C 09/11/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL 50--250/251

REC: SCHWENCER A ORG: UHRIG R E DOCDATE: 09/06/78
NRC FL PWR & LIGHT DATE RCVD: 09/11/78

DOCTYPE: LETTER NOTARIZED: NO COPIES RECEIVED
LTR 3 ENCL 3
SUBJECT:
FORWARDING ADDL INFO TO APPLICANT"S LTR OF 05/04/78 CONCERNING THE OPERATING HISTORY OF SUBJECT FACILITY"S STEAM GENERATORS.

PLANT NAME: TURKEY PT #3 REVIEWER INITIAL: XJM
TURKEY PT #4 DISTRIBUTER INITIAL: DL

********** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS **********

RESPONSES TO STEAM GENERATOR QUESTIONNARE
(DISTRIBUTION CODE A023)

FOR ACTION: BR CHIEF ORB#1 BC**W/7 ENCL

INTERNAL: REG FILE**W/ENCL
I & E**W/2 ENCL
HANAUER**W/ENCL
ENGINEERING BR**W/ENCL
PLANT SYSTEMS BR**W/ENCL
EFFLUENT TREAT SYS**W/ENCL
NRC PDR**W/ENCL
OELD**W/ENCL
AD FOR SYS & PROJ**W/ENCL
REACTOR SAFETY BR**W/ENCL
EEB**W/ENCL

EXTERNAL: LPDR'S
MIAMI, FL**W/ENCL
TERA**W/ENCL
NSIC**W/ENCL
RON GAMBLE**W/6 ENCL
KEN HERRING**W/6 ENCL
ACRS CAT B**W/16 ENCL

DISTRIBUTION: LTR 50 ENCL 50 CONTROL NBR: 782480294
SIZE: 1P+16P

********** THE END **********

Tmuchapp 4w
cap

FLORIDA POWER & LIGHT COMPANY

September 6, 1978
L-78-290

REGULATORY DOCKET FILE COPY

Office of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Schwencer:

Re: Turkey Point Units 3 & 4
Docket Nos. 50-250 & 50-251
Steam Generator Information

In accordance with our letter of May 4, 1978 (L-78-162), additional information on the operating history of the Turkey Point steam generators is attached.

Very truly yours,

J. A. DeMontey

Robert E. Uhrig
Vice President

REU/MAS/sn

Attachment

CC: Mr. James P.O'Reilly, Region II
Robert Lowenstein, Esquire

7824802 94

A023
S 3/3

PEOPLE . . . SERVING PEOPLE

VI. TURBINE STOP VALVE TESTING (applicable to Babcock & Wilcox (B&W) S.G. only)

Frequency of Testing

Actual:

Manufacturer Recommendation: NA

Power Level At Which Testing Is Conducted

Actual:

Manufacturer Recommendation:

Testing Procedures (Stroke length, stroke rate, etc.)

Actual:

Manufacturer Recommendation:

VII. STEAM GENERATOR TUBE DEGRADATION HISTORY

(The following is to be repeated for each scheduled ISI)

Inservice Inspection (ISI) Date: APRIL/MAY 1976

Number of EFP Days of Operation Since Last Inspection:

(The following is to be repeated for each steam generator)

Steam Generator Number: 4A, 4B, 4C

Percentage of Tubes Inspected At This ISI: 4A: 18.28%; 4B: 28.25%; 4C: 18.69%

Percentage of Tubes Inspected At This ISI That Had Been Inspected At The Previous Scheduled ISI:

Percentage of Tubes Plugged Prior to This ISI: 4A: 3.01%; 4B: 3.56%; 4C: 3.25%

Percentage of Tubes Plugged At This ISI: 4A: 0.15%; 4B: 0.09%; 4C: 0.03%

Percentage of Tubes Plugged That Did Not Exceed Degradation Limits: NONE

Percentage of Tubes Plugged As A Result of Exceedance of Degradation Limits: ALL

Sludge Layer Material Chemical Analysis Results:

Sludge Lancing (date):

Ave. Height of Sludge Before Lancing: 4A: 1.60"; 4B: 1.60"; 4C: 1.65"

PER CENT SLUDGE REMOVAL: 4A: 48.3%; 4B: 61.0%; 4C: 60.5%

Replacement, Retubing or Other Remedial Action Considered: (Briefly Specify Details)

Support Plate Hourglassing:

Support Plate Islanding:

Tube Metalurgical Exam Results:

Fretting or Vibration in U-Bend Area (not applicable to B&W S.G.) AS OF (4)

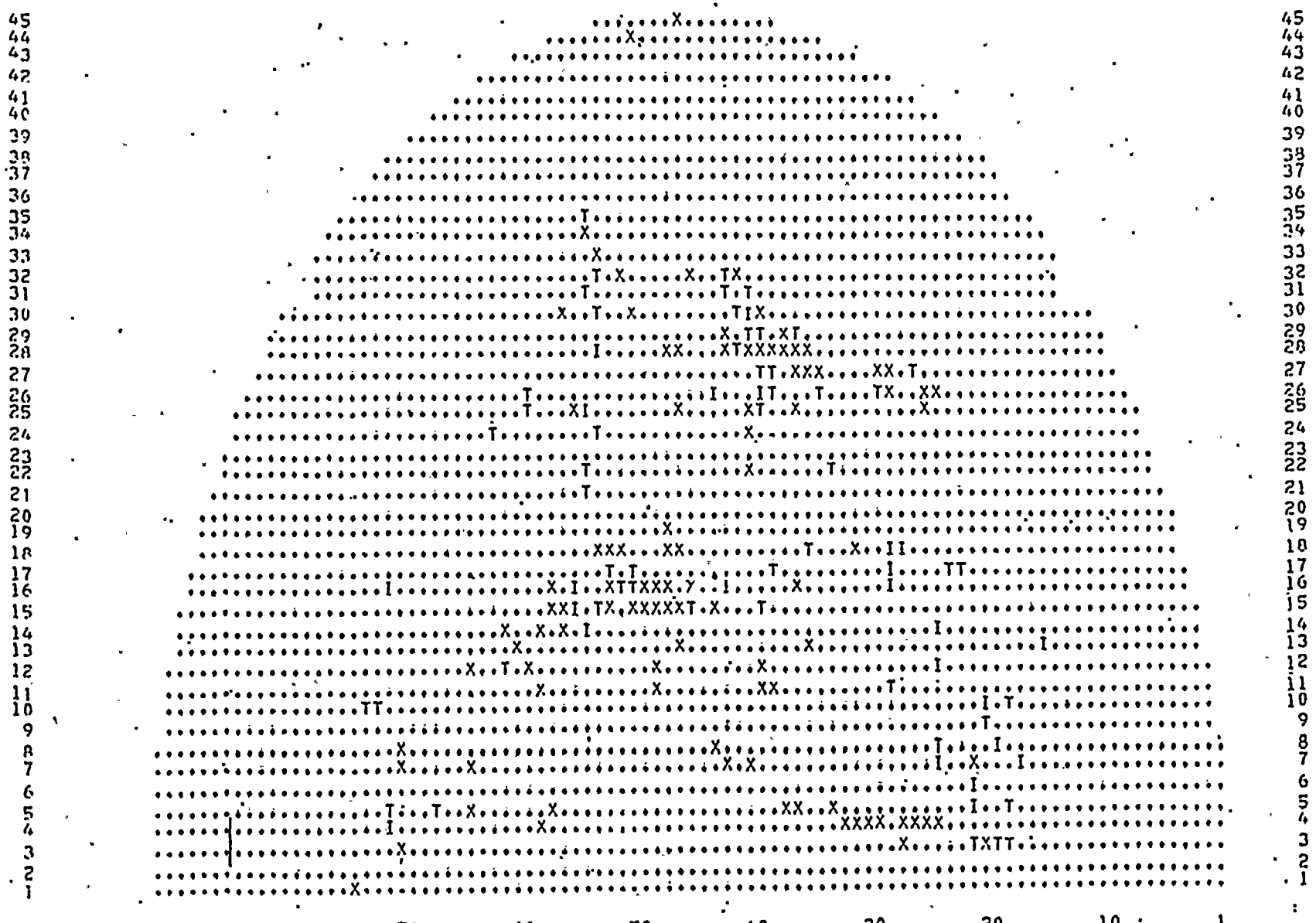
| Percentage of Tubes Plugged | Other Preventive Measures |
|---|---|
| N/A | N/A |

Wastage/Cavitation Erosion

| STEAM GENERATOR | 4A | | 4B | | 4C | |
|---|---|---|---|---|---|---|
| | HL | CL | HL | CL | HL | CL |
| % of Tubes Affected by Wastage/Cavitation Erosion | 1.47 | 7.61 | 1.62 | 6.50 | .18 | 3.40 |
| % of Tubes Plugged Due to Exceedance of Allowable Limit (2) | 0 | .15 | 0 | .09 | .03 | 0 |
| % of Tubes Plugged That Did not Exceed Degradation Limit | 0 | 0 | 0 | 0 | 0 | 0 |
| Location Above Tube Sheet (3) | AT TUBE SHEET | → | → | → | → | → |

TURKEY POINT UNIT 4  GENERATOR A HOT LEG ISIDATE:  APRIL-1976

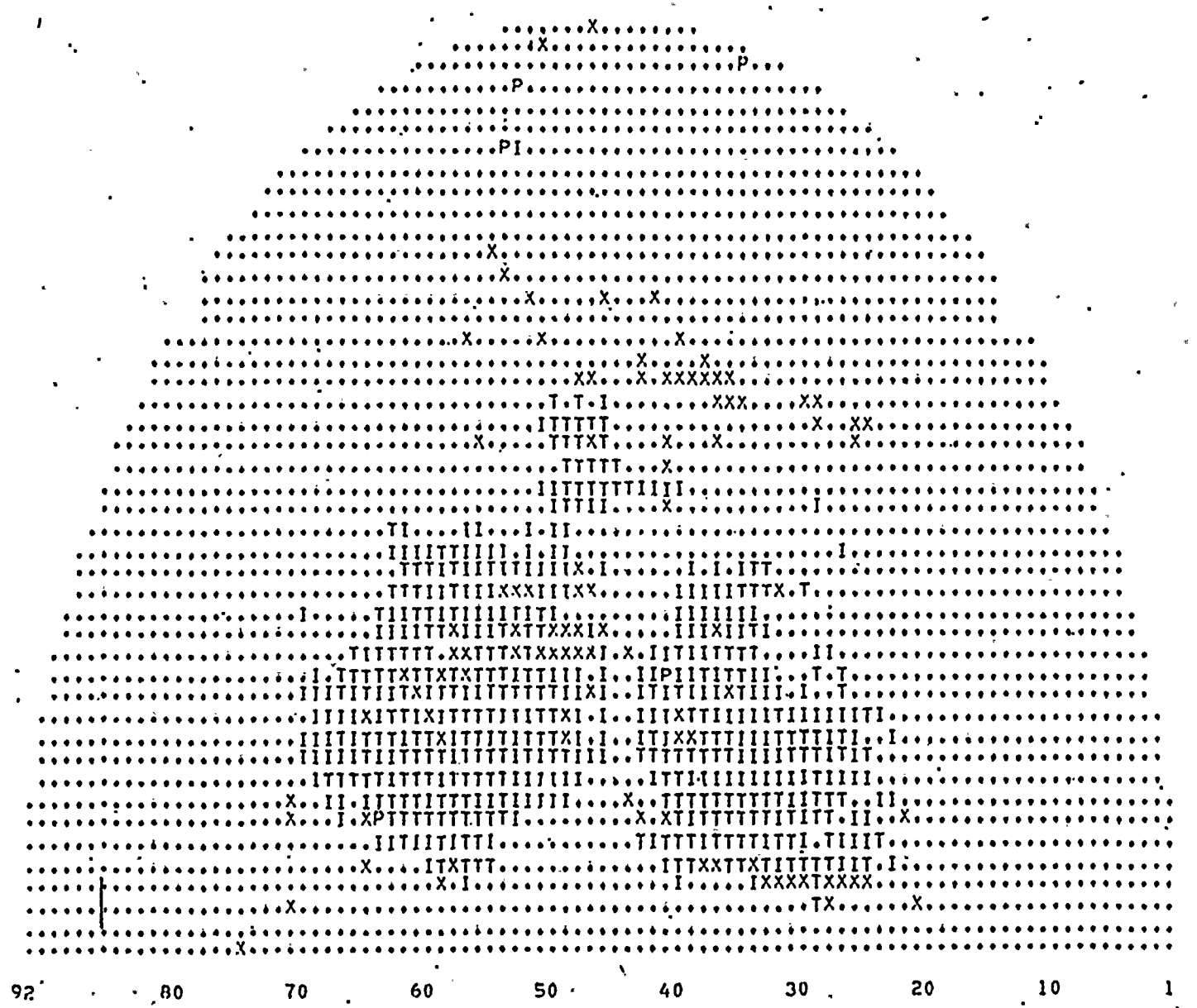
GENERATOR INSPECTION MAP




I -- TUBES INSPECTED BUT, THINNING LESS THAN 20%
T -- WASTAGE/CAVITATION EROSION DISCOVERED GREATER THAN 20% BUT, LESS THAN DEGRADATION LIMITS
D -- DENTING DISCOVERED
P -- TUBE PLUGGED, DEGRADTION LIMIT EXCEEDED
X -- PREVIOUSLY PLUGGED TUBE
* -- TUBE PLUGGED AS PART OF A PREVENTIVE PLUGGING PROGRAM
L -- LEAKER

TURKEY POINT UNIT 4 GENERATOR A OUTLET ISIDATE: MAY 1976

GENERATOR INSPECTION MAP.

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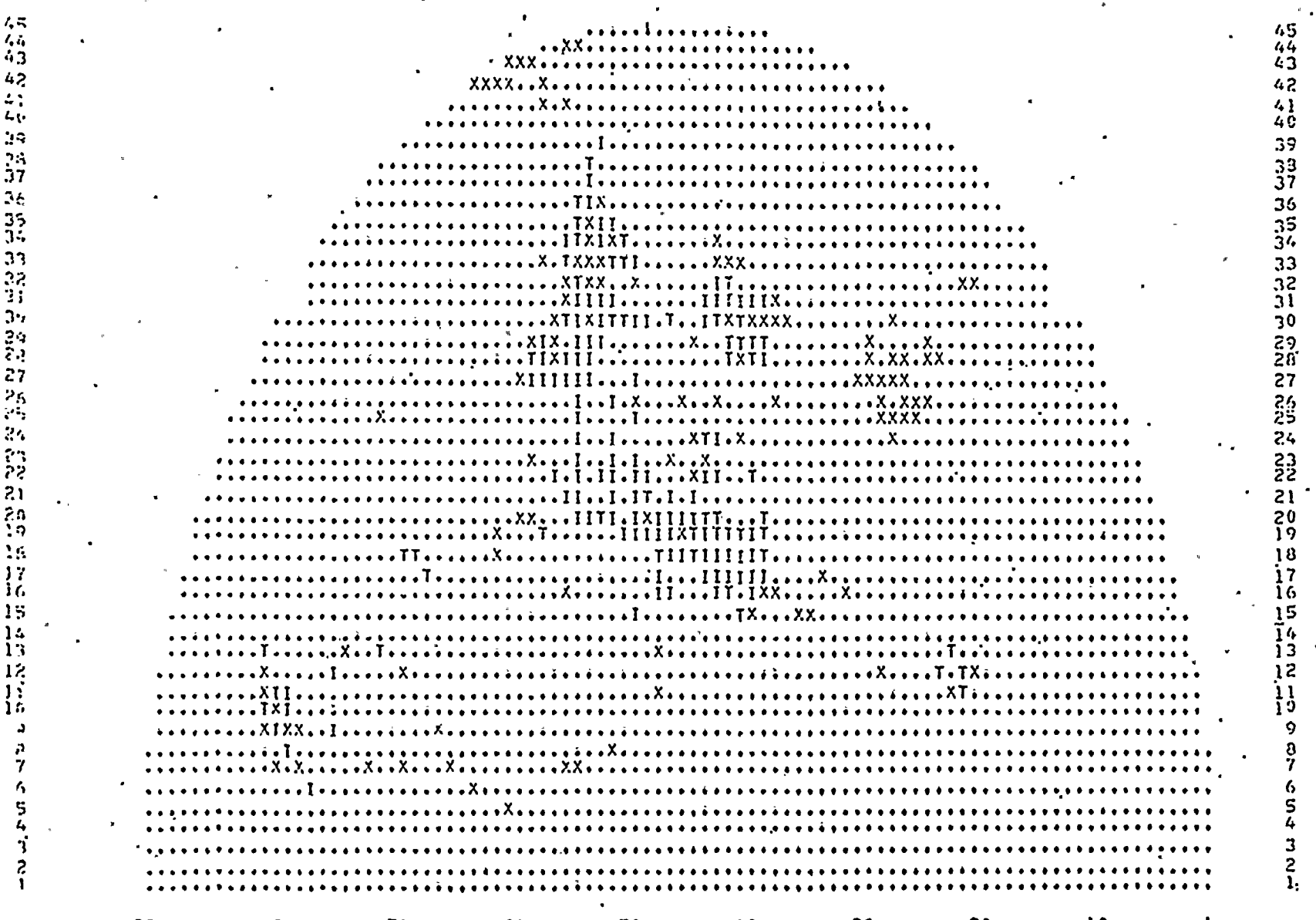
L -- LEAKER

TURKEY POINT UNIT 4  GENERATOR B INLET  ISIDATE:  APRIL 1976

GENERATOR INSPECTION MAP

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D -- DENTING DISCOVERED
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X -- PREVIOUSLY PLUGGED TUBE
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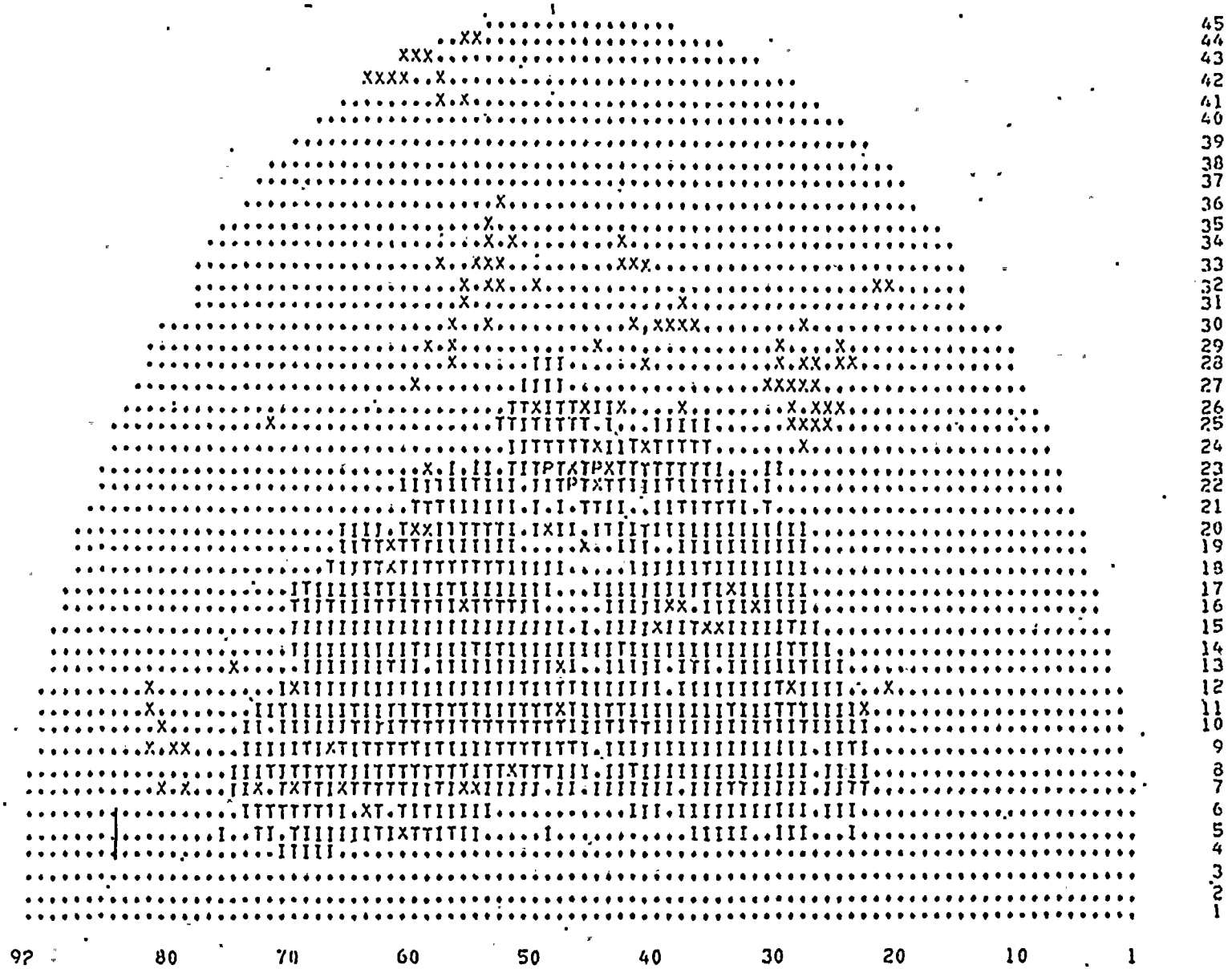
L -- LEAKER

TURKEY POINT UNIT 4 GENERATOR B OUTLET !SIDATE! APRIL 1976

GENERATOR INSPECTION MAP

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D -- DENTING DISCOVERED
P -- TUBE PLUGGED, DEGRADTION LIMIT EXCEEDED
X -- PREVIOUSLY PLUGGED TUBE
* -- TUBE PLUGGED AS PART OF A PREVENTIVE PLUGGING PROGRAM
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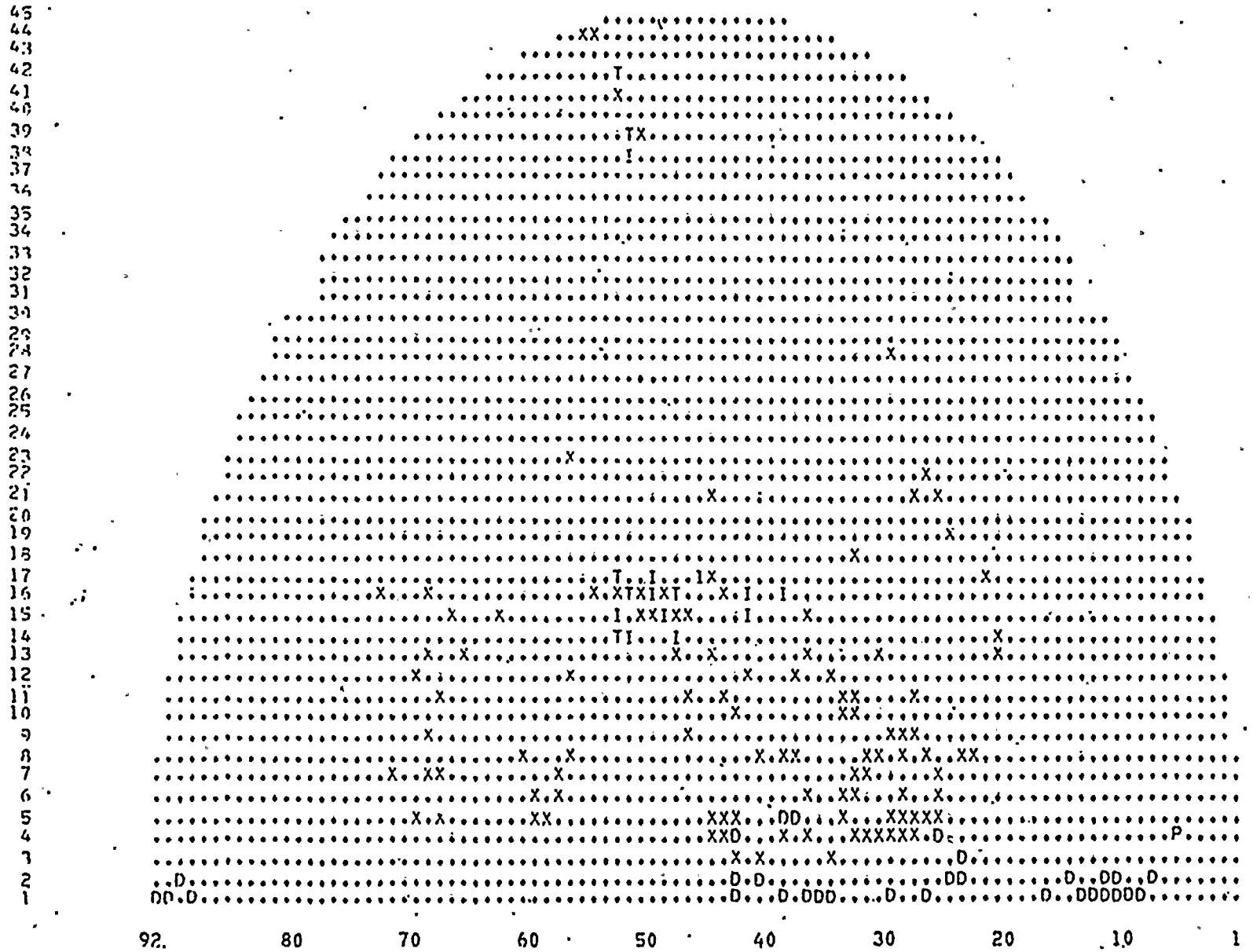
TURKEY POINT UNIT 4  GENERATOR C INLET  ISIDATE:  APRIL 1976

GENERATOR INSPECTION MAP

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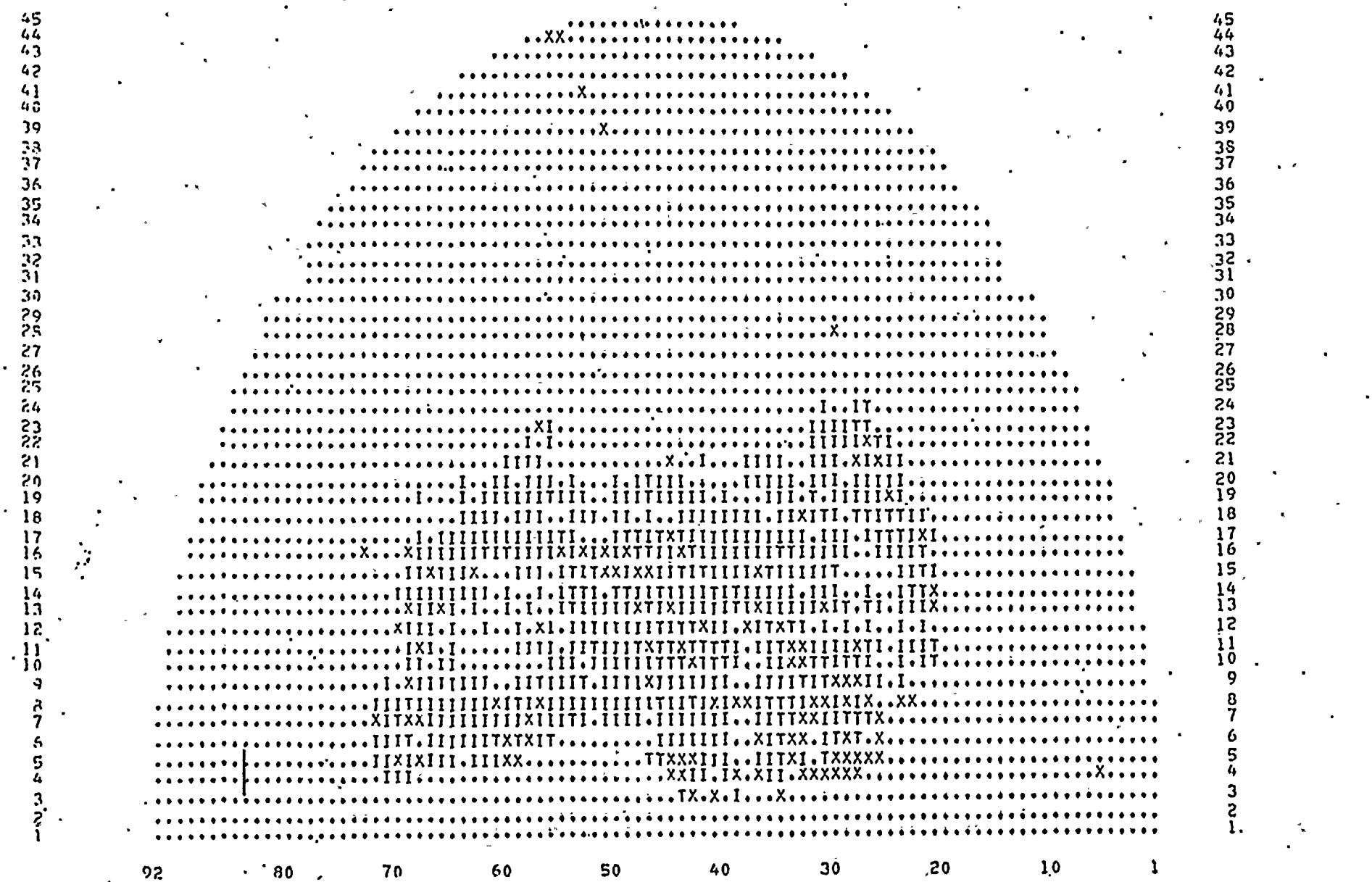
D -- DENTING DISCOVERED
P -- TUBE PLUGGED, DEGRADTION LIMIT EXCEEDED
X -- PREVIOUSLY PLUGGED TUBE
* -- TUBE PLUGGED AS PART OF A PREVENTIVE PLUGGING PROGRAM
L -- LEAKER

TURKEY POINT UNIT 4 GENERATOR C OUTLET ISIDATE: MAY 1976

GENERATOR INSPECTION MAP

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T -- WASTAGE/CAVITATION EROSION DISCOVERED GREATER THAN 20% BUT, LESS THAN DEGRADATION LIMITS
D -- DENTING DISCOVERED
P -- TUBE PLUGGED, DEGRADTION LIMIT EXCEEDED
X -- PREVIOUSLY PLUGGED TUBE
* -- TUBE PLUGGED AS PART OF A PREVENTIVE PLUGGING PROGRAM
L -- LEAKER

VI. TURBINE STOP VALVE TESTING (applicable to Babcock & Wilcox (B&W) S.G. only)

Frequency of Testing

Actual:

Manufacturer Recommendation:

Power Level At Which Testing Is Conducted

Actual:

Manufacturer Recommendation:

Testing Procedures (Stroke length, stroke rate, etc.)

Actual:

Manufacturer Recommendation:

VII. STEAM GENERATOR TUBE DEGRADATION HISTORY

(The following is to be repeated for each scheduled ISI)

Inservice Inspection (ISI) Date: MAY 1977

Number of EFP Days of Operation Since Last Inspection:

(The following is to be repeated for each steam generator)

Steam Generator Number: 4A, 4B, 4C

Percentage of Tubes Inspected At This ISI: 4A: 10.5%; 4B: 8.93%; 4C: 3.68%

Percentage of Tubes Inspected At This ISI That Had Been Inspected At The Previous Scheduled ISI:

Percentage of Tubes Plugged Prior to This ISI: 4A: 3.07%; 4B: 5.03%; 4C: 6.32%

Percentage of Tubes Plugged At This ISI: 4A: 4.26%; 4B: 9.02%; 4C: 5.37%

Percentage of Tubes Plugged That Did Not Exceed Degradation Limits: 4A: 4.14%; 4B: 8.93%; 5.21%

Percentage of Tubes Plugged As A Result of Exceedance of Degradation Limits: 4A: 0.12%; 4B; 0.09%; 4C: 0.16%

Sludge Layer Material Chemical Analysis Results:

Sludge Lancing (date):

SLUDGE VOLUME BEFORE LANCING: 4A: 62.1 gallons; 4B: 66.2 gal.; 4C: 41.4 gal.

PER CENT SLUDGE REMOVAL: 4A: 66.8%; 4B: 87.5%; 4C: 84.8%

Replacement, Retubing or Other Remedial Action Considered: (Briefly Specify Details)

Support Plate Hourglassing:

Support Plate Islanding:

Tube Metalurgical Exam Results:

Fretting or Vibration in U-Bend Area (not applicable to B&W S.G.) AS OF (4)

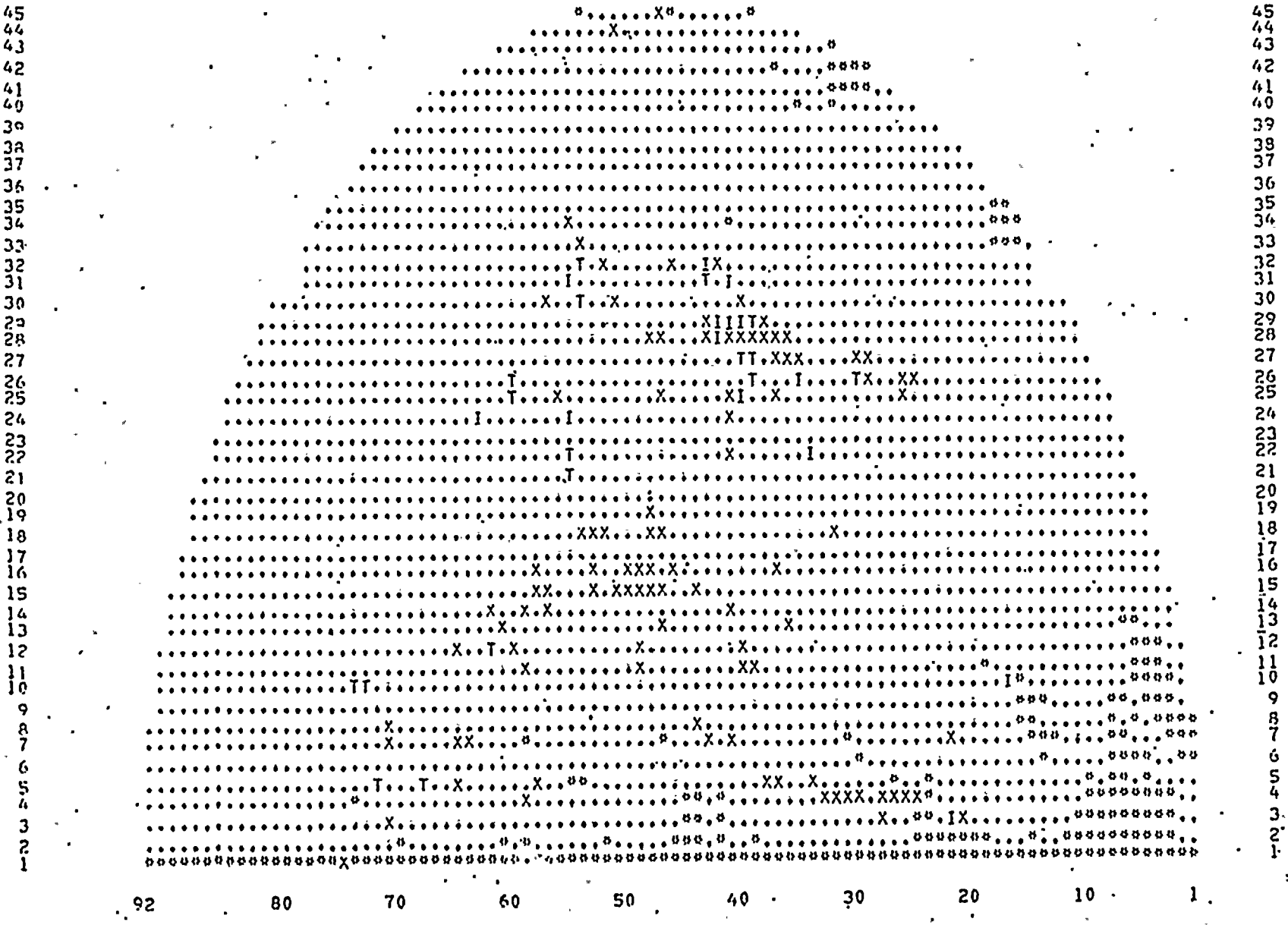
| Percentage of Tubes Plugged | Other Preventive Measures |
|---|---|
| N/A | N/A |

Wastage/Cavitation Erosion

| STEAM GENERATOR | 4A | | 4B | | 4C | |
|---|---|---|---|---|---|---|
| | HL | CL | HL | CL | HL | CL |
| % of Tubes Affected by Wastage/Cavitation Erosion | 0.52 | 4.02 | 0.58 | 2.36 | 0.15 | 1.50 |
| % of Tubes Plugged Due to Exceedance of Allowable Limit (2) | 0 | 0.12 | 0.06 | 0.03 | 0.03 | 0.13 |
| % of Tubes Plugged That Did not Exceed Degradation Limit | 4.14 | | 8.93 | | 5.21 | 0 |
| Location Above Tube Sheet (3) | AT TUBE SHEET → | | | | | |

TURKEY POINT UNIT 4  GENERATOR A INLET  ISIDATE:  MAY 1977

GENERATOR INSPECTION MAP

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D -- DENTING DISCOVERED
P -- TUBE PLUGGED, DEGRADTION LIMIT EXCEEDED
X -- PREVIOUSLY PLUGGED TUBE
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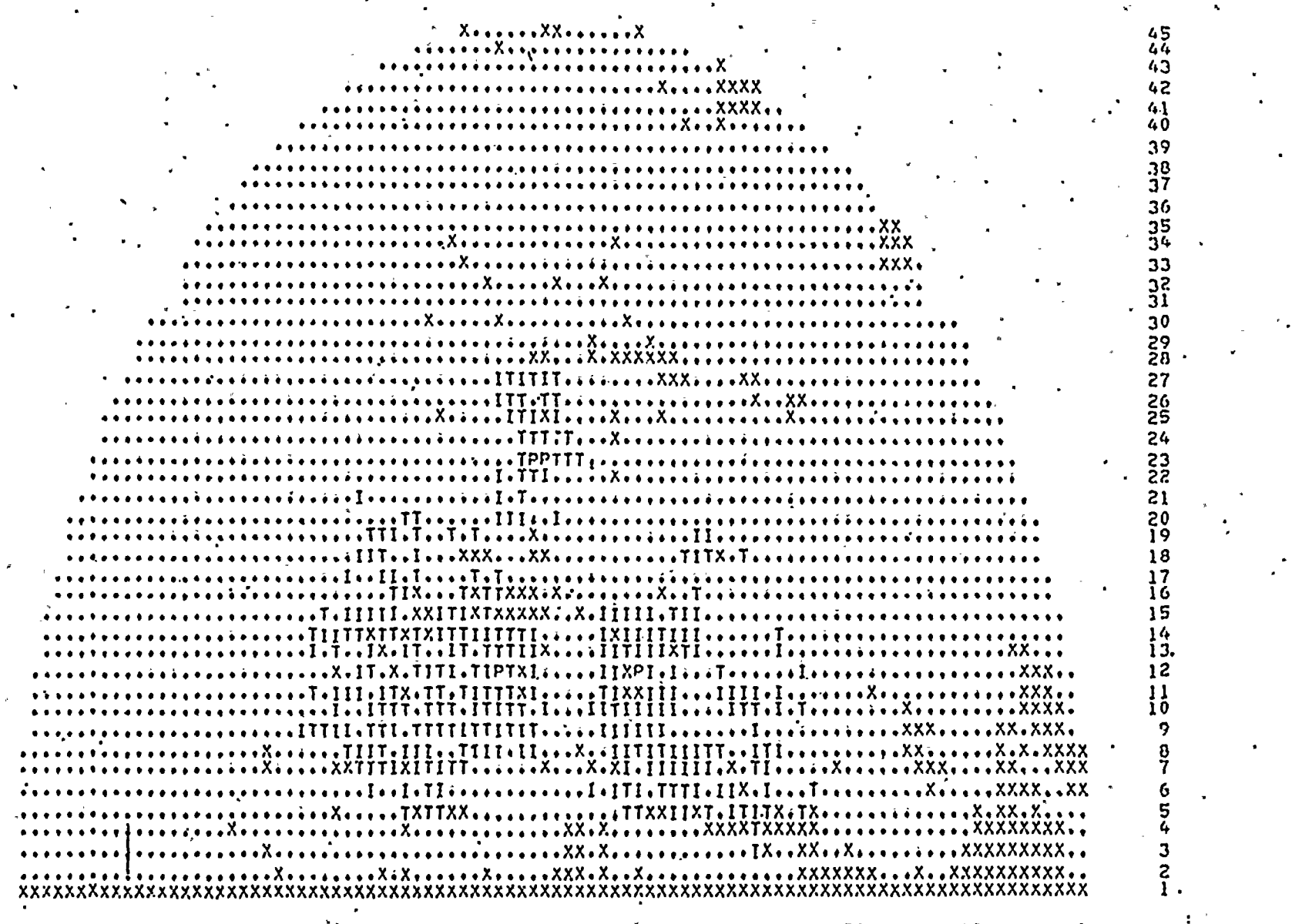
L -- LEAKER

BRAID POINT UNIT 4 GENERATOR A OUTLET ISIDATE: MAY 1977

GENERATOR INSPECTION MAP



92 80 70 60 50 40 30 20 10 1

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D -- DENTING DISCOVERED
P -- TUBE PLUGGED, DEGRADTION LIMIT EXCEEDED
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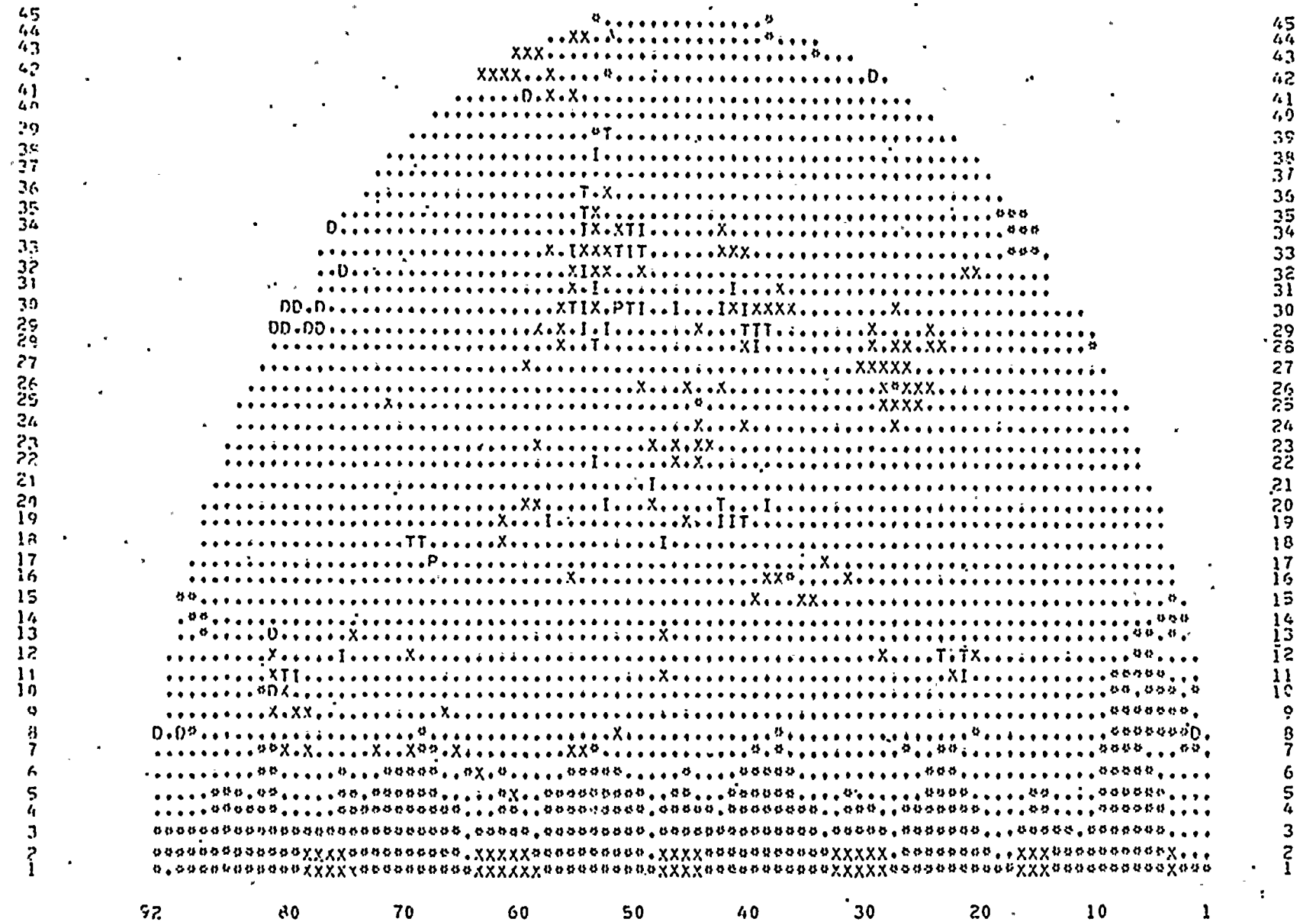
TURKEY POINT UNIT 4  GENERATOR B INLET  ISIDATE: MAY 1977

GENERATOR INSPECTION MAP

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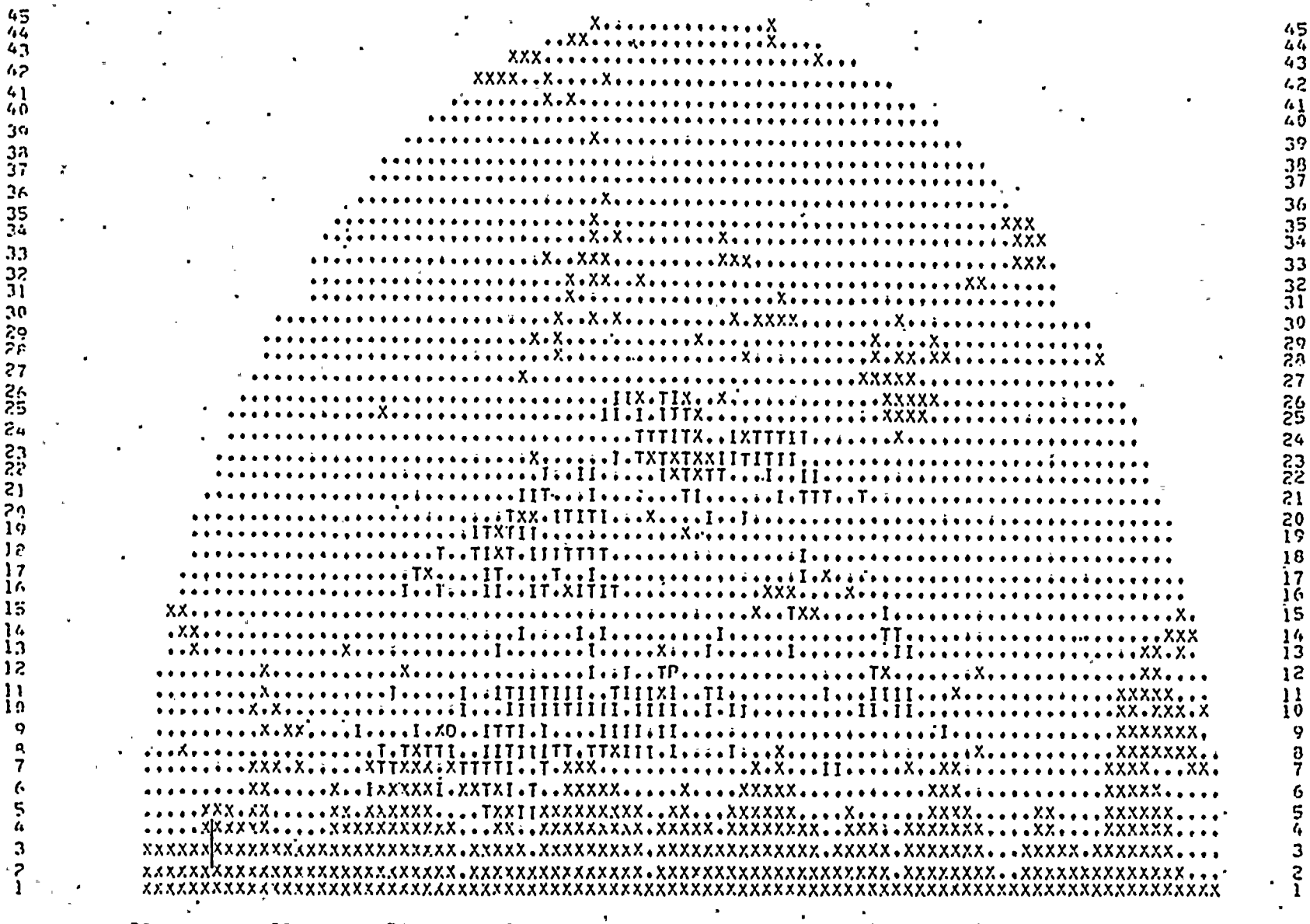
TURKEY POINT UNIT 4 GENERATOR B OUTLET ISIDATE: MAY 1977

GENERATOR INSPECTION MAP

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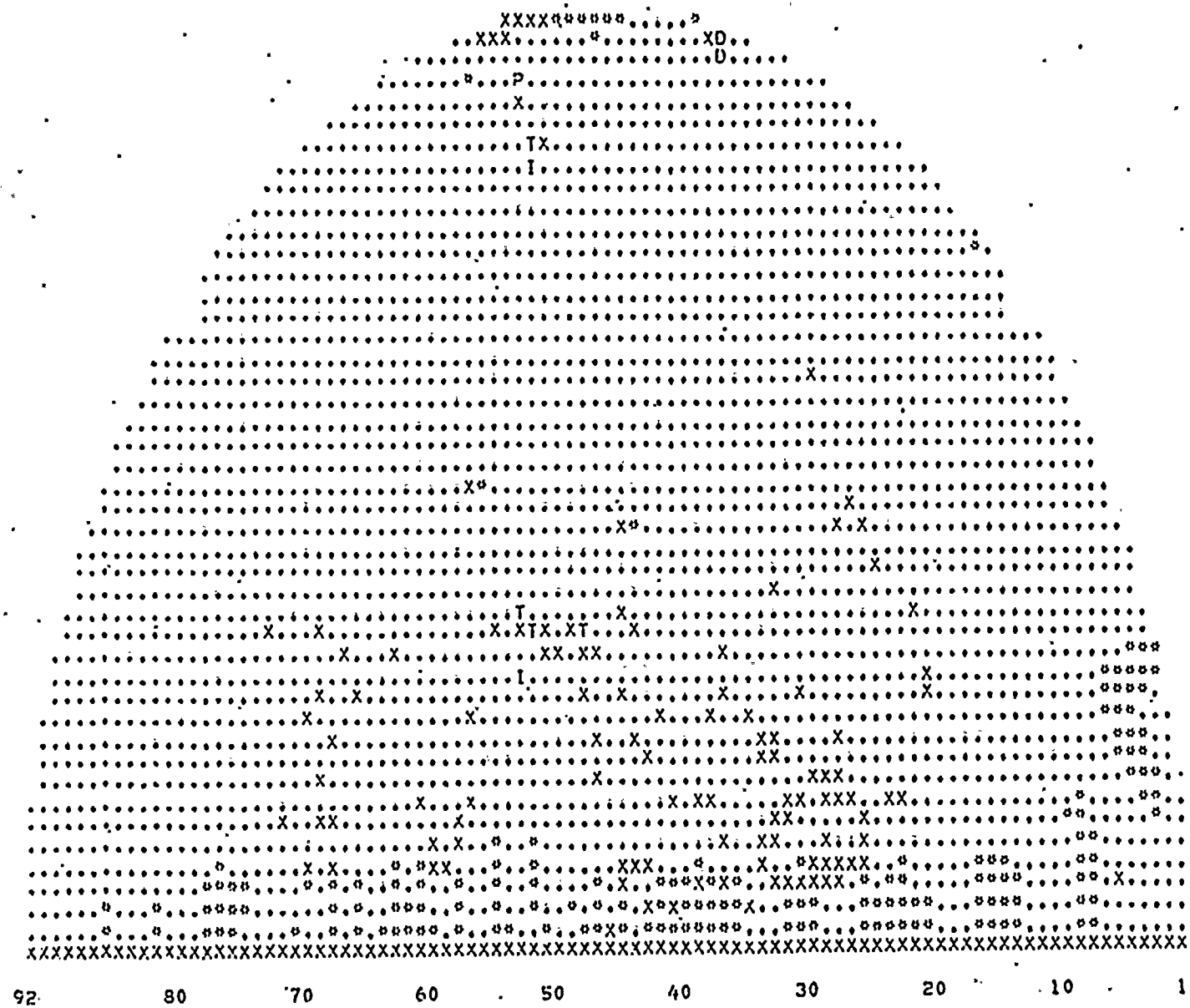
TURKEY POINT UNIT 4  GENERATOR C INLET  ISIDATE: APRIL 1977

GENERATOR INSPECTION MAP



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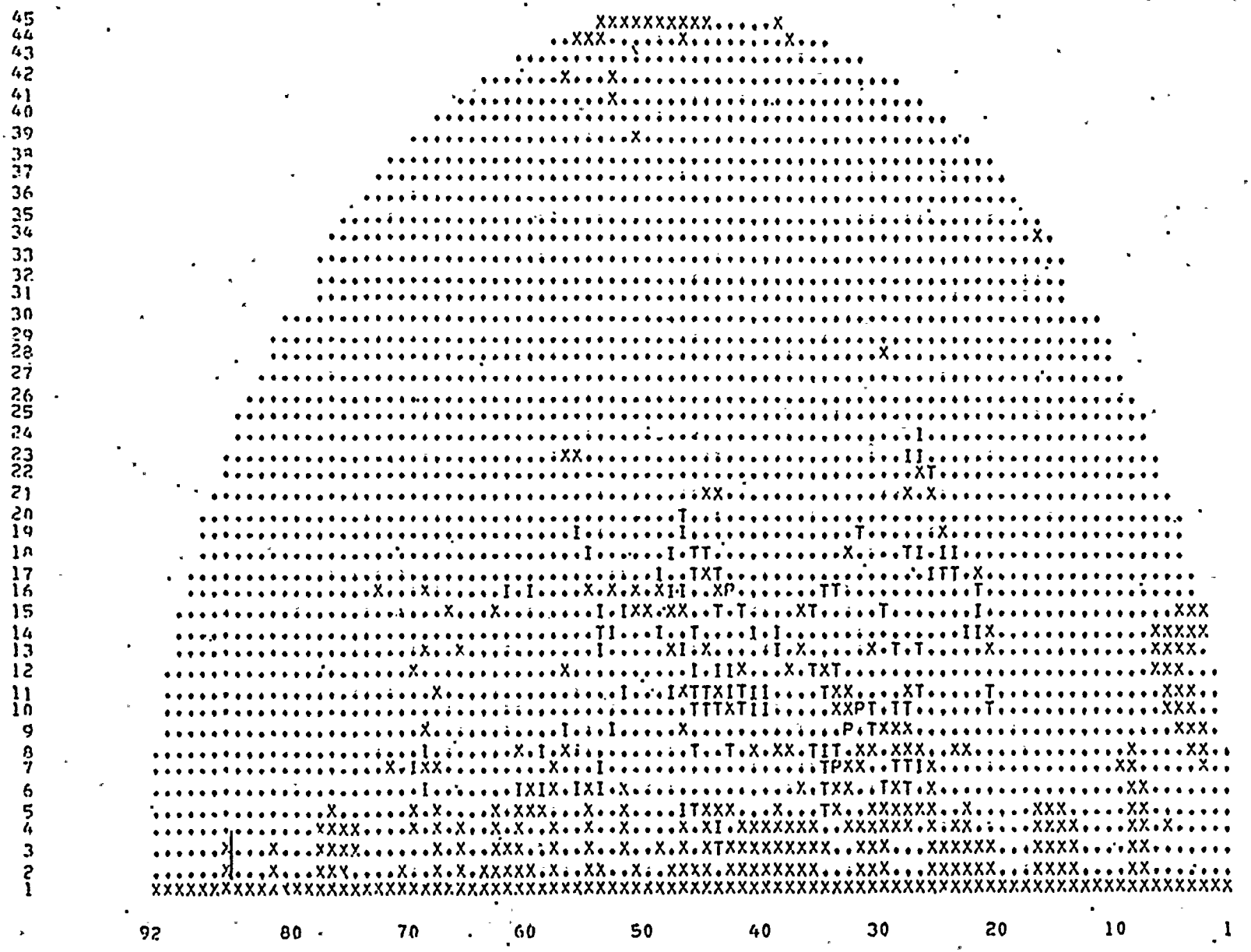
TURKEY POINT UNIT 4  GENERATOR C OUTLET  ISIDATE:  MAY 1977

GENERATOR INSPECTION MAP



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