH	TEC	611-EB	MDD				1			20	
=====															
	17	35	1	TEC	TEH	611-EF	25	3H	.00	.00	N1	.43	123	0	100% INDICATION PID FROM BUBBLE TEST
	17	35	4	3H	3H	RP1-ZR	SAI	3H	.00	.00	1	.34	9%	54	RESULT OF DISCREPANCY RESOLUTION
	17	35													PRETEST FOR POSITIVE I.D.
	17	35													1>>>>> POSITIVE I.D. ESTABLISHED <<<<<
89-Sep	17	35	0	TEH	TEC	611-EB	MDD				1			34	
=====															
	11	41	1	TEC	TEH	611-EF	DI	TEH	16.59	.00	1	2.00	45	11	RESULT OF DISCREPANCY RESOLUTION
	11	41	11	TSH	TEH	RP1-ZR	MDD				1			54	
89-Sep	11	41	0	TEH	TEC	611-EB	28U				6			21	
=====															
	1	42	1	11H	TEH	611-EF	MDD				1			50	
	1	42	3	11C	11H	RP1-ZR	SAI	11H	2.35	.00	1	9.50	27	61	PRETEST FOR POSITIVE I.D.
	1	42	3	11C	11H	RP1-ZR	LXH	11H	209.0	261.0	1	100.00	45	61	
	1	42	3	11H	11C	RP1-ZR	PID	11H	2.38	.00	1	19.9%	21	62	1>>>>> POSITIVE I.D. ESTABLISHED <<<<<
	1	42	2	11C	TEC	591-EF	MDD				1			67	
89-Sep	1	42	0	11H	TEC	591-EF	7D				1			9	
89-Sep	1	42	0	11H	TEH	611-EB	MDD				1			73	
89-Sep	1	42	0	11C	11H	RP1-ZR	MDD				1			83	
89-Sep	1	42	0	11C	10H	591-EB	MDD				1			88	IN-BED HEAT TREAT DETECTED
89-Sep	1	42	0	11C	11H	RP1-ZR	MDD				1			92	
=====															
	24	48	1	TEC	TEH	611-EF	DI	3H	.00	.00	1	.55	12%	13	100% INDICATION PID FROM BUBBLE TEST
	24	48	4	3H	3H	RP1-ZR	LXH	3H	201.0	456.0	1	100.00	78	54	
	24	48	4	3H	3H	RP1-ZR	SAI	3H	.00	.00	1	.66	105	54	RESULT OF DISCREPANCY RESOLUTION
	24	48													PRETEST FOR POSITIVE I.D.
	24	48													1>>>>> POSITIVE I.D. ESTABLISHED <<<<<
89-Sep	24	48	0	TEH	TEC	611-EB	MDD				1			40	
=====															
	33	49	1	TEC	TEH	611-EF	26	3H	.00	.00	N1	.50	122	13	
	33	49	4	3H	3H	RP1-ZR	MDD				1			54	
89-Sep	33	49	0	TEH	TEC	611-EB	MDD				1			41	
=====															
	8	52	1	11C	TEH	611-EF	68	3H	.00	.00	N1	1.93	80	45	RESULT OF DISCREPANCY RESOLUTION
DATE	ROW	COL	PLAN	CE-D	CE-E	PRIME	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TYPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE W-14

INSPECTION: ROR Y1

1-Nov-91 11:11

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	8	52													IRETEST FOR POSITIVE I.D.
	8	52	1	11C	TEH	610-EF PID	3H	.00	.00	N1	1.73	86	51	13333	POSITIVE I.D. ESTABLISHED <<<<<
	8	52	4	3H	3H	RPC-ZR HAI	3H	.00	.00	1	70.00	260	54		IRETEST FOR POSITIVE I.D.
	8	52	4	3H	3H	RPC-ZR LHM	3H	263.0	323.0	1	100.00	55	54		
89-Sep	8	52	0	TEH	TEC	610-EB 2W0				6			21		
	11	52	1	10C	TEH	610-EF DI	3H	.00	.00	N1	.21	80	49		
	11	52	4	3H	3H	RPC-ZR HDO				1			54		
89-Sep	11	52	0	TEH	TEC	610-EB 2W0				6			21		
	24	53	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.71	42	14		
	24	53	1	TEC	TEH	610-EF DHT	10H	22.35	.00	1	9.56	181	14		
	24	53	4	3H	3H	RPC-ZR HDO				1			54		
89-Sep	24	53	0	TEH	TEC	610-EB HDO				1			43		
	25	54	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.92	29	14		RESULT OF DISCREPANCY RESOLUTION
	25	54	4	3H	3H	RPC-ZR HDO				1			54		
89-Sep	25	54	0	TEH	TEC	610-EB HDO				1			43		
	29	54	1	TEC	TEH	610-EF DI	3H	.00	.00	N1	.29	120	14		RESULT OF DISCREPANCY RESOLUTION
	29	54	4	3H	3H	RPC-ZR HDO				1			54		
89-Sep	29	54	0	TEH	TEC	610-EB HDO				1			43		
	44	56	1	TEC	TEH	610-EF 29 AV1		.00	.00	N2	1.90		16		
89-Sep	44	56	0	11C	TEC	610-EB HDO				1			1		RESULT OF DISCREPANCY RESOLUTION
89-Sep	44	56	0	11C	TEH	610-EB 30 AV1		.00	.00	N2	1.25		71		RESULT OF DISCREPANCY RESOLUTION
	45	56	1	TEC	TEH	610-EF 19 AV1		.00	.00	N2	.79		16		RESULT OF DISCREPANCY RESOLUTION
	45	56	1	TEC	TEH	610-EF 33 AV2		.00	.00	N2	2.70		16		
89-Sep	45	56	0	11C	TEC	610-EB HDO				1			1		
89-Sep	45	56	0	11C	TEH	610-EB HDO				1			71		
	46	56	1	TEC	TEH	610-EF 10 AV2		.00	.00	N2	.70		16		RESULT OF DISCREPANCY RESOLUTION
89-Sep	46	56	0	11C	TEC	610-EB HDO				1			1		
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE 4/24

INSPECTION: 400-13

J-Hav P1 11112

DATE	ROW	COL	PLAN	CE-B	CE-C	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	D.	TAPE1	COMMENTS
89-Sep	46	56	0	11C	TEH	610-EB RDD					1			71	
	17	57	1	TEC	TEH	610-EF DI	3H	.00	.00	K1	.78	57	56		
	17	57	4	3H	3H	RPC-ZK RDD				1			54		
89-Sep	17	57	0	TEH	TEC	610-EB RDD				1			45		
	18	57	1	11C	TEH	610-EF DI	7H	.00	.00	K1	.34	24	47		RESULT OF DISCREPANCY RESOLUTION
	18	57	6	7H	7H	RPC-ZK RDD				1			54		
	18	57	5	3H	3H	RPC-ZK RDD				1			54		
	18	57	4	3H	3H	RPC-ZK RDD				1			54		
	18	57	10	1H	TSH	RPC-ZK RDD				1			54		
89-Sep	18	57	0	TEH	TEC	610-EB RDD				1			45		
	17	59	1	TEC	TEH	610-EF DI	3H	.00	.00	K1	.59	07	17		RESULT OF DISCREPANCY RESOLUTION
	17	59	4	3H	3H	RPC-ZK RDD				1			55		
89-Sep	17	59	0	TEH	TEC	610-EB RDD				1			47		
	42	59	1	TEC	TEH	610-EF PI	AV1	.00	.00	K1	2.97		17		
	42	59	1	TEC	TEH	610-EF PI	AV3	.00	.00	K1	.69		17		RESULT OF DISCREPANCY RESOLUTION
	42	59	1	TEC	TEH	610-EF PI	AV4	.00	.00	K1	.52		17		RESULT OF DISCREPANCY RESOLUTION
	42	59													RETEST - TEST FULL LENGTH
	42	59	1	TEC	TEH	610-EF 35	AV1	.00	.00	K2	3.26		51		
	42	59	1	TEC	TEH	610-EF 25	AV3	.00	.00	K2	1.30		51		
89-Sep	42	59	0	11C	TEC	610-EB RDD				1			1		
89-Sep	42	59	0	11C	TEH	610-EB RDD				1			71		
	43	59	1	TEC	TEH	610-EF PI	AV1	.00	.00	K1	3.04		17		
	43	59	1	TEC	TEH	610-EF PI	AV4	.00	.00	K1	2.28		17		
	43	59	1	TEC	TEH	610-EF 43	AV1	.00	.00	K2	6.38		51		RETEST FOR POSITIVE I.D.
	43	59	1	TEC	TEH	610-EF 38	AV4	.00	.00	K2	4.00		51		
	43	59	1	TEC	TEH	610-EF PID	AV1	.00	.00	1	3.04	124	53		)))) POSITIVE I.D. ESTABLISHED <<<<
89-Sep	43	59	0	11C	TEC	610-EB RDD				1			1		
89-Sep	43	59	0	11C	TEH	610-EB 32	AV1	.00	.00	K2	1.22		71		
89-Sep	43	59	0	11C	TEH	610-EB 21	AV4	.00	.00	K2	.62		71		RESULT OF DISCREPANCY RESOLUTION
	46	59	1	TEC	TEH	610-EF PI	AV1	.00	.00	K1	.33		20		RESULT OF DISCREPANCY RESOLUTION
DATE	ROW	COL	PLAN	CE-B	CE-C	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	D.	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Dreadwood Unit 1

CCE -K/D4

INSPECTION: APR-71

1-Rev-PI 11121

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	46	59	1	TEC	TEH	610-EF	PI	AV2	.00	.00	R1	5.70	20	1	
	46	59	1	TEC	TEH	610-EF	PI	AV4	.00	.00	R1	1.06	20	1	
	46	59	1	TEC	TEH	610-EF	46	AV2	.00	.00	R2	0.52	51		1st TEST FOR POSITIVE I.D.
	46	59	1	TEC	TEH	610-EF	27	AV4	.00	.00	R2	1.57	51	1	
	46	59	1	TEC	YEH	610-EF	PI	AV2	.00	.00	1	5.23	111	53	1)))) POSITIVE I.D. ESTABLISHED <(((
89-Sep	46	59	0	11C	TEC	610-EB		NDD			1		1	1	
89-Sep	46	59	0	11C	TEH	610-EB	20	AV2	.00	.00	R2	.97	71	1	
	47	59	1	TEC	TEH	610-EF	PI	AV2	.00	.00	R1	1.75	20		1st TEST - TEST FULL LENGTH
	47	59	1	TEC	TEH	610-EF	34	AV2	.00	.00	R2	2.79	51	1	
89-Sep	47	59	0	11C	TEC	610-EB		NDD			1		1	1	
89-Sep	47	59	0	11C	TEH	610-EB		NDD			1		71	1	
	1	60	1	11H	TEH	610-EF	DI	3H	.00	.00	R1	.55	01	25	1) RESULT OF DISCREPANCY RESOLUTION
	1	60	4	3H	3H	RPC-ZR		NDD			1		55	1	
	1	60	3	11C	11H	RPC-ZR		NDD			1		59	1	
	1	60	2	11C	TEC	590-EF		NDD			1		64	1	
89-Sep	1	60	0	11H	TEC	590-EB		NDD			1		10	1	
89-Sep	1	60	0	11H	TEH	610-EB		NDD			1		75	1	
89-Sep	1	60	0	11C	11H	RPC-ZR		NDD			1		82	1	
89-Sep	1	60	0	11C	PH	590-EB		NDD			1		89	1	10-BEND HEAT TREAT DETECTED
89-Sep	1	60	0	11C	11H	RPC-ZR		NDD			1		94	1	
	46	60	1	TEC	TEH	610-EF	PI	AV1	.00	.00	R1	.61	20	1	
	46	60	1	TEC	TEH	610-EF	PI	AV3	.00	.00	R1	.50	20		1) RESULT OF DISCREPANCY RESOLUTION
	46	60	1	TEC	TEH	610-EF	24	AV1	.00	.00	R2	1.06	51		1) RESULT OF DISCREPANCY RESOLUTION
	46	60	1	TEC	TEH	610-EF	22	AV2	.00	.00	R2	.85	51		1) RESULT OF DISCREPANCY RESOLUTION
	46	60	1	TEC	TEH	610-EF	21	AV3	.00	.00	R2	.75	51		1) RESULT OF DISCREPANCY RESOLUTION
89-Sep	46	60	0	11C	TEC	610-EB		NDD			1		1	1	
89-Sep	46	60	0	11C	TEH	610-EB		NDD			1		71	1	
	17	61	1	TEC	TEH	610-EF	DI	3H	.00	.00	R1	.47	111	17	1) RESULT OF DISCREPANCY RESOLUTION
	17	61	5	5H	5H	RPC-ZR		NDD			1		55	1	
	17	61	4	3H	3H	RPC-ZR		NDD			1		55	1	
	17	61	10	1H	TSH	RPC-ZR		NDD			1		55	1	
89-Sep	17	61	0	TEH	TEC	610-EB		NDD			1		47	1	
	24	61	1	TEC	TEH	610-EF	DI	3H	.00	.00	R1	.63	76	17	1) RESULT OF DISCREPANCY RESOLUTION

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE - 4/14

IMPLETION 400-73

1-Nov-91 11:13

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS
	24	61	4	3H	3H	RPC-ZR NDU					1			55	
89-Sep	24	61	0	TEH	TEC	610-EB NDU					1			47	
=====															
	40	61	1	TEC	TEH	610-EF IMR TSC	.00	.00			1			18	RESULT OF LAR
	40	61	1	TEC	TEH	610-EF IMR TEC	20.47	.00			1			18	RESULT OF LAR
89-Sep	40	61	0	TEH	TEC	610-EB DI TEC	20.47	.00	N1			1.13	102	47	RESULT OF DISCREPANCY RESOLUTION
89-Sep	40	61													IRETEST - TEST FULL LENGTH
89-Sep	40	61	0	TSC	TSC	RPC-ZR NDU					1			20	
89-Sep	40	61	0	TEC	TEH	610-EB DI TSC	.00	.00	N1			1.63	122	72	RESULT OF DISCREPANCY RESOLUTION
=====															
	49	63	1	TEC	TEH	610-EF IMR TEH	18.25	.00			1			18	RESULT OF LAR
	49	63	1	TEC	TEH	610-EF DI TEH	16.11	.00	N1			3.27	40	18	RESULT OF LAR
	49	63	11	TSH	TEH	RPC-ZR NDU					1			55	
89-Sep	49	63	0	TEC	TEC	610-EB NDU					1			1	
89-Sep	49	63	0	TEC	TEH	610-EB DI TEH	18.25	.00	N1			1.50	42	71	RESULT OF DISCREPANCY RESOLUTION
89-Sep	49	63	0	TSH	TEH	RPC-ZR NDU					1			86	
=====															
	10	64	1	TEC	TEH	610-EF DI SH	.00	.00	N1			.45	127	18	RESULT OF DISCREPANCY RESOLUTION
		64	5	SH	SH	RPC-ZR NDU					1			55	
		64	4	3H	3H	RPC-ZR NDU					1			55	
	19	64	10	1H	TSH	RPC-ZR NDU					1			55	
89-Sep	19	64	0	TEH	TEC	610-EB NDU					1			48	
=====															
	39	64	1	TEC	TEH	610-EF DI SH	.00	.00	N1			.83	59	30	RESULT OF DISCREPANCY RESOLUTION
	39	64													IRPC INDICATION PID FROM BUBBLE TEST
	39	64	4	3H	3H	RPC-ZR SAI SH	.00	.00	1			.46	133	55	IRETEST FOR POSITIVE I.D.
	39	64													IRPC POSITIVE I.D. ESTABLISHED <<<<<
	39	64	4	3H	3H	RPC-ZR LXW SH	290.0	261.0	1			100.00	45	55	
89-Sep	39	64	0	TEH	TEC	610-EB NDU					1			48	
=====															
	49	64	1	TEC	TEH	610-EF IMR TEH	2.93	.00			1			18	RESULT OF LAR
	49	64	1	TEC	TEH	610-EF DI TEH	6.14	.00	N1			.02	97	18	RESULT OF LAR
	49	64	11	TSH	TEH	RPC-ZR NDU					1			55	
89-Sep	49	64	0	TEC	TEC	610-EB NDU					1			1	
89-Sep	49	64	0	TEC	TEH	610-EB DI TEH	2.93	.00	N1			1.24	41	71	RESULT OF DISCREPANCY RESOLUTION
89-Sep	49	64	0	TSH	TEH	RPC-ZR NDU					1			85	
=====															
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -4/04

INSPECTION: 4-91

1-Nov-91 11:21

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	11	66	1	TEC	TEH	610-EF	DI	TEH	10.29	.00	M1	12.55	10	23	RESULT OF DISCREPANCY RESOLUTION
	11	66	11	TSH	TEH	RPC-ZR	MDO				1			55	
89-Sep	11	66	0	TEH	TEC	610-EB	2AV				1			17	
	18	66	1	11C	TEH	610-EF	25	TSH	.27	.00	1	1.64	10	30	
	18	66	10	1H	TSH	RPC-ZR	MDO				1			55	RESULT OF LAR
	18	66	10	1H	TSH	RPC-ZR	SCI	TSH	.47	.00	3	6.35	16	55	INTEST FOR POSITIVE I.D.
	18	66													THIS TUBE MANUALLY REMOVED FROM RETEST LIST
	18	66													REMOVED FROM PLUG LIST BASED ON NRPC RESULTS
	18	66	10	1H	TSH	RPC-ZR	MDO							61	THIS DATA TAPE ANALYSIS CHANGES PRIOR ANALYSIS
89-Sep	18	66	0	TEH	TEC	610-EB	MDO				1			49	
	27	66	1	11C	TEH	610-EF	DI	SH	.00	.00	M1	.57	102	30	
	27	66	5	SH	SH	RPC-ZR	MDO				1			55	
	27	66	4	3H	3H	RPC-ZR	MDO				1			55	
	27	66	8	1H	1H	RPC-ZR	SCN							55	ISUPPORT NOT VISIBLE AT 1H
	27	66	9	TSH	TSH	RPC-ZR	MDO				1			55	
89-Sep	27	66	0	TEH	TEC	610-EB	MDO				1			49	
	48	67	1	TEC	TEH	610-EF	DI	TEH	4.40	.00	M1	3.66	73	15	RESULT OF LAR
	48	67	11	TSH	TEH	RPC-ZR	MDO				1			55	
89-Sep	48	67	0	11C	TEC	610-EB	MDO				1			1	
89-Sep	48	67	0	11C	TEH	610-EB	DI	TEH	4.37	.00	M1	1.11	119	72	
89-Sep	48	67	0	TSH	TEH	RPC-ZR	MDO				1			85	
	3	69	1	11C	TEH	610-EF	NEM	SH	10.14	.00	1	.60	156	37	RESULT OF DISCREPANCY RESOLUTION
	3	69	2	11C	TEC	590-EF	MDO				1			64	
89-Sep	3	69	0	11H	TEC	610-EB	MDO				1			6	
89-Sep	3	69	0	11H	TEH	610-EB	IMR	SH	10.10	.00	1			75	RESULT OF LAR
	9	73	1	TEC	TEH	610-EF	DI	TEH	12.10	.00	M1	11.67	15	23	RESULT OF DISCREPANCY RESOLUTION
	9	73	11	TSH	TEH	RPC-ZR	MDO				1			55	
89-Sep	9	73	0	TEH	TEC	610-EB	2AV				1			16	
	35	73	1	TEC	TEH	610-EF	DI	7H	.00	.00	M1	.49	25	21	RESULT OF DISCREPANCY RESOLUTION
	35	73	6	7H	7H	RPC-ZR	MDO				1			55	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -4/D4

INDUCTION: Apr-71

1-Nov-71 11:12

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEL	TAPE1	COMMENTS
	35	73	5	5H	5H	RPC-ZR MDD					1	55			
	35	73	4	3H	3H	RPC-ZR MDD					1	55			
	35	73	10	1H	1H	RPC-ZR MDD					1	55			
89-Sep	35	73	0	TEH	TEC	610-EB MDD					1	52			
=====															
	24	74	1	11C	TEH	610-EF DI	3H		.00	.00	N1	.61	115	31	RESULT OF DISCREPANCY RESOLUTION
	24	74	4	3H	3H	RPC-ZR MDD					1	55			
89-Sep	24	74	0	TEH	TEC	610-EB MDD					1	53			
=====															
	34	74	1	11C	TEH	610-EF DI	3H		.00	.00	1	.66	90	31	RESULT OF DISCREPANCY RESOLUTION
	34	74	4	3H	3H	RPC-ZR MDD					1	55			
89-Sep	34	74	0	TEH	TEC	610-EB MDD					1	53			
=====															
	24	76	1	10C	TEH	610-EF DI	3H		.00	.00	N1	.50	65	31	RESULT OF DISCREPANCY RESOLUTION
	24	76	4	3H	3H	RPC-ZR MDD					1	55			
89-Sep	24	76	0	TEH	TEC	610-EB MDD					1	54			
=====															
	42	76	1	11C	TEH	610-EF DI	TEH	12.15	.00	.00	N1	3.07	41	31	RESULT OF DISCREPANCY RESOLUTION
	42	76	11	1H	1H	RPC-ZR MDD					1	55			
89-Sep	42	76	0	TEH	TEC	610-EB MDD					1	54			
=====															
	30	77	1	11C	TEH	610-EF DI	3H		.00	.00	N1	.50	90	31	
	30	77	4	3H	3H	RPC-ZR MDD					1	55			
89-Sep	30	77	0	TEH	TEC	610-EB MDD					1	55			
=====															
	24	80	1	TEC	TEH	610-EF NDM	DN	33.46	.00	.00	6	.67	46	32	RESULT OF DISCREPANCY RESOLUTION
89-Sep	24	80	0	TEH	TEC	610-EB MDD					1	56			
=====															
	48	82	1	TEC	TEH	610-EF DI	TEC	17.24	.00	.00	N1	21.00	12	24	RESULT OF DISCREPANCY RESOLUTION
89-Sep	48	82	0	TEH	TEC	610-EB MDD					1	57			
=====															
	25	83	1	TEC	TEH	610-EF INR	TEH	20.86	.00	.00	N1			23	RESULT OF DISCREPANCY RESOLUTION
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEL	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -A/D4

INSPECTION: NO. 91

1-Aug-91 11:21

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
89-Sep	25	83	6	TEH	TEC	610-ED	DI	TEH	20.83	.00	M1	.86	127	57	RESULT OF DISCREPANCY RESOLUTION
89-Sep	25	83	6	TSH	TEH	RPC-2A	MDO				1			85	
	32	92	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.89	55	37	RESULT OF DISCREPANCY RESOLUTION
	32	92	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.63	74	30	RESULT OF DISCREPANCY RESOLUTION
	32	92	4	3H	3H	RPC-2R	MDO				1			55	
89-Sep	32	92	6	TEH	TEC	610-ED	MDO				1			62	
	7	93	1	TEC	TEH	610-EF	DI	3H	.00	.00	M1	.61	80	29	RESULT OF DISCREPANCY RESOLUTION
	7	93	4	3H	3H	RPC-2R	MDO				1			55	
89-Sep	7	93	6	TEH	TLC	610-ED	MDO				1			60	
	41	95	1	TEC	TEH	610-EF	MOR	10H	11.99	.00	1	.80	77	25	RESULT OF DISCREPANCY RESOLUTION
89-Sep	41	95	6	TEH	TEC	610-ED	IMR	10H	12.09	.00	1			63	RESULT OF LAR
	4	99	1	11C	TSH	610-EF	MDO				1			35	RESULT OF DISCREPANCY RESOLUTION
	4	99	1	11C	TEH	610-EF	IMR	7H	4.55	.00	1			51	RESULT OF DISCREPANCY RESOLUTION
89-Sep	4	99	6	11H	TEC	610-ED	MDO				1			7	
89-Sep	4	99	6	11H	TEH	610-ED	IMR	7H	4.11	.00	1			77	RESULT OF LAR
	9	102	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.42	79	35	
	9	102	4	3H	3H	RPC-2R	MDO				1			55	
89-Sep	9	102	6	TEH	TEC	610-ED	0AV				1			13	RESULT OF DISCREPANCY RESOLUTION
	11	108	1	TEC	TEH	610-EF	DI	3H	.00	.00	M1	.77	62	28	RESULT OF DISCREPANCY RESOLUTION
	11	108													IRPC INDICATION FID FROM MODIM TEST
	11	108	4	3H	3H	RPC-2R	SAI	3H	-.10	.00	1	.72	157	55	IRETEST FOR POSITIVE I.D.
	11	108													1>>>>> POSITIVE I.D. ESTABLISHED <<<<<
	11	108	4	3H	3H	RPC-2R	LXW	3H	298.0	278.0	1	100.50	48	55	
89-Sep	11	108	6	TEH	TEC	610-ED	1AV				1			13	RESULT OF DISCREPANCY RESOLUTION
89-Sep	11	108	6	TEH	TEC	610-ED	DI	3H	.00	.00	M1	.80	86	13	RESULT OF DISCREPANCY RESOLUTION
89-Sep	11	108	6	3H	3H	RPC-2A	MDO				1			85	RESULT OF LAR
	23	109	1	TEC	TEH	610-EF	PI	AV4	.00	.00	1	.46	122	27	RESULT OF LAR
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -4/04

INSPECTION: NOV-91

1-Nov-91 11:11

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE	COMMENTS
	23	109	1	TEC	TEH	610-EF	13	AV4	.00	.00	RI	.65		51	RESULT OF DISCREPANCY RESOLUTION
89-Sep	23	109	0	TEH	TEC	610-EF					1			67	
=====															
	8	110	1	11C	TSH	610-EF					1			34	RESULT OF DISCREPANCY RESOLUTION
	8	110	1	SH	TEH	610-EF	DI	3H	.00	.00	RI	.56	87	51	RESULT OF DISCREPANCY RESOLUTION
	8	110	4	3H	3H	RPC-ZE					1			55	
89-Sep	8	110	0	TEH	TEC	610-EF					1			13	RESULT OF DISCREPANCY RESOLUTION
=====															
	11	110	1	TEC	TEH	610-EF	IMR	3H	.00	.00	RI			20	RESULT OF DISCREPANCY RESOLUTION
89-Sep	11	110	0	TEH	TEC	610-EF	2AV				1			13	RESULT OF DISCREPANCY RESOLUTION
89-Sep	11	110	0	TEH	TEC	610-EF	DI	3H	.00	.00	RI	.66	42	13	RESULT OF DISCREPANCY RESOLUTION
89-Sep	11	110	0	3H	3H	RPC-ZA					1			85	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE	COMMENTS

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TOTAL TUBES

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -D/D4

INSPECTION: Apr-91

1-Nov 91 2224

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS
	15	6	1	TEC	TEH	610-EF	39	TSH	4.70	.00	1	.55	137	2	
	15	6	1	TEC	TEH	610-EF	30	TSH	4.12	.00	1	.60	135	2	RESULT OF DISCREPANCY RESOLUTION
	15	6	10	1H	TSH	RPC-ZR	39	TSH	4.05	.00	1	.76	134	58	
	15	6	10	1H	TSH	RPC-ZR	LXM	TSH	302.0	273.0	1	100.00	47	50	
	15	6	10	1H	TSH	RPC-ZR	39	TSH	4.62	.00	1	1.36	134	58	
	15	6	10	1H	TSH	RPC-ZR	LXM	TSH	229.0	306.0	1	100.00	51	50	
89-Sep	15	6	0	TEH	TEC	610-EB	37	TSH	4.43	.00	1	.64	139	23	RESULT OF LAR
89-Sep	15	6	0	TEH	TEC	610-EB	20	TSH	4.97	.00	1	.50	147	23	RESULT OF LAR
89-Sep	15	6	0	1H	TSH	RPC-ZA	SAI	TSH	4.88	.00	1	.44	127	86	1-THIS TUBE MANUALLY REMOVED FROM PLUG LIST
89-Sep	15	6													REMOVAL FROM PLUG LIST BASED ON BUBBIN TE
89-Sep	15	6	0	1H	TSH	RPC-ZA	SAI	TSH	4.34	.00	1	.44	138	86	1-THIS TUBE MANUALLY REMOVED FROM PLUG LIST
89-Sep	15	6													REMOVAL FROM PLUG LIST BASED ON BUBBIN TE
	16	7	1	TEC	TEH	610-EF	36	TSH	4.50	.00	1	1.72	140	2	
	16	7	10	1H	TSH	RPC-ZR	38	TSH	4.33	.00	1	.12	135	58	
	16	7	10	1H	TSH	RPC-ZR	LXM	TSH	301.0	284.0	1	100.00	40	50	
89-Sep	16	7	0	TEH	TEC	610-EB	35	TSH	4.82	.00	1	1.69	141	23	RESULT OF LAR
89-Sep	16	7	0	1H	TSH	RPC-ZA	SAI	TSH	5.33	.00	1	.62	86	86	1-THIS TUBE MANUALLY REMOVED FROM PLUG LIST
89-Sep	16	7													REMOVAL FROM PLUG LIST BASED ON BUBBIN TE
	32	20	1	TEC	TEH	610-EF	59	3H	.00	.00	R1	1.16	94	5	IRETEST FOR POSITIVE I.D.
	32	20	1	TEC	TEH	610-EF	PII	3H	.00	.00	R1	1.49	86	25	1>>>> POSITIVE I.D. ESTABLISHED <<<<
	32	20	1			RPC-ZR	KT							55	
	32	20	4	3H	3H	RPC-ZR	SAI	3H	-1.03	.00	1	1.44	90	50	IRETEST FOR POSITIVE I.D.
	32	20	4	3H	3H	RPC-ZR	LXM	3H	372.0	273.0	1	100.00	47	50	
89-Sep	32	20	0	TEH	TEC	610-EB	RDD				1			29	
	5	21	1	11C	TEH	610-EF	DMF	11H	3.30	.00	R1			10	RESULT OF DISCREPANCY RESOLUTION
	5	21	1	11C	TEH	610-EF	INT	11H	20.07	.00	R1			10	RESULT OF DISCREPANCY RESOLUTION
89-Sep	5	21	0	11C	TEC	610-EB	DNT	11H	3.30	.00	R1	14.13	184	2	
89-Sep	5	21	0	11H	TEC	610-EB	DNT	11H	20.87	.00	R1	24.46	181	2	
89-Sep	5	21	0	11H	TEH	610-EB	RDD				1			8	
	6	21	1	11C	TEH	610-EF	39	7H	.00	.00	R1	.61	111	10	RESULT OF DISCREPANCY RESOLUTION
	6	21	6	7H	7H	RPC-ZR	RDD				1			55	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -D/D4

INSPECTION: Apr-91

1-Nov-91 11124

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS
	6	21	5	SH	SH	RPC-ZR NDD					1		55		
	6	21	4	SH	SH	RPC-ZR NDD					1		55		
	6	21	10	1H	TSH	RPC-ZR NDD					1		55		RESULT OF DISCREPANCY RESOLUTION
89-Sep	6	21	0	TEH	TEC	610-EB NDD					1		24		
=====															
	33	23	1	11C	TEH	610-EF DI	3H		.00	.00	N1	.55	120	10	RESULT OF DISCREPANCY RESOLUTION
	33	23	4	3H	3H	RPC-ZR NDD					1		55		
89-Sep	33	23	0	TEH	TEC	610-EB NDD					1		30		
=====															
	25	25	1	11C	TEH	610-EF DI	5H		.00	.00	N1	.46	120	10	RESULT OF DISCREPANCY RESOLUTION
	25	25	5	SH	SH	RPC-ZR NDD					1		55		
	25	25	4	3H	3H	RPC-ZR NDD					1		55		
	25	25	8	1H	1H	RPC-ZR NDD					1		55		
	25	25	9	TSH	TSH	RPC-ZR NDD					1		55		
89-Sep	25	25	0	TEH	TEC	610-EB NDD					1		32		
=====															
	31	25	1	11C	TEH	610-EF DI	3H		.00	.00	N1	.40	104	10	RESULT OF DISCREPANCY RESOLUTION
	31	25	4	3H	3H	RPC-ZR NDD					1		55		
89-Sep	31	25	0	TEH	TEC	610-EB NDD					1		31		
=====															
	33	25	1	10C	TEH	610-EF DI	3H		.00	.00	N1	.69	111	10	RESULT OF DISCREPANCY RESOLUTION
	33	25													RPC INDICATION PID FROM BUBBIM TEST
	33	25	4	3H	3H	RPC-ZR NAI	3H		.00	.00	2	11.55	83	55	RESULT OF DISCREPANCY RESOLUTION
	33	25													RETEST FOR POSITIVE I.D.
	33	25													***** POSITIVE I.D. ESTABLISHED *****
89-Sep	33	25	0	TEH	TEC	610-EB NDD					1		31		
=====															
	34	25	1	11C	TEH	610-EF DI	3H		.00	.00	N1	1.17	85	10	
	34	25	1	11C	TEH	610-EF DI	5H		.00	.00	N1	.55	85	10	RESULT OF NON-RESOLUTION ITEM ADD OR CHANGE
	34	25													RPC INDICATION PID FROM BUBBIM TEST
	34	25													***** POSITIVE I.D. ESTABLISHED *****
	34	25	5	SH	SH	RPC-ZR NDD					1		55		
	34	25	10	1H	TSH	RPC-ZR NDD					1		55		
	34	25	4	3H	3H	RPC-ZR NAI	3H		.02	.00	2	18.49	130	55	RESULT OF DISCREPANCY RESOLUTION
	34	25													RETEST FOR POSITIVE I.D.
	34	25													THIS TUBE MANUALLY REMOVED FROM RETEST LI
89-Sep	34	25	0	TEH	TEC	610-EB NDD					1		31		
=====															
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE - D/D4

INSPECTION: Apr-91

1-Nov-91 11124

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE	COMMENTS
	29	26	1	TEC	TEH	610-EF	IMF	TEC	17.05	.00	N1			6	
89-Sep	29	26	0	TEH	TEC	610-EB	DI	TEC	17.05	.00	N1	1.50	42	32	RESULT OF LAR
89-Sep	29	26	0	TSC	TEC	RPC-ZA	NDD				1			72	
=====															
	46	33	1	TEC	TEH	610-EF	DI	3H	.00	.00	1	.46	153	0	RESULT OF DISCREPANCY RESOLUTION
	46	33													RPC INDICATION PID FROM BOBDM TEST
	46	33	4	3H	3H	RPC-ZA	SAL	3H	.00	.00	2	18.49	130	55	RESULT OF DISCREPANCY RESOLUTION
	46	33													IRETEST FOR POSITIVE I.D.
	46	33													1>>>> POSITIVE I.D. ESTABLISHED <<<<
89-Sep	46	33	0	TEH	TEC	610-EB	NDD				1			35	
=====															
	24	43	1	11C	TEH	610-EF	DI	3H	.00	.00	1	.63	95	22	
	24	43	4	3H	3H	RPC-ZA	NDD				1			55	
89-Sep	24	43	0	TEH	TEC	610-EB	NDD				1			41	
=====															
	28	44	1	11C	TEH	610-EF	DI	3H	.00	.00	N1	.62	85	22	RESULT OF DISCREPANCY RESOLUTION
	28	44	1	11C	TEH	610-EF	DI	3H	.00	.00	N1	.69	97	22	RESULT OF DISCREPANCY RESOLUTION
	28	44	5	5H	5H	RPC-ZA	NDD				1			55	
	28	44	4	3H	3H	RPC-ZA	NDD				1			55	
	28	44	10	1H	TSH	RPC-ZA	NDD				1			55	
89-Sep	28	44	0	TEH	TEC	610-EB	NDD				1			42	
=====															
	42	44	1	11C	TEH	610-EF	DI	3H	.00	.00	N1	.45	67	22	RESULT OF DISCREPANCY RESOLUTION
	42	44	4	3H	3H	RPC-ZA	NDD				1			55	
89-Sep	42	44	0	TEH	TEC	610-EB	NDD				1			42	
=====															
	27	47	1			610-EF	MT				N1			12	
	27	47	1	11C	TEH	610-EF	DI	3H	.00	.00	N1	.30	70	52	RESULT OF DISCREPANCY RESOLUTION
	27	47	6	7H	7H	RPC-ZA	NDD				1			55	
	27	47	5	5H	5H	RPC-ZA	NDD				1			55	
	27	47	4	3H	3H	RPC-ZA	NDD				1			55	
	27	47	9	TSH	TSH	RPC-ZA	NDD				1			55	
	27	47	8	1H	1H	RPC-ZA	SCN				1			55	SUPPORT NOT VISIBLE AT 1H
89-Sep	27	47	0	TEH	TEC	610-EB	NDD				1			43	
=====															
	31	47	1			610-EF	MT				N1			12	IRETEST - TEST FULL LENGTH
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -D/D4

INSPECTION: Apr-91

1-Nov-91 11:24

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS
	31	47	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.44	36	52	RESULT OF DISCREPANCY RESOLUTION
	31	47	1	11C	TEH	610-EF	DI	5H	.00	.00	M1	.70	65	52	RESULT OF DISCREPANCY RESOLUTION
	31	47	5	5H	5H	RPC-2R	MDD				1			55	1
	31	47	4	3H	3H	RPC-2R	MDD				1			55	1
	31	47	10	1H	TSH	RPC-2R	MDD				1			55	1
89-Sep	31	47	0	TEH	TEC	610-EB	MDD				1			43	1
	32	47	1			610-EF	MT				M1			12	1
	32	47	1	11C	TEH	610-EF	DI	3H	.00	.00	M1	.65	87	52	1
	32	47	4	3H	3H	RPC-2R	MDD				1			55	1
89-Sep	32	47	0	TEH	TEC	610-EB	MDD				1			43	1
	27	50	1	TEC	TEH	610-EF	DI	3H	.06	.00	M1	.94	74	13	1
	27	50	1	TEC	TEH	610-EF	DI	5H	.00	.00	M1	.71	60	13	1
	27	50	1	11C	TEH	610-EF	DI	3H	.00	.00	1	.74	94	23	1
	27	50	1	11C	TEH	610-EF	DI	5H	.00	.00	1	.38	116	23	1
	27	50	5	5H	5H	RPC-2R	MDD				1			55	1
	27	50	4	3H	3H	RPC-2R	MDD				1			55	1
	27	50	9	TSH	TSH	RPC-2R	MDD				1			55	1
	27	50	8	1H	1H	RPC-2R	SCN				1			55	1
89-Sep	27	50	0	TEH	TEC	610-EB	MDD				1			45	1
	21	52	1	TEC	TEH	610-EF	DI	3H	.00	.00	M1	.70	90	14	1
	21	52	1	TEC	TEH	610-EF	DI	5H	.00	.00	M1	.86	76	14	1
	21	52	5	5H	5H	RPC-2R	MDD				1			55	1
	21	52	4	3H	3H	RPC-2R	MDD				1			55	1
	21	52	9	TSH	TSH	RPC-2R	MDD				1			55	1
	21	52	8	1H	1H	RPC-2R	SCN				1			55	1
89-Sep	21	52	0	TEH	TEC	610-EB	MDD				1			45	1
	20	53	1	TEC	TEH	610-EF	DI	3H	.00	.00	M1	.80	82	14	1
	20	53	4	3H	3H	RPC-2R	MDD				1			56	1
89-Sep	20	53	0	TEH	TEC	610-EB	MDD				1			46	1
	25	53	1	TEC	TEH	610-EF	DI	3H	.00	.00	M1	.64	59	14	1
	25	53	4	3H	3H	RPC-2R	MDD				1			56	1
89-Sep	25	53	0	TEH	TEC	610-EB	MDD				1			46	1
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -0/14

INSPECTION: Apr-71

1-AUG 71 11124

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS
	21	54	1	TEC	TEH	610-EF DI	BH		.00	.00	M1	.62	03	14	RESULT OF DISCREPANCY RESOLUTION
	21	54	2	BH	BH	RPC-ZR RDD					1			56	
	21	54	6	7H	7H	RPC-ZR RDD					1			56	
	21	54	5	5H	5H	RPC-ZR RDD					1			56	
	21	54	4	3H	3H	RPC-ZR RDD					1			56	
	21	54	9	TSH	TSH	RPC-ZR RDD					1			56	
	21	54	8	1H	1H	RPC-ZR SCR					1			56	SUPPORT NOT VISIBLE AT 1H
89-Sep	21	54	0	TEH	TEC	610-EF RDD					1			46	
=====															
	28	54	1	TEC	TEH	610-EF DI	3H		.00	.00	M1	1.04	02	14	RESULT OF DISCREPANCY RESOLUTION
	28	54	4	3H	3H	RPC-ZR RDD					1			56	
89-Sep	28	54	0	TEH	TEC	610-EF RDD					1			46	
=====															
	41	54	1	TEC	TEH	610-EF DI	7H		.00	.00	M1	.51	101	14	RESULT OF DISCREPANCY RESOLUTION
	41	54	6	7H	7H	RPC-ZR RDD					1			56	
	41	54	5	5H	5H	RPC-ZR RDD					1			56	
	41	54	4	3H	3H	RPC-ZR RDD					1			56	
	41	54	10	1H	TSH	RPC-ZR RDD					1			56	
89-Sep	41	54	0	TEH	TEC	610-EF RDD					1			46	
=====															
	36	55	1	TEC	TEH	610-EF DI	3H		.03	.00	M1	.77	68	15	RESULT OF DISCREPANCY RESOLUTION
	36	55	4	3H	3H	RPC-ZR RDD					1			56	
89-Sep	36	55	0	TEH	TEC	610-EF RDD					1			47	
=====															
	42	59	1	TEC	TEH	610-EF PI	AV1		.00	.00	M1	.83	77	25	RESULT OF DISCREPANCY RESOLUTION
	42	59													IRETEST - TEST FULL LENGTH
	42	59	1	TEC	TEH	610-EF 26	AV1		.00	.00	M2	1.44		52	
89-Sep	42	59	0	11C	TEC	610-EF RDD					1			6	
89-Sep	42	59	0	10C	TEH	610-EF RDD					1			78	RESULT OF DISCREPANCY RESOLUTION
=====															
	45	59	1	TEC	TEH	610-EF PI	AV1		.00	.00	M1	.55	126	25	RESULT OF DISCREPANCY RESOLUTION
	45	59	1	TEC	TEH	610-EF PI	AV3		.00	.00	M1	1.25	143	25	IRETEST - TEST FULL LENGTH
	45	59	1	TEC	TEH	610-EF 21	AV1		.00	.00	M2	.89		52	
	45	59	1	TEC	TEH	610-EF 23	AV3		.00	.00	M2	1.13		52	
89-Sep	45	59	0	11C	TEC	610-EF RDD					1			6	
89-Sep	45	59	0	11C	TEH	610-EF 22	AV3		.00	.00	M2	.87		76	RESULT OF DISCREPANCY RESOLUTION
=====															
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAM	VOLTS	DEG	TAPE1	COMMENTS



## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -0/04

INSPECTION: Apr-91

1-Nov-91 11124

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	28	62	1	TEC	TEH	610-EF	NDD				1			26	
	28	62	1	11C	TEH	610-EF	35	SH	.00	.00	N1	.38	114	56	RESULT OF DISCREPANCY RESOLUTION
	28	62	5	SH	SH	RPC-ZR	NDD				1			56	
	28	62	4	SH	SH	RPC-ZR	NDD				1			56	
	28	62	9	TSH	TSH	RPC-ZR	NDD				1			56	
	28	62	8	1H	1H	RPC-ZR	SCN				1			56	SUPPORT NOT VISIBLE AT 1H
89-Sep	28	62	0	TEH	TEC	610-EF	NDD				1			49	
	34	62	1	TEC	TEH	610-EF	NDD				1			26	
	34	62	1	10C	TEH	610-EF	31	SH	.00	.00	N1	.44	117	56	RESULT OF DISCREPANCY RESOLUTION
	34	62	4	SH	SH	RPC-ZR	NDD				1			56	
89-Sep	34	62	0	TEH	TEC	610-EF	NDD				1			49	
	14	63	1	11C	TEH	610-EF	35	7H	.00	.00	N1	.49	112	52	RESULT OF DISCREPANCY RESOLUTION
	14	63	6	7H	7H	RPC-ZR	NDD				1			57	
	14	63	5	SH	SH	RPC-ZR	NDD				1			57	
	14	63	4	SH	SH	RPC-ZR	NDD				1			57	
	14	63	10	1H	TSH	RPC-ZR	NDD				1			57	
89-Sep	14	63	0	TEH	TEC	610-EF	NDD				1			50	
	24	64	1	TEC	TEH	610-EF	38	SH	.00	.00	N1	.29	100	27	
	24	64	4	SH	SH	RPC-ZR	NDD				1			56	
89-Sep	24	64	0	TEH	TEC	610-EF	NDD				1			50	
	29	65	1	10C	TEH	610-EF	D1	SH	.00	.00	N1	.60	93	50	RESULT OF LAR
	29	65	1	10C	TEH	610-EF	P1D	SH	.00	.00	N1	.54	80	53	1>>>> POSITIVE I.D. ESTABLISHED <<<<
	29	65													RESULT OF DISCREPANCY RESOLUTION
	29	65	4	SH	SH	RPC-ZR	NDD				1			56	
89-Sep	29	65	0	TEH	TEC	610-EF	NDD				1			50	
	33	65	1	10C	TEH	610-EF	D1	SH	.00	.00	N1	.70	66	50	RESULT OF LAR
	33	65	1	11C	TEH	610-EF	P1D	SH	.00	.00	N1	.79	72	53	1>>>> POSITIVE I.D. ESTABLISHED <<<<
	33	65	4	SH	SH	RPC-ZR	NDD				1			56	
89-Sep	33	65	0	TEH	TEC	610-EF	NDD				1			50	
	43	65	1	11C	TEH	610-EF	D1	SH	.00	.00	N1	.60	96	50	RESULT OF DISCREPANCY RESOLUTION
DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Dreadwood Unit 1

CCE -D/D4

INSPECTION: Apr-91

1-Mar-91 11:24

DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LUCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS
	43	65	4	3H	3H	RPC-2R MDD					1			56	
89-Sep	43	65	0	TEH	TEC	610-EB MDD					1			56	
	44	70	1	TEC	TEH	610-EF DI	5H	.00	.00	M1	.49	120	29		
	44	70	5	5H	5H	RPC-2R MDD					1			56	
	44	70	4	3H	3H	RPC-2R MDD					1			56	
	44	70	10	1H	TSH	RPC-2R MDD					1			56	
89-Sep	44	70	0	TEH	TEC	610-EB MDD					1			53	
	21	79	1	11C	TEH	610-EF BDA					1			45	
	21	79	1	11C	TEH	610-EF DI	3H	.00	.00	M1	.65	60	46		
	21	79	4	3H	3H	RPC-2R MDD					1			56	
89-Sep	21	79	0	TEH	TEC	610-EB MDD					1			57	
	34	79	1	11C	TEH	610-EF BDA					1			45	
	34	79	1	11C	TEH	610-EF DI	5H	.00	.00	M1	.43	129	46		RESULT OF DISCREPANCY RESOLUTION
	34	79	5	5H	5H	RPC-2R MDD					1			56	
	34	79	4	3H	3H	RPC-2R MDD					1			56	
	34	79	10	1H	TSH	RPC-2R MDD					1			56	
89-Sep	34	79	0	TEH	TEC	610-EB MDD					1			57	
	35	79	1	11C	TEH	610-EF BDA					1			45	RESULT OF DISCREPANCY RESOLUTION
	35	79	1	11C	TEH	610-EF DI	3H	.00	.00	M1	.43	96	46		RESULT OF DISCREPANCY RESOLUTION
	35	79	4	3H	3H	RPC-2R MDD					1			56	
89-Sep	35	79	0	TEH	TEC	610-EB MDD					1			57	
	27	81	1	11C	TEH	610-EF DI	3H	.00	.00	M1	.35	44	45		RESULT OF DISCREPANCY RESOLUTION
	27	81	4	3H	3H	RPC-2R MDD					1			56	
89-Sep	27	81	0	TEH	TEC	610-EB MDD					1			50	
	39	81	1	11C	TEH	610-EF DI	3H	.00	.00	M1	.57	91	45		RESULT OF DISCREPANCY RESOLUTION
	39	81	4	3H	3H	RPC-2R MDD					1			56	
89-Sep	39	81	0	TEH	TEC	610-EB MDD					1			50	
DATE	ROW	COL	PLAN	CE-B	CE-E	PROBE	IND	LUCK	INCH1	INCH2	CHAR	VOLTS	DEG	TAPE1	COMMENTS

## INDICATION LISTING - BOTH LEGS CUMULATIVE

Braidwood Unit 1

CCE -D/D4

INSPECTION: Apr-91

1-Nov-91 11124

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
	43	83	1	11C	TEH	610-EF DI	3H		.00	.00	M1	.37	65	44	RESULT OF DISCREPANCY RESOLUTION
	43	83	4			RPC-ZR MT								56	
	43	83	4	3H	3H	RPC-ZR MDD					1			57	
89-Sep	43	83	0	TEH	TEC	610-EB MDD					1			59	
	41	85	1	11C	TEH	610-EF DI	3H		.00	.00	M1	.84	44	44	RESULT OF DISCREPANCY RESOLUTION
	41	85	4	3H	3H	RPC-ZR MDD					1			57	
89-Sep	41	85	0	TEH	TEC	610-EB MDD					1			60	
	18	86	1	11C	TEH	610-EF DI	3H		.00	.00	M1	.61	38	44	RESULT OF DISCREPANCY RESOLUTION
	18	86	4	3H	3H	RPC-ZR MDD					1			57	
89-Sep	18	86	0	TEH	TEC	610-EB MDD					1			60	
	34	87	1	11C	TEH	610-EF DI	3H		.00	.00	M1	.60	95	43	RESULT OF LAR
	34	87	1	11C	TEH	610-EF PID	3H		.00	.00	M1	.39	101	53	1>>>> POSITIVE I.D. ESTABLISHED <<<<
	34	87	4	3H	3H	RPC-ZR MDD					1			57	
89-Sep	34	87	0	TEH	TEC	610-EB MDD					1			62	
	37	97	1	11C	TEH	610-EF DI	3H		.00	.00	M1	.60	99	43	RESULT OF DISCREPANCY RESOLUTION
	37	97	4	3H	3H	RPC-ZR MDD					1			57	
89-Sep	37	97	0	TEH	TEC	610-EB MDD					1			62	
	17	97	1	TEC	TEH	610-EF INR	TEC		15.04	.00	1			35	
	17	97	1	11C	TEH	610-EF MDD					1			42	
89-Sep	17	97	0	TEH	TEC	610-EB DI	TEC		15.10	.00	M1	17.61	12	66	RESULT OF DISCREPANCY RESOLUTION
89-Sep	17	97	0	ISC	TEC	RPC-ZR MDD					1			72	
	20	108	1	TEC	TEH	610-EF INR	TEH		8.56	.00	1			38	
89-Sep	20	108	0	TEH	TEC	610-EB DI	TEH		8.49	.00	M1	1.72	43	70	
89-Sep	20	108	0	TSH	TEH	RPC-ZR MDD					1			86	
	15	109	1	TEC	TEH	610-EF INR	TEH		16.43	.00	1			38	RESULT OF DISCREPANCY RESOLUTION
89-Sep	15	109	0	TEH	TEC	610-EB DI	TEH		16.24	.00	M1	2.87	40	70	
89-Sep	15	109	0	TSH	TEH	RPC-ZR MDD					1			86	

DATE	ROW	COL	PLAN	CE-D	CE-E	PROBE	IND	LOCK	INCH1	INCH2	CHAN	VOLTS	DEG	TAPE1	COMMENTS
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APPENDIX 4

CERTIFIED EDDY CURRENT TESTING PERSONNEL



# PERSONNEL CERTIFICATIONS

The following personnel acquired and analyzed the eddy current data for Braidwood Unit 1 second refuel outage (AIR02). Those personnel identified with an asteris: analyzed the data.

NAME	ET CERT. LEVEL	COMPANY
* A.J. Dlabik	IIA	W
* J.E. Dye	IIA	W
* K.P. Hoolahan	IIA	W
* R.H. Ingraham	III	W
G.W. Miller	II	W
* R.A. Popovich	III	W
M.L. Price	I	W
D.L. Reif	II	W
* M.A. Richmond	III	W
T.M. Robertson	IIA	W
S.H. Taylor	IIA	W
W.R. Valdez	I	W
L.J. Raper	IIA	ANA
* P.W. O'Grady	IIA	ANA
R.S. Miller	II	ANA
E.J. Hako	IIA	ANA
Y.K. Salls	IIA	ANA
C.F. Benefield	IIA	ANA
* E.P. Lopez	IIA	ANA
* V.S. Lynn	IIA	ANA
* J.I. Radovanic	III	ANA
* C.M. Whatley	IIA	ANA
* B.E. Akerlind	IIA	UTL
* D.R. Greene	IIA	UTL
* K.D. Stewart	IIA	UTL
* J.T. Sheldon	IIA	NDE
* M.S. East	IIA	NDE
* C.K. Wheeler	IIA	NDE
* J.M. Case	IIA	NDE
K.C. Miller	I	W
C.E. Walton	II	ANA
M.A. Jones	I	ANA
J.J. Chapla	III	ANA