

Indian Point 3  
Nuclear Power Plant  
P.O. Box 215  
Buchanan, New York 10511  
914-736-8000



**New York Power  
Authority**

December 4, 1992  
IP-NRC-92-097

License No. 50-286  
Docket No. DPR-64

Mr. John R. Jolicoeur  
ERDS Project Manager  
U.S. Nuclear Regulatory Commission  
Mail Stop MNBB 3206  
Washington, D.C. 20554

**Subject: IP3 ERDS**

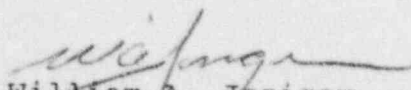
Dear Mr. Jolicoeur:

Testing of our ERDS system with your contractor identified a problem which requires a change to our Plant Attribute Library (PAL). The data communication attribute XON/XOFF is not supported by our ERDS data link software. We require that the suspend/resume flow control method be used instead of XON/XOFF. Preliminary testing with our contractor proved that satisfactory communication will occur with suspend/resume. I have attached (Attachment I) a page from the original ERDS Communications Description and Survey Questionnaire showing the change.

Attachment II is the Indian Point 3 Data Point Library to support the emergency response data system.

If you should have any further questions, please contact Roger Harris of my staff at (914) 736-8712.

Very truly yours,

  
William A. Josiger  
Resident Manager  
Indian Point 3 Nuclear Power Plant

waj/ac/rj  
attachments

140013  
9212150027 921204  
PDR ADOCK 05000286  
F PDR

*Handwritten initials: AOK 11/1*

cc: U.S. Nuclear Regulatory Commission (original)  
Attn: Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

IP3 Resident Inspector  
Indian Point 3  
U.S. Nuclear Regulatory Commission  
P.O. Box 337  
Buchanan, New York 10511

ATTACHMENT I  
REVISION TO IP3 PLANT  
ATTRIBUTE LIBRARY (PAL)  
FOR THE EMERGENCY RESPONSE  
DATA SYSTEM (ERDS)

## 3. Data Communication Details

- a. Can this data feeder provide asynchronous serial data communication (RS-232-C) with full-modem control?

YES

- b. Will this feeder transmit in ASCII or EBCDIC?

ASCII

- c. Can this feeder transmit at a serial baud rate of 2400 bps? If not, at what baud rate can it transmit?

- YES

- d. Does the operating system support XON/XOFF flow control?

NO

1. Are any problems foreseen with the NRC using XON/XOFF to control the transmission of data?

YES

- e. If it is not feasible to reconfigure a serial port for the ERDS linkup (i.e., change the baud rate, parity, etc.), please explain why.

N/A

- f. Do any ports currently exist for the ERDS linkup?

YES

1. If not, is it possible to add additional ports?

N/A

ATTACHMENT II  
INDIAN POINT 3 DATA  
POINT LIBRARY FOR  
THE EMERGENCY RESPONSE  
DATA SYSTEM (ERDS)

## ERDS Signals

| <u>Sequence</u> | <u>Point ID</u> | <u>Description</u>                      |
|-----------------|-----------------|---|
| 1               | U1169           | POWER RANGE NIS POWER                   |
| 2               | N31             | SOURCE RANGE DETECTOR 31                |
| 3               | N32             | SOURCE RANGE DETECTOR 32                |
| 4               | N35             | INTERMEDIATE RANGE DETECTOR 35          |
| 5               | N36             | INTERMEDIATE RANGE DETECTOR 36          |
| 6               | KRVLIS          | LOWEST REACTOR VESSEL WATER LEVEL       |
| 7               | KHCET           | HIGHEST CET                             |
| 8               | TMARCETA        | CET TEMP SAT MARGIN                     |
| 9               | KAL1F           | MEDIAN LOW RCL 31 FLOW                  |
| 10              | KAL2F           | MEDIAN LOW RCL 32 FLOW                  |
| 11              | KAL3F           | MEDIAN LOW RCL 33 FLOW                  |
| 12              | KAL4F           | MEDIAN LOW RCL 34 FLOW                  |
| 13              | LT417D          | STEAM GENERATOR #31 W.R. LEVEL          |
| 14              | LT427D          | STEAM GENERATOR #32 W.R. LEVEL          |
| 15              | LT437D          | STEAM GENERATOR #33 W.R. LEVEL          |
| 16              | LT447D          | STEAM GENERATOR #34 W.R. LEVEL          |
| 17              | KSG31P          | MEDIAN HIGH STEAM GENERATOR 31 PRESSURE |
| 18              | KSG32P          | MEDIAN HIGH STEAM GENERATOR 32 PRESSURE |
| 19              | KSG33P          | MEDIAN HIGH STEAM GENERATOR 33 PRESSURE |
| 20              | KSG34P          | MEDIAN HIGH STEAM GENERATOR 34 PRESSURE |
| 21              | KSG31MF         | MEDIAN LOW MAIN FEED FLOW TO SG31       |
| 22              | KSG32MF         | MEDIAN LOW MAIN FEED FLOW TO SG32       |
| 23              | KSG33MF         | MEDIAN LOW MAIN FEED FLOW TO SG33       |
| 24              | KSG34MF         | MEDIAN LOW MAIN FEED FLOW TO SG34       |
| 25              | FT1200          | AUX FEED FLOW TO SG31                   |
| 26              | FT1201          | AUX FEED FLOW TO SG32                   |
| 27              | FT1202          | AUX FEED FLOW TO SG33                   |
| 28              | FT1203          | AUX FEED FLOW TO SG34                   |
| 29              | TE413B          | RCL LOOP #1 COLD LEG TEMP               |
| 30              | TE423B          | RCL LOOP #2 COLD LEG TEMP               |
| 31              | TE433B          | RCL LOOP #3 COLD LEG TEMP               |
| 32              | TE443B          | RCL LOOP #4 COLD LEG TEMP               |

## ERDS Signals (cont'd)

| <u>Sequence</u> | <u>Point ID</u> | <u>Description</u>                       |
|-----------------|-----------------|--|
| 33              | TE413A          | RCL LOOP #1 HOT LEG TEMP                 |
| 34              | TE423A          | RCL LOOP #2 HOT LEG TEMP                 |
| 35              | TE433A          | RCL LOOP #3 HOT LEG TEMP                 |
| 36              | TE443A          | RCL LOOP #4 HOT LEG TEMP                 |
| 37              | PT403           | RCS PRESSURE LOOP 4                      |
| 38              | PT402           | RCS PRESSURE LOOP 1                      |
| 39              | KAVGPZRL        | MEDIAN HIGH PRESSURIZER LEVEL            |
| 40              | KAVGPZL2        | MEDIAN LOW PRESSURIZER LEVEL             |
| 41              | FT128           | CHARGING PUMP DISCHARGE FLOW             |
| 42              | KSIF            | TOTAL NON-BIT SAFETY INJECTION FLOW      |
| 43              | KBSIF           | TOTAL BIT SAFETY INJECTION FLOW          |
| 44              | KRHRF           | TOTAL RHR FLOW                           |
| 45              | LT1253          | CONTAINMENT LEVEL                        |
| 46              | LT1254          | CONTAINMENT LEVEL                        |
| 47              | LT1255          | CONTAINMENT SUMP LEVEL                   |
| 48              | LT1256          | CONTAINMENT SUMP LEVEL                   |
| 49              | R27             | PLANT VENT RADIATION                     |
| 50              | R18             | LIQUID WASTE DISPOSAL RADIATION          |
| 51              | R15             | STEAM AIR EJECTOR RADIATION              |
| 52              | R25             | CONTAINMENT HIGH RAD MONITOR 1           |
| 53              | R26             | CONTAINMENT HIGH RAD MONITOR 2           |
| 54              | R04             | CHARGING PUMP ROOM RAD                   |
| 55              | R62A            | STEAM LINE 31 RADIATION                  |
| 56              | R62B            | STEAM LINE 32 RADIATION                  |
| 57              | R62C            | STEAM LINE 33 RADIATION                  |
| 58              | R62D            | STEAM LINE 34 RADIATION                  |
| 59              | R19             | STEAM GENERATOR BLOWDOWN RADIATION       |
| 60              | PT1421          | CONTAINMENT HIGH PRESSURE                |
| 61              | PT1422          | CONTAINMENT HIGH PRESSURE                |
| 62              | TC1416          | CONTAINMENT AVERAGE TEMPERATURE          |
| 63              | HCMCA           | CONTAINMENT H <sub>2</sub> CONCENTRATION |
| 64              | HCMCB           | CONTAINMENT H <sub>2</sub> CONCENTRATION |
| 65              | LT920           | RWST LEVEL                               |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | NI POWER RNG  |
| Point ID:  | U1169   |
| Plant Spec Point Desc.:                          | POWER RANGE NIS POWER   |
| Generic/Cond Desc.:                              | NUCLEAR INSTRUMENTS POWER RANGE   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 120.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 4   |
| How Processed:                                   | AVERAGE   |
| Sensor Locations:                                | OUTSIDE OF CORE ON CRANE WALL   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | AVERAGE OF FOUR POWER RANGE<br>CHANNELS (N41F, N42F, N43F, & N44F)<br>EVERY FOUR SECONDS. POINT I.D. U1169<br>IS ONLY A COMPUTER POINT INPUT<br>NUMBER. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NI SOURC RNG   |
| Point ID:  | N31  |
| Plant Spec Point Desc.:                          | SOURCE RANGE DETECTOR 31   |
| Generic/Cond Desc.:                              | NUCLEAR INSTRUMENTS SOURCE RNG   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | CPS  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 1.000  |
| Maximum Instr Range:                             | 1000.0E + 03   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC.  |
| Sensor Locations:                                | OUTSIDE OF CORE ON CRANE WALL  |
| Alarm/Trip Set Points:                           | HI AT 90.000   |
| NI Detector Power Supply<br>Cut-off Power Level: | 7E-11 IR   |
| NI Detector Power Supply<br>Turn-on Power Level: | 4E-11 IR   |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS SIGNAL IS PROPORTIONAL TO THE<br>LOGARITHM OF THE NUMBER OF PULSES<br>PER UNIT TIME RECEIVED FROM A NEUTRON<br>FLUX PROPORTIONAL COUNTER. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | :P3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NI SOURC RNG   |
| Point ID:  | N32  |
| Plant Spec Point Desc.:                          | SOURCE RANGE DETECTOR 32   |
| Generic/Cond Desc.:                              | NUCLEAR INSTRUMENTS SOURCE RNG   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | CF :   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 1.000  |
| Maximum Instr Range:                             | 1000.0E + 03   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC.  |
| Sensor Locations:                                | OUTSIDE OF CORE ON CRANE WALL  |
| Alarm/Trip Set Points:                           | HI AT 90.000   |
| NI Detector Power Supply<br>Cut-off Power Level: | 7E-11 IR   |
| NI Detector Power Supply<br>Turn-on Power Level: | 4E-11 IR   |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS SIGNAL IS PROPORTIONAL TO THE<br>LOGARITHM OF THE NUMBER OF PULSES<br>PER UNIT TIME RECEIVED FROM A NEUTRON<br>FLUX PROPORTIONAL COUNTER. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NI INTER RNG   |
| Point ID:  | N35  |
| Plant Spec Point Desc.:                          | INTERMEDIATE RANGE DETECTOR 35   |
| Generic/Cond Desc.:                              | NUCLEAR INSTRUMENTS INT RANGE  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | AMPS   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 10.0E-12   |
| Maximum Instr Range:                             | 1000.0E-06   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC.  |
| Sensor Locations:                                | OUTSIDE OF CORE ON CRANE WALL  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS SIGNAL IS PROPORTIONAL TO THE<br>LOGARITHM OF THE CURRENT RECEIVED<br>FROM A COMPENSATED ION CHAMBER. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NI INTER RNG   |
| Point ID:  | N36  |
| Plant Spec Point Desc.:                          | INTERMEDIATE RANGE DETECTOR 36   |
| Generic/Cond Desc.:                              | NUCLEAR INSTRUMENTS INT RANGE  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | AMPS   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 10.0E-12   |
| Maximum Instr Range:                             | 1000.0E-06   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC.  |
| Sensor Locations:                                | OUTSIDE OF CORE ON CRANE WALL  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS SIGNAL IS PROPORTIONAL TO THE<br>LOGARITHM OF THE CURRENT RECEIVED<br>FROM A COMPENSATED ION CHAMBER. |

INDIAN POINT UNIT #3

DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | REAC VES LEV  |
| Point ID:  | KRVLIS  |
| Plant Spec Point Desc.:                          | LOWEST REACTOR VESSEL WATER LEVEL   |
| Generic/Cond Desc.:                              | REACTOR VESSEL WATER LEVEL  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 120.0   |
| Zero Point Reference:                            | TNKBOT  |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 4   |
| How Processed:                                   | LOWEST  |
| Sensor Locations:                                | TOP & BOTTOM OF VESSEL  |
| Alarm/Trip Set Points:                           | LO AT 65.0  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: | Y   |
| Level Reference Leg:                             | WET   |
| Unique System Desc:                              | IF AT LEAST ONE RCP FLOW IS GREATER<br>THAN OR EQUAL TO 91% THIS POINT IS<br>THE LOWEST OF 2 DYNAMIC RANGE<br>SIGNALS. OTHERWISE IT IS THE LOWEST<br>OF 2 FULL RANGE SIGNALS. THE POINT IS<br>FLAGGED UNRELIABLE IF NEITHER SIGNAL<br>OF THE APPLICABLE PAIR IS GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | TEMP CORE EX   |
| Point ID:  | KHCET  |
| Plant Spec Point Desc.:                          | HIGHEST CET  |
| Generic/Cond Desc.:                              | HIGHEST TEMPERATURE AT CORE EXIT   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 32.0   |
| Maximum Instr Range:                             | 2300.0   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 65   |
| How Processed:                                   | HIGHEST  |
| Sensor Locations:                                | EXIT OF SELECTED FUEL ASSEMBLIES IN<br>CORE  |
| Alarm/Trip Set Points:                           | HI / HI AT 700.0   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THE HIGHEST VALVE OF 32 OR MORE IN<br>CORE THERMOCOUPLE SIGNALS IS USED<br>FOR THIS POINT. THE POINT IS FLAGGED<br>UNRELIABLE IF LESS THAN 32 SIGNALS ARE<br>GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SUB MARGIN   |
| Point ID:  | TMARCETA   |
| Plant Spec Point Desc.:                          | CET TEMP SAT MARGIN  |
| Generic/Cond Desc.:                              | SATURATION TEMP-HIGHEST CET  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | -50  |
| Maximum Instr Range:                             | 400  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 4  |
| How Processed:                                   | SEE SYSTEM DESC.   |
| Sensor Locations:                                | PRZR PRESS, RCS PRESS & INCORE T/C'S   |
| Alarm/Trip Set Points:                           | LO/LO AT 20  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SET PIN EQUAL TO 14.7 PLUS THE<br>MINIMUM VALUE OF 2 RCS PRESS SIGNALS<br>AND THE AVERAGE PRZR PRESS SIGNAL.<br>INTERPOLATE THE STEAM TABLE TO FIND<br>THE SAT TEMP (TSAT) FOR THE VALUE OF<br>PIN. SUBTRACT THE VALUE OF THE<br>AVERAGE CORE EXIT TEMP SIGNAL FROM<br>TSAT TO GET TMARCETA. THE POINT IS<br>FLAGGED UNRELIABLE IF ANY OF THE 4<br>INPUT SIGNALS ARE NOT GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | CORE FLOW   |
| Point ID:  | KAL1F   |
| Plant Spec Point Desc.:                          | MEDIAN RCL 31 FLOW  |
| Generic/Cond Desc.:                              | TOTAL REACTOR COOLANT FLOW  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | 0-443.4" H <sub>2</sub> O   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 120.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 3   |
| How Processed:                                   | MEDIAN  |
| Sensor Locations:                                | STM GEN 31 DISCH UPSTRM OF RCP  |
| Alarm/Trip Set Points:                           | LO AT 92.0 HI AT 115.0  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR RCS LOOP 1 THE POINT IS<br>FLAGGED UNRELIABLE IF ALL 3 SIGNALS<br>ARE NOT GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CORE FLOW  |
| Point ID:  | KAL2F  |
| Plant Spec Point Desc.:                          | MEDIAN RCL 32 FLOW   |
| Generic/Cond Desc.:                              | TOTAL REACTOR COOLANT FLOW   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-406.1" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 120.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 32 DISCH UPSTRM OF RCP   |
| Alarm/Trip Set Points:                           | LO AT 92.0 HI AT 115.0   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR RCS LOOP 2. THE POINT IS<br>FLAGGED UNRELIABLE IF ALL 3 SIGNALS<br>ARE NOT GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CORE FLOW  |
| Point ID:  | KAL3F  |
| Plant Spec Point Desc.:                          | MEDIAN RCL 33 FLOW   |
| Generic/Cond Desc.:                              | TOTAL REACTOR COOLANT FLOW   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-435.5" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 120.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 33 DISCH UPSTRM OF RCP   |
| Alarm/Trip Set Points:                           | LO AT 92.0 HI AT 115.0   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR RCS LOOP 3. THE POINT IS<br>FLAGGED UNRELIABLE IF ALL 3 SIGNALS<br>ARE NOT GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CORE FLOW  |
| Point ID:  | KAL4F  |
| Plant Spec Point Desc.:                          | MEDIAN RCL 34 FLOW   |
| Generic/Cond Desc.:                              | TOTAL REACTOR COOLANT FLOW   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-424.6" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 120.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 34 DISCH UPSTRM OF RCP   |
| Alarm/Trip Set Points:                           | LO AT 92.0 HI AT 115.0   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR RCS LOOP 4. THE POINT IS<br>FLAGGED UNRELIABLE IF ALL 3 SIGNALS<br>ARE NOT GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG LEVEL 1/A   |
| Point ID:  | LT417D   |
| Plant Spec Point Desc.:                          | STEAM GEN 31 W.R. LEVEL  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 1 WATER LEVEL  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-516" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 100.0  |
| Zero Point Reference:                            | TUBSHT   |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | EL 95 CNTMNT   |
| Alarm/Trip Set Points:                           | LO AT 43.0 HI AT 55.0  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: | N  |
| Level Reference Leg:                             | WET  |
| Unique System Desc:                              | INSTRUMENT IS CALIBRATED COLD. SEE<br>ATTACHED GRAPH FOR ACTUAL LEVEL. |

STEAM GENERATOR  
WIDE RANGE LEVEL

COLD CALIBRATION AT 76°F

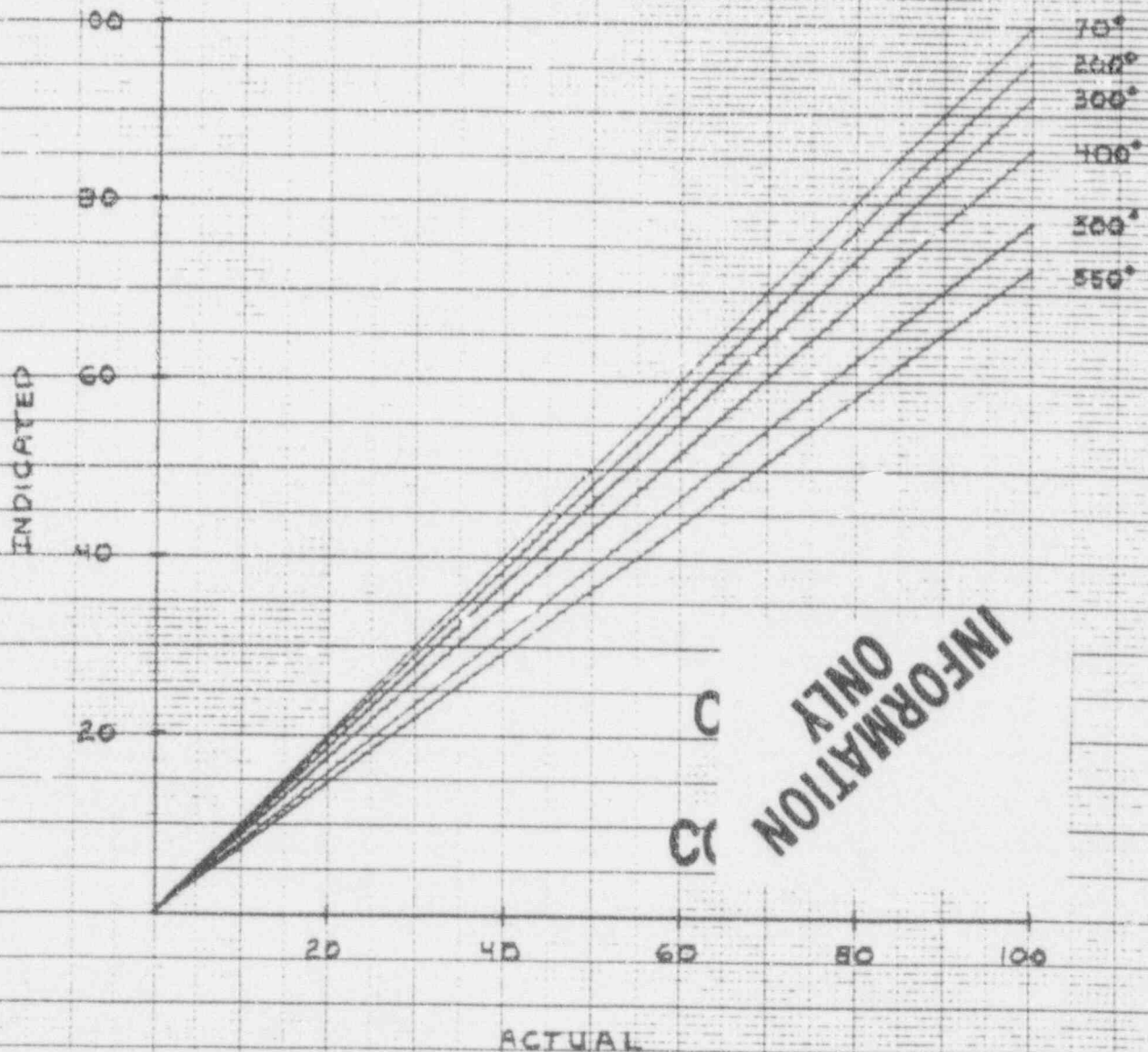
Written by: [Signature]  
Reviewed by: [Signature]  
Approved by: [Signature]  
PORC Review 4/24/00 - 12/29/00  
Effective Date 12/29/00

LT-417 D

LT-427D

LC = 4370

LT 4470



INFORMATION  
ONLY

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG LEVEL 2/B   |
| Point ID:  | LT427D   |
| Plant Spec Point Desc.:                          | STEAM GEN 32 W.R. LEVEL  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 2 WATER LEVEL  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-516" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 100.0  |
| Zero Point Reference:                            | TUBSHT   |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | EL 95 CNTMNT   |
| Alarm/Trip Set Points:                           | LO AT 43.0 HI AT 55.0  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: | N  |
| Level Reference Leg:                             | WET  |
| Unique System Desc:                              | INSTRUMENT IS CALIBRATED COLD. SEE<br>ATTACHED GRAPH FOR ACTUAL LEVEL. |

STEAM GENERATOR  
WIDE RANGE LEVEL

COLD CALIBRATION AT 70°F

Written by:

Reviewed by:

Approved by:

PORC Review

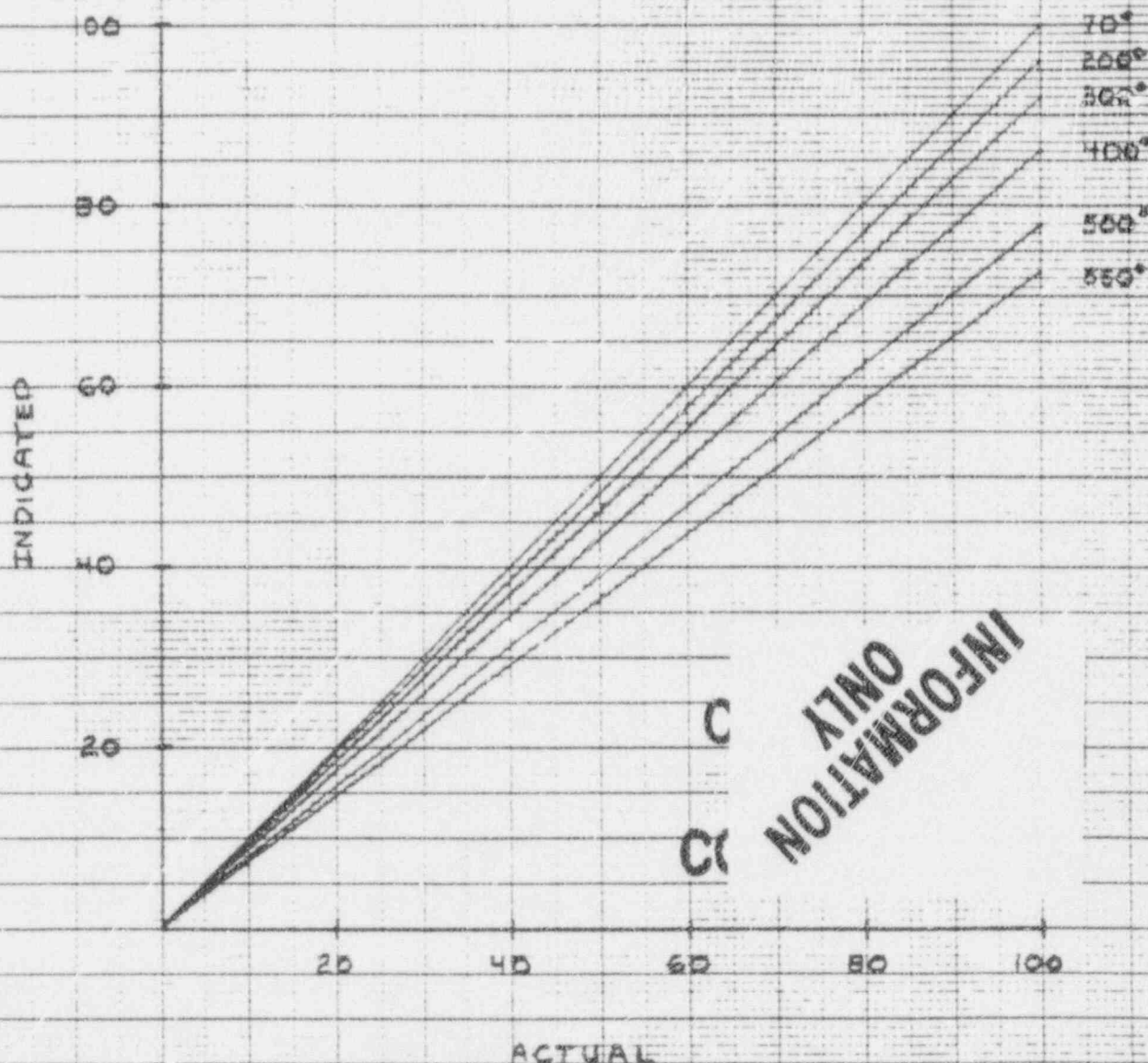
Effective Date

LT-417 D

WT-4270

LY-4370

LT-447D



INFORMATION ONLY

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG LEVEL 3/C   |
| Point ID:  | LT437D   |
| Plant Spec Point Desc.:                          | STEAM GEN 33 W.R. LEVEL  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 3 WATER LEVEL  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-516" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 100.0  |
| Zero Point Reference:                            | TUBSHT   |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | EL 95 CNTMNT   |
| Alarm/Trip Set Points:                           | LO AT 43.0 HI AT 55.0  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: | N  |
| Level Reference Leg:                             | WET  |
| Unique System Desc:                              | INSTRUMENT IS CALIBRATED COLD. SEE<br>ATTACHED GRAPH FOR ACTUAL LEVEL. |

# STEAM GENERATOR

## WIDE RANGE LEVEL

COLD CALIBRATION AT 70°F

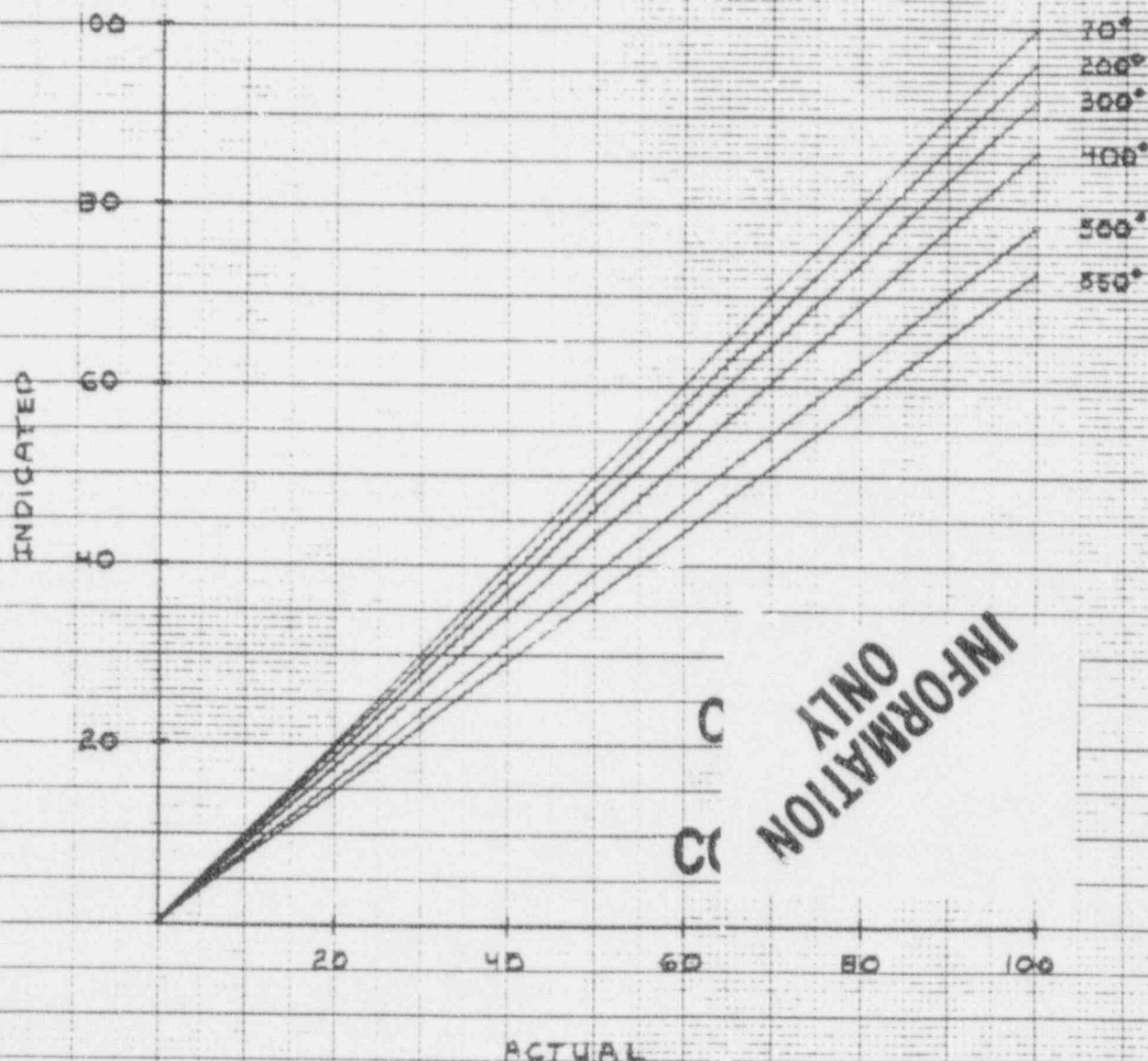
Written by: [Signature]  
 Reviewed by: [Signature]  
 Approved by: [Signature]  
 PORC Review: 4/28/70 - 12/2/70  
 Effective Date: 12/2/70

LT-417D

LT-427D

LT-437D

LT-447D



## DATA POINT LIBRARY REFERENCE FILE

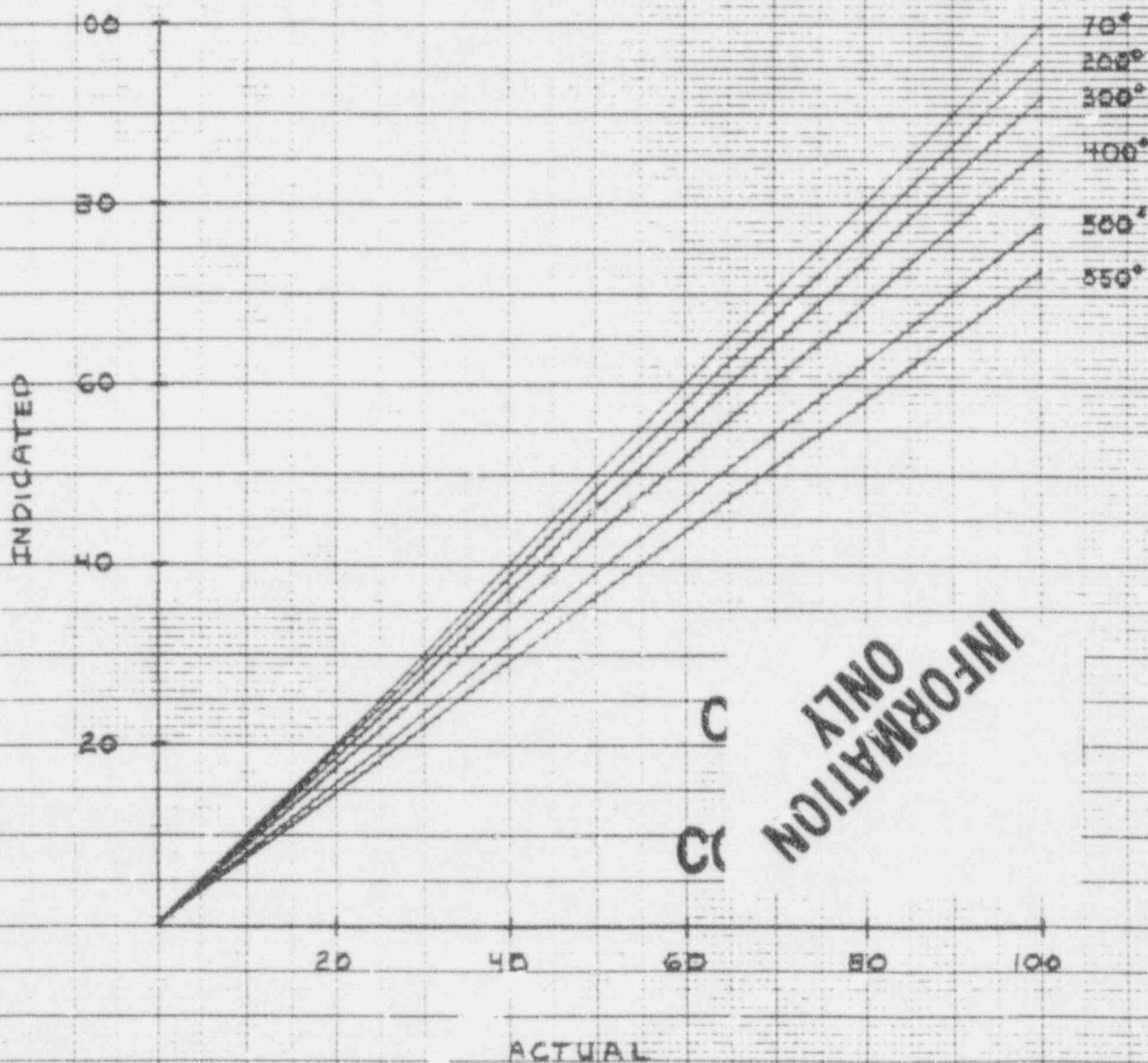
|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC EHDS Parameter:                              | SG LEVEL 4/D   |
| Point ID:  | LT447D   |
| Plant Spec Point Desc.:                          | STEAM GEN 34 W.R. LEVEL  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 4 WATER LEVEL  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PCT  |
| Engr Units Conversion:                           | 0-516" H <sub>2</sub> O  |
| Minimum Range:                                   | 0.0  |
| Maximum Instr Range:                             | 100.0  |
| Zero Point Reference:                            | TUBSHT   |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | EL 95 CNTMNT   |
| Alarm/Trip Set Points:                           | LO AT 43.0 HI AT 55.0  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: | N  |
| Level Reference Leg:                             | WET  |
| Unique System Desc:                              | INSTRUMENT IS CALIBRATED COLD. SEE<br>ATTACHED GRAPH FOR ACTUAL LEVEL. |

# STEAM GENERATOR WIDE RANGE LEVEL

COLD CALIBRATION AT 70°F

Written by: [Signature]  
Reviewed by: [Signature]  
Approved by: [Signature]  
PORC Review 4/24/00 - 12/22/00  
Effective Date 2/2/00

LT-4170  
LT-4270  
LT-4370  
LT-4470



46 1320

K-E  
D. B. 10-10-1984  
RECEIVED & EXAMINED  
MAY 10 1984

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG PRESS 1/A   |
| Point ID:  | KSG31P   |
| Plant Spec Point Desc.:                          | MEDIAN SG 31 PRESSURE  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 1 PRESSURE   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PSIG   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 1400.0   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 31 DISCH HDR   |
| Alarm/Trip Set Points:                           | LO AT 640 HI AT 1380   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 PRESS<br>SIGNALS FOR STM GEN 31 OUTPUT. THE<br>POINT IS FLAGGED UNRELIABLE IF ALL 3<br>SIGNALS ARE NOT GOOD. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG PRESS 2/B   |
| Point ID:  | KSG32P   |
| Plant Spec Point Desc.:                          | MEDIAN SG 32 PRESSURE  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 2 PRESSURE   |
| Analog/Digit:                                    | A  |
| Engr Units/Dig States:                           | PSIG   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 1400.0   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 32 DISCH HDR   |
| Alarm/Trip Set Points:                           | LO AT 640 HI AT 1380   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 PRESS<br>SIGNALS FOR STM GEN 32 OUTPUT. THE<br>POINT IS FLAGGED UNRELIABLE IF ALL 3<br>SIGNALS ARE NOT GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG PRESS 3/C   |
| Point ID:  | KSG33P   |
| Plant Spec Point Desc.:                          | MEDIAN SG 33 PRESSURE  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 3 PRESSURE   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PSIG   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 1400.0   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 33 DISCH HDR   |
| Alarm/Trip Set Points:                           | LO AT 640 HI AT 1380   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 PRESS<br>SIGNALS FOR STM GEN 33 OUTPUT. THE<br>POINT IS FLAGGED UNRELIABLE IF ALL 3<br>SIGNALS ARE NOT GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | SG PRESS 4/D   |
| Point ID:  | KSG34P   |
| Plant Spec Point Desc.:                          | MEDIAN SG 34 PRESSURE  |
| Generic/Cond Desc.:                              | STEAM GENERATOR 4 PRESSURE   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | PSIG   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 1400.0   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | STM GEN 34 DISCH HDR   |
| Alarm/Trip Set Points:                           | LO AT 640 HI AT 1380   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 PRESS<br>SIGNALS FOR STM GEN 34 OUTPUT. THE<br>POINT IS FLAGGED UNRELIABLE IF ALL 3<br>SIGNALS ARE NOT GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | MN FD FL 1/A   |
| Point ID:  | KSG31MF  |
| Plant Spec Point Desc.:                          | MEDIAN MAIN FEED FLOW TO SG31  |
| Generic/Cond Desc.:                              | STM GEN 1 MAIN FEEDWATER FLOW  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | KLB/HR   |
| Engr Units Conversion:                           | 0-300" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0  |
| Maximum Instr Range:                             | 4000   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | UPSTRM OF STM GEN 31 MAIN INLET HDR  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR STM GEN 31 MAIN FEED<br>INLET. TWO OF THE SIGNALS ARE DERIVED<br>FROM DP TRANSMITTERS AND THE THIRD<br>IS ULTRASONIC. THE POINT IS FLAGGED<br>UNRELIABLE IF ALL 3 SIGNALS ARE NOT<br>GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | MN FD FL 2/B   |
| Point ID:  | KSG32MF  |
| Plant Spec Point Desc.:                          | MEDIAN MAIN FEED FLOW TO SG32  |
| Generic/Cond Desc.:                              | STM GEN 2 MAIN FEEDWATER FLOW  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | KLB/HR   |
| Engr Units Conversion:                           | 0-300" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0  |
| Maximum Instr Range:                             | 4000   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | UPSTRM OF STM GEN 32 MAIN INLET HDR  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR STM GEN 32 MAIN FEED<br>INLET. TWO OF THE SIGNALS ARE DERIVED<br>FROM DP TRANSMITTERS AND THE THIRD<br>IS ULTRASONIC. THE POINT IS FLAGGED<br>UNRELIABLE IF ALL 3 SIGNALS ARE NOT<br>GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reacto Unit:                                     | IP3  |
| Date Acquired:                                   | N/A  |
| ARC EADS Parameter:                              | MN FD FL 3/C   |
| Point ID:  | KSG33MF  |
| Plant, Unit, Area, Desc.:                        | MEDIAN MAIN FEED FLOW TO SG33  |
| Generic/Cond Desc.:                              | STM GEN 3 MAIN FEEDWATER FLOW  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | KLB/HR   |
| Engr Units Conversion:                           | 0-300" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0  |
| Maximum Instr Range:                             | 4000   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | UPSTRM OF STM GEN 33 MAIN INLET HDR  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR STM GEN 33 MAIN FEED<br>INLET. TWO OF THE SIGNALS ARE DERIVED<br>FROM DP TRANSMITTERS AND THE THIRD<br>IS ULTRASONIC. THE POINT IS FLAGGED<br>UNRELIABLE IF ALL 3 SIGNALS ARE NOT<br>GOOD. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | MN FD FL 4/D   |
| Point ID:  | KSG34MF  |
| Plant Spec Point Desc.:                          | MEDIAN MAIN FEED FLOW TO SG34  |
| Generic/Cond Desc.:                              | STM GEN 3 MAIN FEEDWATER FLOW  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | KLB/HR   |
| Engr Units Conversion:                           | 0-300" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0  |
| Maximum Instr Range:                             | 4000   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 3  |
| How Processed:                                   | MEDIAN   |
| Sensor Locations:                                | UPSTRM OF STM GEN 34 MAIN INLET HDR  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF 3 FLOW<br>SIGNALS FOR STM GEN 34 MAIN FEED<br>INLET. TWO OF THE SIGNALS ARE DERIVED<br>FROM DP TRANSMITTERS AND THE THIRD<br>IS ULTRASONIC. THE POINT IS FLAGGED<br>UNRELIABLE IF ALL 3 SIGNALS ARE NOT<br>GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | AX FD FL 1/A   |
| Point ID:  | FT1200   |
| Plant Spec Point Desc.:                          | AUX FEED FLOW TO SG31                                    |
| Generic/Cond Desc.:                              | STM GEN 1 AUXILIARY FW FLOW                              |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | GPM  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 450.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | UPSTRM OF STM GEN 31 AUX FEED INLET                      |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES AUX FW FLOW INTO STM GEN 31<br>MAIN FW INLET HDR. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | AX FD FL 2/B   |
| Point ID:  | FT1201   |
| Plant Spec Point Desc.:                          | AUX FEED FLOW TO SG32                                    |
| Generic/Cond Desc.:                              | STM GEN 2 AUXILIARY FW FLOW                              |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | GPM  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 450.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | UPSTRM OF STM GEN 32 AUX FEED INLET                      |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES AUX FW FLOW INTO STM GEN 32<br>MAIN FW INLET HDR. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | AX FD FL 3/C   |
| Point ID:  | FT1202   |
| Plant Spec Point Desc.:                          | AUX FEED FLOW TO SG33                                    |
| Generic/Cond Desc.:                              | STM GEN 3 AUXILIARY FW FLOW                              |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | GPM  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 450.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | UPSTRM OF STM GEN 33 AUX FEED INLET                      |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES AUX FW FLOW INTO STM GEN 33<br>MAIN FW INLET HDR. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | AX FD FL 4/D   |
| Point ID:  | FT1203   |
| Plant Spec Point Desc.:                          | AUX FEED FLOW TO SG34                                    |
| Generic/Cond Desc.:                              | STM GEN 4 AUXILIARY FW FLOW                              |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | GPM  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 450.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | UPSTRM OF STM GEN 34 AUX FEED INLET                      |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES AUX FW FLOW INTO STM GEN 34<br>MAIN FW INLET HDR. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CL TEMP 1/A  |
| Point ID:  | TE413B   |
| Plant Spec Point Desc.:                          | RCL LOOP 1 COLD LEG TEMP                             |
| Generic/Cond Desc.:                              | STM GEN 1 OUTLET TEMPERATURE                         |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 700.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | RCS LOOP 1 COLD LEG                                  |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00                                      |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES RCS LOOP 1 COLD LEG TEMP<br>DWSTRM OF RCP 31. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CL TEMP 2/B  |
| Point ID:  | TE423B   |
| Plant Spec Point Desc.:                          | RCL LOOP 2 COLD LEG TEMP                             |
| Generic/Cond Desc.:                              | STM GEN 2 OUTLET TEMPERATURE                         |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 700.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | RCS LOOP 2 COLD LEG                                  |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00                                      |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES RCS LOOP 2 COLD LEG TEMP<br>DWSTRM OF RCP 32. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CL TEMP 3/C  |
| Point ID:  | TE433B   |
| Plant Spec Point Desc.:                          | RCL LOOP 3 COLD LEG TEMP                             |
| Generic/Cond Desc.:                              | STM GEN 3 OUTLET TEMPERATURE                         |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 700.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | RCS LOOP 3 COLD LEG                                  |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00                                      |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES RCS LOOP 3 COLD LEG TEMP<br>DWSTRM OF RCP 33. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CL TEMP 4/D  |
| Point ID:  | TE443B   |
| Plant Spec Point Desc.:                          | RCL LOOP 4 COLD LEG TEMP                             |
| Generic/Cond Desc.:                              | STM GEN 4 OUTLET TEMPERATURE                         |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 700.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | RCS LOOP 4 COLD LEG                                  |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00                                      |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | SENSES RCS LOOP 4 COLD LEG TEMP<br>DWSTRM OF RCP 34. |

# INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | HL TEMP 1/A   |
| Point ID:  | TE413A  |
| Plant Spec Point Desc.:                          | RCL LOOP 1 HOT LEG TEMP                                 |
| Generic/Cond Desc.:                              | STM GEN 1 INLET TEMPERATURE                             |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | DEGF  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 700.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | RCS LOOP 1 HOT LEG                                      |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES RCS LOOP 1 HOT LEG TEMP<br>UPSTRM OF STM GEN 31. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | HL TEMP 2/B   |
| Point ID:  | TE423A  |
| Plant Spec Point Desc.:                          | RCL LOOP 2 HOT LEG TEMP                                 |
| Generic/Cond Desc.:                              | STM GEN 2 INLET TEMPERATURE                             |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | DEGF  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 700.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | RCS LOOP 2 HOT LEG                                      |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES RCS LOOP 2 HOT LEG TEMP<br>UPSTRM OF STM GEN 32. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | HL TEMP 3/C   |
| Point ID:  | TE433A  |
| Plant Spec Point Desc.:                          | RCL LOOP 3 HOT LEG TEMP                                 |
| Generic/Cond Desc.:                              | STM GEN 3 INLET TEMPERATURE                             |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | DEGF  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 700.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | RCS LOOP 3 HOT LEG                                      |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES RCS LOOP 3 HOT LEG TEMP<br>UPSTRM OF STM GEN 33. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | HL TEMP 4/D   |
| Point ID:  | TE443A  |
| Plant Spec Point Desc.:                          | RCL LOOP 4 HOT LEG TEMP                                 |
| Generic/Cond Desc.:                              | STM GEN 4 INLET TEMPERATURE                             |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | DEGF  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 700.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | RCS LOOP 4 HOT LEG                                      |
| Alarm/Trip Set Points:                           | HI/HI AT 700.00   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES RCS LOOP 4 HOT LEG TEMP<br>UPSTRM OF STM GEN 34. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | RCS PRESSURE  |
| Point ID:  | PT403   |
| Plant Spec Point Desc.:                          | RCS PRESSURE LOOP 4   |
| Generic/Cond Desc.:                              | REACTOR COOLANT SYSTEM PRESSURE                             |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PSIG  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 3000.0  |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | RCS LOOP 4 HOT LEG  |
| Alarm/Trip Set Points:                           | HI AT 2290 HI/HI AT 2320                                    |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES RCS LOOP 4 HOT LEG PRESSURE<br>UPSTRM OF STM GEN 34. |

## INDIAN POINT UNIT #3

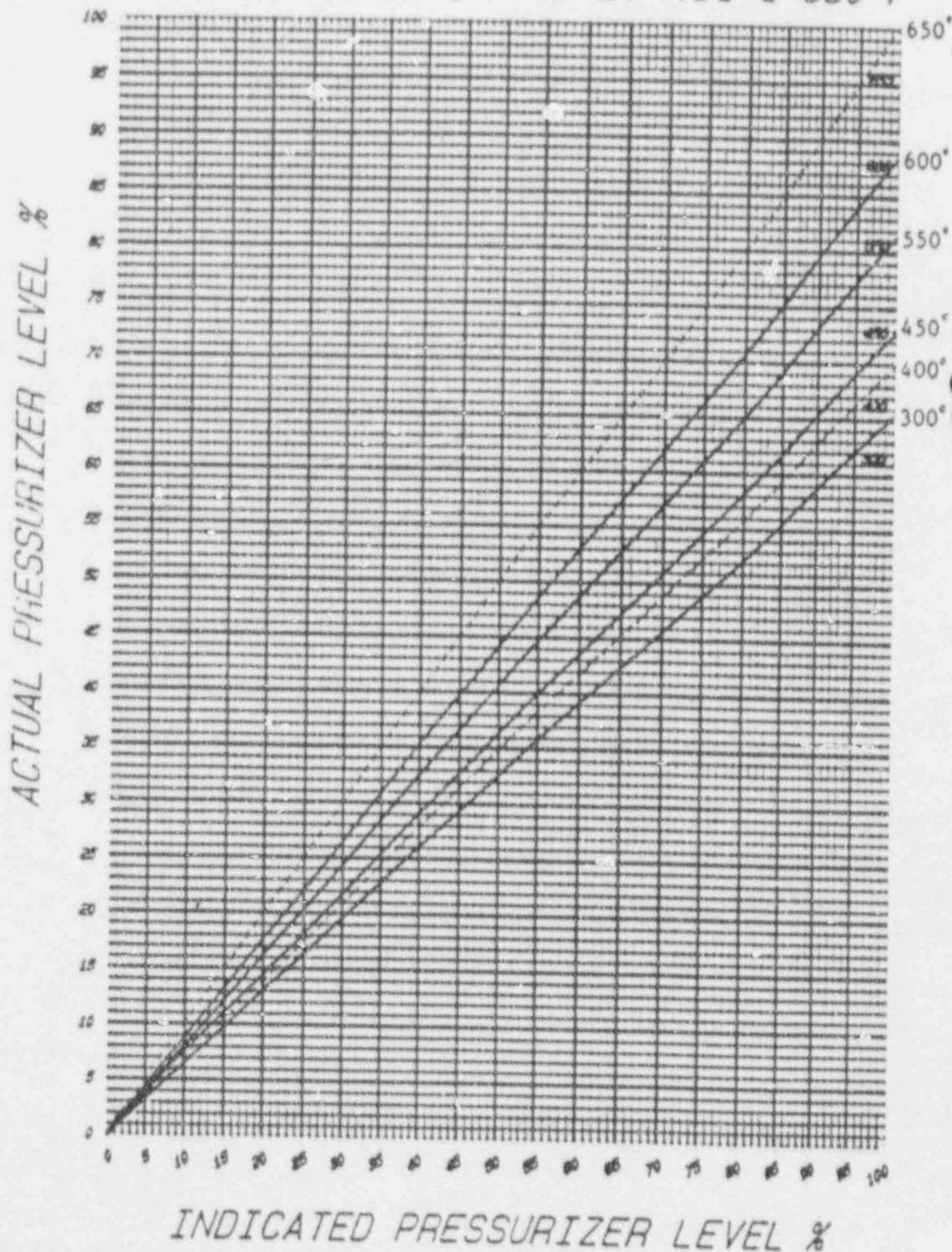
## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | RCS PRESSURE  |
| Point ID:  | PT402   |
| Plant Spec Point Desc.:                          | RCS PRESSURE LOOP 1   |
| Generic/Cond Desc.:                              | REACTOR COOLANT SYSTEM PRESSURE                             |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PSIG  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 3000.0  |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | RCS LOOP 1 HOT LEG  |
| Alarm/Trip Set Points:                           | HI AT 2290 HI/HI AT 2320                                    |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES RCS LOOP 1 HOT LEG PRESSURE<br>UPSTRM OF STM GEN 31. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | PRZR LEVEL  |
| Point ID:  | KAVGPZRL  |
| Plant Spec Point Desc.:                          | MEDIAN PRZR LEVEL   |
| Generic/Cond Desc.:                              | PRIMARY SYSTEM PRZR LEVEL   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | 58.1 - 321.8" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 100.0   |
| Zero Point Reference:                            | TNKBOT  |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 3   |
| How Processed:                                   | MEDIAN  |
| Sensor Locations:                                | EL68 CNTMNT   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: | N   |
| Level Reference Leg:                             | WET   |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF THREE W.R<br>LEVEL SIGNALS (CALIBRATED FOR 650°F -<br>SEE ATTACHED GRAPH). THE POINT IS<br>FLAGGED UNRELIABLE IF ALL THREE<br>SIGNALS ARE NOT GOOD. |

GRAPH RCS-3A (REV. 1)  
DENSITY COMPENSATION FOR HOT CALIBRATED  
LT-459, LT-460, AND LT-461 @ 650°F



ATNOCOR  
INFORMATION  
COP

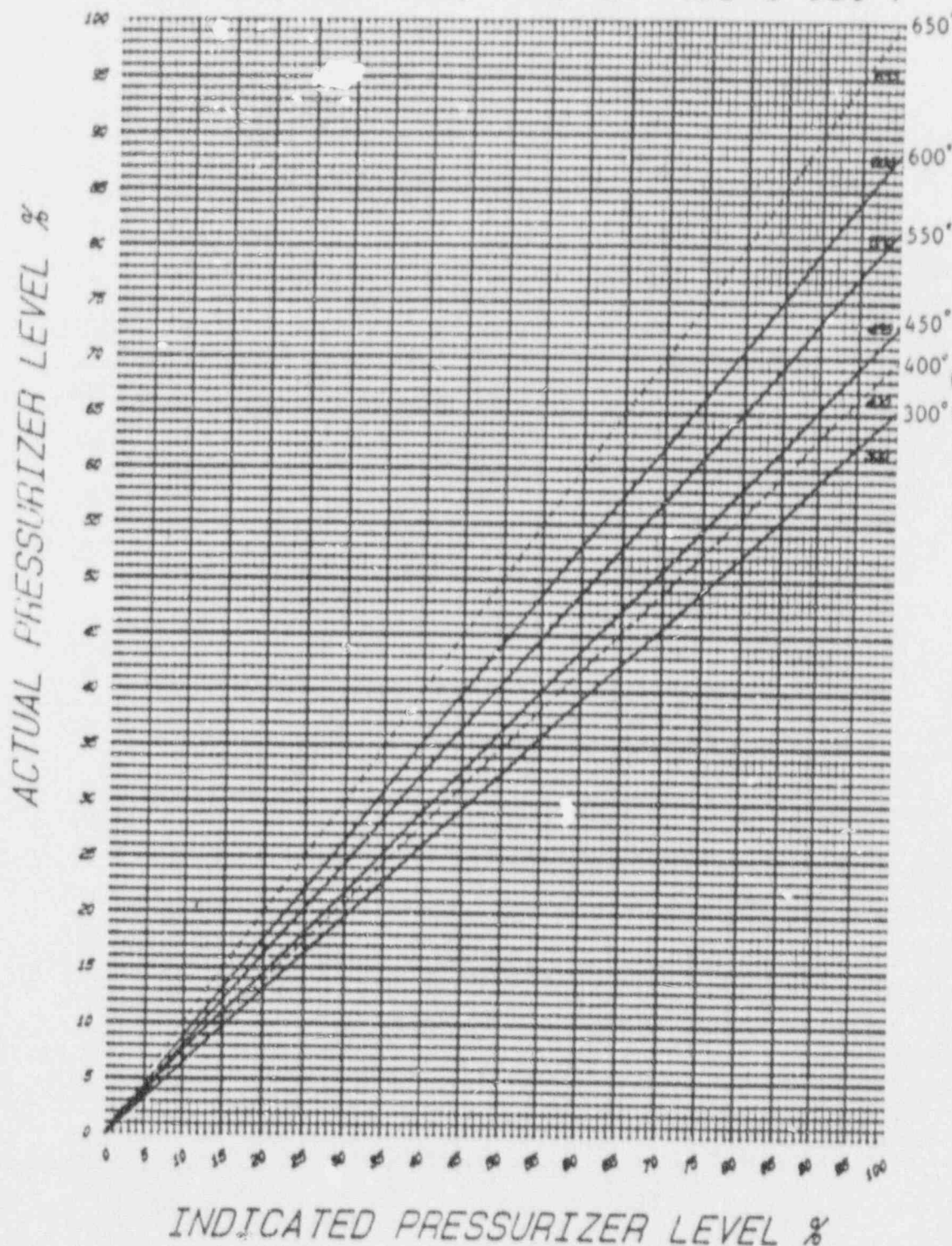
NOTE: ALL TEMPERATURES REFER  
TO PRESSURIZER TEMPERATURE  
IN DEGREES FAHRENHEIT

Written By: *John J. Jones / J. Flatz*  
Reviewed By: *Guay*  
PORC Review *MI* Date *7/20/87*  
Approved By: *MI* Date *7/20/87*  
Effective Date: *7/20/87*

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | PRZR LEVEL  |
| Point ID:  | KAVGPZL2  |
| Plant Spec Point Desc.:                          | MEDIAN PRZR LEVEL   |
| Generic/Cond Desc.:                              | PRIMARY SYSTEM PRZR LEVEL   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | 58.1 - 321.8" H <sub>2</sub> O  |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 100.0   |
| Zero Point Reference:                            | TNKBOT  |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 3   |
| How Processed:                                   | MEDIAN  |
| Sensor Locations:                                | EL 68 CNTMNT  |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: | N   |
| Level Reference Leg:                             | WET   |
| Unique System Desc:                              | THIS POINT IS THE MEDIAN OF THREE W.R<br>LEVEL SIGNALS (CALIBRATED FOR 650°F -<br>SEE ATTACHED GRAPH). THE POINT IS<br>FLAGGED UNRELIABLE IF ALL THREE<br>SIGNALS ARE NOT GOOD. |

# GRAPH RCS-3A (REV. 1) DENSITY COMPENSATION FOR HOT CALIBRATED LT-459, LT-460, AND LT-461 @ 650°F



NOTE: ALL TEMPERATURES REFER  
 TO PRESSURIZER TEMPERATURE  
 IN DEGREES FAHRENHEIT

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 NOCONLY

Written By: John Johnson / J. A. Galt  
 Reviewed By: George S. Galt  
 PORC Review M. Galt Date 11/20/89  
 Approved By: John Johnson Date 11/20/89  
 Effective Date 11/20/89

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NEED ERDS Parameter:                             | RCS CHG/MU                                      |
| Point ID:  | FT128   |
| Plant Spec Point Desc.:                          | CHARGING PUMP DISCHARGE FLOW                    |
| Generic/Cond Desc.:                              | PRIM SYS CHARGING OR MAKEUP FLOW                |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | GPM   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.0   |
| Maximum Instr Range:                             | 125.0   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | N/A   |
| Sensor Locations:                                | CHARGING LINE UPSTRM OF REGEN HX                |
| Alarm/Trip Set Points:                           | HI/HI AT 125.0                                  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | SENSES TOTAL CHARGING FLOW TO<br>REGENERATE HX. |

INDIAN POINT UNIT #3  
DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NOT LISTED   |
| Point ID:  | KSIF   |
| Plant Spec Point Desc.:                          | TOTAL NON-BIT SAFETY INJECTION FLOW  |
| Generic/Cond Desc.:                              | TOTAL SI FLOW  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | GPM  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 1200   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 4  |
| How Processed:                                   | SUM  |
| Sensor Locations:                                | UPSTRM OF INJ POINT TO COLD LEG 1 THRU 4   |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>for DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE SUM OF 4 NON-BIT SI FLOW<br>SIGNALS. ONE SIGNAL FOR EACH COLD LEG<br>INJECTION LINE. THE SIGNAL IS FLAGGED<br>UNRELIABLE IF MORE THAN TWO SIGNALS ARE<br>NOT GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NOT LISTED   |
| Point ID:  | KBSIF  |
| Plant Spec Point Desc.:                          | TOTAL BIT SAFETY INJECTION FLOW  |
| Generic/Cond Desc.:                              | TOTAL SI FLOW  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | GPM  |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 1200   |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 4  |
| How Processed:                                   | SUM  |
| Sensor Locations:                                | UPSTRM OF INJ POINT TO COLD LEG 1 THRU 4   |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS THE SUM OF 4 BORONATED SI<br>FLOW SIGNALS FOR EACH COLD LEG<br>INJECTION LINE. THE SIGNAL IS FLAGGED<br>UNRELIABLE IF MORE THAN TWO SIGNALS ARE<br>NOT GOOD. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | NOT LISTED  |
| Point ID:  | KRHRF   |
| Plant Spec Point Desc.:                          | TOTAL RHR FLOW  |
| Generic/Cond Desc.:                              | TOTAL RHR FLOW  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | GPM   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0   |
| Maximum Instr Range:                             | 4000  |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 4   |
| How Processed:                                   | SUM   |
| Sensor Locations:                                | RHR REC TO COLD LEG 1 THRU 4  |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS POINT IS THE SUM OF 4 RHR FLOW<br>SIGNALS. ONE SIGNAL FOR EACH COLD LEG<br>REC:RC LINE THE SIGNAL IS FLAGGED<br>UNRELIABLE IF MORE THAN TWO SIGNALS ARE<br>NOT GOOD. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |                   |
|--|-------------------|
| Date:  | 11/12/92          |
| Reactor Unit:                                    | IP3               |
| Data Feeder:                                     | N/A               |
| NRC ERDS Parameter:                              | NOT LISTED        |
| Point ID:  | LT1253            |
| Plant Spec Point Desc.:                          | CONTAINMENT LEVEL |
| Generic/Cond Desc.:                              | CONTAINMENT LEVEL |
| Analog/Digital:                                  | A                 |
| Engr Units/Dig States:                           | FT                |
| Engr Units Conversion:                           | N/A               |
| Minimum Instr Range:                             | 46.00             |
| Maximum Instr Range:                             | 54.00             |
| Zero Point Reference:                            | CNTFLR            |
| Reference Point Notes:                           | N/A               |
| PROC or SENS:                                    | S                 |
| Number of Sensors:                               | N/A               |
| How Processed:                                   | N/A               |
| Sensor Locations:                                | CNTMNT EL 46      |
| Alarm/Trip Set Points:                           | NONE              |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A               |
| NI Detector Power Supply<br>Turn on Power Level: | N/A               |
| Instrument Failure Mode:                         | N/A               |
| Temperature Compensation<br>For DP Transmitters: |                   |
| Level Reference Leg:                             | DRY               |
| Unique System Desc:                              | N/A               |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |                   |
|--|-------------------|
| Date:  | 11/12/92          |
| Reactor Unit:                                    | IP3               |
| Data Feeder:                                     | N/A               |
| NRC ERDS Parameter:                              | NUT LISTED        |
| Point ID:  | LT1254            |
| Plant Spec Point Desc.:                          | CONTAINMENT LEVEL |
| Generic/Cond Desc.:                              | CONTAINMENT LEVEL |
| Analog/Digital:                                  | A                 |
| Engr Units/Dig States:                           | FT                |
| Engr Units Conversion:                           | N/A               |
| Minimum Instr Range:                             | 46.00             |
| Maximum Instr Range:                             | 54.00             |
| Zero Point Reference:                            | CNTFLR            |
| Reference Point Notes:                           | N/A               |
| PROC or SENS:                                    | S                 |
| Number of Sensors:                               | N/A               |
| How Processed:                                   | N/A               |
| Sensor Locations:                                | CNTMNT EL 46      |
| Alarm/Trip Set Points:                           | NONE              |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A               |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A               |
| Instrument Failure Mode:                         | N/A               |
| Temperature Compensation<br>For DP Transmitters: |                   |
| Level Reference Leg:                             | DRY               |
| Unique System Desc:                              | N/A               |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |                           |
|--|---------------------------|
| Date:  | 11/12/92                  |
| Reactor Unit:                                    | IP3                       |
| Data Feeder:                                     | N/A                       |
| NRC ERDS Parameter:                              | CTMNT SMP W/R             |
| Point ID:  | LT1255                    |
| Plant Spec Point Desc.:                          | CONTAINMENT SUMP LEVEL    |
| Generic/Cond Desc.:                              | CONTAINMENT SUMP WR LEVEL |
| Analog/Digital:                                  | A                         |
| Engr Units/Dig States:                           | FT                        |
| Engr Units Conversion:                           | N/A                       |
| Minimum Instr Range:                             | 38.25                     |
| Maximum Instr Range:                             | 48.25                     |
| Zero Point Reference:                            | TNKBOT                    |
| Reference Point Notes:                           | N/A                       |
| PROC or SENS:                                    | S                         |
| Number of Sensors:                               | N/A                       |
| How Processed:                                   | N/A                       |
| Sensor Locations:                                | BC BOTTOM OF CNTMNT SUMP  |
| Alarm/Trip Set Points:                           | NONE                      |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A                       |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A                       |
| Instrument Failure Mode:                         | N/A                       |
| Temperature Compensation<br>For DP Transmitters: |                           |
| Level Reference Leg:                             | DRY                       |
| Unique System Desc:                              | N/A                       |

## DATA POINT LIBRARY REFERENCE FILE

|  |                           |
|--|---------------------------|
| Date:  | 11/12/92                  |
| Reactor Unit:                                    | IP3                       |
| Data Feeder:                                     | N/A                       |
| NRC ERDS Parameter:                              | CTMNT SMP WR              |
| Point ID:  | LT1256                    |
| Plant Spec Point Desc.:                          | CONTAINMENT SUMP LEVEL    |
| Generic/Cond Desc.:                              | CONTAINMENT SUMP WR LEVEL |
| Analog/Digital:                                  | A                         |
| Engr Units/Dig States:                           | FT                        |
| Engr Units Conversion:                           | N/A                       |
| Minimum Instr Range:                             | 38.25                     |
| Maximum Instr Range:                             | 48.25                     |
| Zero Point Reference:                            | TNKBOT                    |
| Reference Point Notes:                           | N/A                       |
| PROC or SENS:                                    | S                         |
| Number of Sensors:                               | N/A                       |
| How Processed:                                   | N/A                       |
| Sensor Locations:                                | BOTTOM OF CNTMNT SUMP     |
| Alarm/Trip Set Points:                           | NONE                      |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A                       |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A                       |
| Instrument Failure Mode:                         | N/A                       |
| Temperature Compensation<br>For DP Transmitters: |                           |
| Level Reference Leg:                             | DRY                       |
| Unique System Desc:                              | N/A                       |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | EFF GAS RAD   |
| Point ID:  | R27   |
| Plant Spec Point Desc.:                          | PLANT VENT RADIATION  |
| Generic/Cond Desc.:                              | RADIOACTIVITY OF RELEASED GASSES  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | UCI/S   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 10.0E+00  |
| Maximum Instr Range:                             | 10.0E+12  |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | P   |
| Number of Sensors:                               | 4   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | 80' PURGE VALVE   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITORING SYSTEM USES OUTPUTS<br>FROM A SCINTILLATION/PM TUBE, SOLID<br>STATE SENSORS AND FLOW/ TRANSMITTERS<br>TO PROVIDE THE RADIATION RELEASE RATE OF<br>THE PLANT VENT. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | EFF LIQ RAD  |
| Point ID:  | R18  |
| Plant Spec Point Desc.:                          | LIQUID WASTE DISPOSAL RADIATION  |
| Generic/Cond Desc.:                              | RADIOACTIVITY OF RELEASED LIQ  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | UCI/CC   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 1.000E - 07  |
| Maximum Instr Range:                             | 1.000E - 01  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC   |
| Sensor Locations:                                | 34' PAB WASTE CONDENSATE   |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS MONITOR USES A CRYSTAL<br>SCINTILLATION/PM TUBE THAT PRODUCES AN<br>OUTPUT PROPORTIONAL TO THE LEVEL OF<br>GAMMA RADIATION IN THE WASTE DISPOSAL<br>SYSTEM LIQUID RELEASES. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | COND A/E RAD   |
| Point ID:  | R15  |
| Plant Spec Point Desc.:                          | STEAM AIR EJECTOR RADIATION  |
| Generic/Cond Desc.:                              | COND AIR EJECTOR RADIOACTIVITY   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | UCI/CC   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 1.000E-06  |
| Maximum Instr Range:                             | 1.000E-00  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC.  |
| Sensor Locations:                                | 55' TURB A/E EXH   |
| Alarm/Trip Set Points:                           | HI/HI AT 0.400   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         |  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS MONITOR USES A SCINTILLATION/PM<br>TUBE THAT PRODUCES AN OUTPUT<br>PORPORTIONAL TO THE LEVEL OF GAMMA<br>RADIATION IN THE DISCHARGE OF THE AIR<br>EJECTOR EXHAUST HEADER. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | CNTMNT RAD  |
| Point ID:  | R25   |
| Plant Spec Point Desc.:                          | CNTMNT HIGH RAD MONITOR 1   |
| Generic/Cond Desc.:                              | RADIATION LEVEL IN CNTMNT   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | R/HR  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 1.000E+00   |
| Maximum Instr Range:                             | 1.000E+08   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | 95' CNTMNT WEST   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A GAMMA IONIZATION<br>CHAMBER THAT PRODUCES AN OUTPUT<br>PROPORTIONAL TO THE RADIATION LEVEL IN<br>THE CONTAINMENT. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | CNTMNT RAD  |
| Point ID:  | R26   |
| Plant Spec Point Desc.:                          | CNTMNT HIGH RAD MONITOR 2   |
| Generic/Cond Desc.:                              | RADIATION LEVEL IN CNTMNT   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | R/HR  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 1.000E + 00   |
| Maximum Instr Range:                             | 1.000E + 08   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | 95' CNTMNT EAST   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A GAMMA IONIZATION<br>CHAMBER THAT PRODUCES AN OUTPUT<br>PROPORTIONAL TO THE RADIATION LEVEL IN<br>THE CONTAINMENT. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERCS Parameter:                              | NOT LISTED  |
| Point ID:  | R04   |
| Plant Spec Point Desc.:                          | CHARGING PUMP ROOM RAD  |
| Generic/Cond Desc.:                              | CHARGING PUMP ROOM RAD  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | MR/HR   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.100E+00   |
| Maximum Instr Range:                             | 10.000E+03  |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | ACCESS TO CHG PUMP ROOMS  |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A G-M TUBE THAT<br>PRODUCES AN OUTPUT PROPORTIONAL TO<br>THE EQUIVALENT GAMMA RADIATION DOSE<br>RATE AT THE ACCESS TO THE CHARGING<br>PUMP ROOMS. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | MAIN SL 1/A   |
| Point ID:  | R62A  |
| Plant Spec Point Desc.:                          | STEAM LINE 31 RADIATION   |
| Generic/Cond Desc.:                              | STM GEN 1 STEAM LINE RAD LEVEL  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | UCI/CC  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 1.000E - 04   |
| Maximum Instr Range:                             | 1.000E + 01   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | AUX BOILER FD BLDG STEAM BRIDGE   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A G-M TUBE THAT<br>PRODUCES AN OUTPUT PROPORTIONAL TO<br>THE EQUIVALENT GAMMA RADIATION DOSE<br>RATE ADJACENT TO STEAM LINE 31. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | MAIN SL 2/B   |
| Point ID:  | R62B  |
| Plant Spec Point Desc.:                          | STEAM LINE 32 RADIATION   |
| Generic/Cond Desc.:                              | STM GEN 2 STEAM LINE RAD LEVEL  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | UCI/CC  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 1.000E - 04   |
| Maximum Instr Range:                             | 1.000E + 01   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | AUX BOILER FD BLDG STEAM BRIDGE   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A G-M TUBE THAT<br>PRODUCES AN OUTPUT PROPORTIONAL TO<br>THE EQUIVALENT GAMMA RADIATION DOSE<br>RATE ADJACENT TO STEAM LINE 32. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | MAIN SL 3/C   |
| Point ID:  | R62C  |
| Plant Spec Point Desc.:                          | STEAM LINE 33 RADIATION   |
| Generic/Cond Desc.:                              | STM GEN 3 STEAM LINE RAD LEVEL  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | UCI/CC  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 1.000E - 04   |
| Maximum Instr Range:                             | 1.000E + 01   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | AUX BOILER FD BLDG STEAM BRIDGE   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A G-M TUBE THAT<br>PRODUCES AN OUTPUT PROPORTIONAL TO<br>THE EQUIVALENT GAMMA RADIATION DOSE<br>RATE ADJACENT TO STEAM LINE 33. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | MAIN SL 4/D   |
| Point ID:  | R62D  |
| Plant Spec Point Desc.:                          | STEAM LINE 34 RADIATION   |
| Generic/Cond Desc.:                              | STM GEN 4 STEAM LINE RAD LEVEL  |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | UCI/CC  |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 1.000E - 04   |
| Maximum Instr Range:                             | 1.000E + 01   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | AUX BOILER FD BLDG STEAM BRIDGE   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | THIS MONITOR USES A G-M TUBE THAT<br>PRODUCES AN OUTPUT PROPORTIONAL TO<br>THE EQUIVALENT GAMMA RADIATION DOSE<br>RATE ADJACENT TO STEAM LINE 34. |

INDIAN POINT UNIT #3

DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | NOT LISTED   |
| Point ID:  | R19  |
| Plant Spec Point Desc.:                          | STM GEN BLOWDOWN RADIATION   |
| Generic/Cond Desc.:                              | STM GEN BLOWDOWN RADIATION   |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | UCI/CC   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 1.000E - 06  |
| Maximum Instr Range:                             | 1.000E + 02  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | SEE SYS DESC.  |
| Sensor Locations:                                | PAB PIPE CHASE TO MINI CNTMNT  |
| Alarm/Trip Set Points:                           | HI/HI AT 14.000  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS MONITOR USES A CRYSTAL<br>SCINTILLATION/PM TUBE THAT PRODUCES AN<br>OUTPUT PROPORTIONAL TO THE LEVEL OF<br>GAMMA RADIATION IN A STEAM GENERATOR<br>BLOWDOWN SAMPLE. |

## INDIAN POINT UNIT #3

## DATA POINT LIBRARY REFERENCE FILE

|  |                        |
|--|------------------------|
| Date:  | 11/12/92               |
| Reactor Unit:                                    | IP3                    |
| Data Feeder:                                     | N/A                    |
| NRC ERDS Parameter:                              | CTMNT PRESS            |
| Point ID:  | PT1421                 |
| Plant Spec Point Desc.:                          | CONTAINMENT HIGH PRESS |
| Generic/Cond Desc.:                              | CONTAINMENT PRESSURE   |
| Analog/Digital:                                  | A                      |
| Engr Units/Dig States:                           | PSIG                   |
| Engr Units Conversion:                           | N/A                    |
| Minimum Instr Range:                             | -5.0                   |
| Maximum Instr Range:                             | 200.0                  |
| Zero Point Reference:                            | N/A                    |
| Reference Point Notes:                           | N/A                    |
| PROC or SENS:                                    | S                      |
| Number of Sensors:                               | N/A                    |
| How Processed:                                   | N/A                    |
| Sensor Locations:                                | PAB EL 49              |
| Alarm/Trip Set Points:                           | NONE                   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A                    |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A                    |
| Instrument Failure Mode:                         | N/A                    |
| Temperature Compensation<br>For DP Transmitters: |                        |
| Level Reference Leg:                             | N/A                    |
| Unique System Desc:                              | N/A                    |

## DATA POINT LIBRARY REFERENCE FILE

|  |                        |
|--|------------------------|
| Date:  | 11/12/92               |
| Reactor Unit:                                    | IP3                    |
| Data Feeder:                                     | N/A                    |
| NRC ERDS Parameter:                              | CTMNT PRESS            |
| Point ID:  | PT1422                 |
| Plant Spec Point Desc :                          | CONTAINMENT HIGH PRESS |
| Generic/Cond Desc.:                              | CONTAINMENT PRESSURE   |
| Analog/Digital:                                  | A                      |
| Engr Units/Dig States:                           | PSIG                   |
| Engr Units Conversion:                           | N/A                    |
| Minimum Instr Range:                             | -5.0                   |
| Maximum Instr Range:                             | 200.0                  |
| Zero Point Reference:                            | N/A                    |
| Reference Point Notes:                           | N/A                    |
| PROC or SENS:                                    | S                      |
| Number of Sensors:                               | N/A                    |
| How Processed:                                   | N/A                    |
| Sensor Locations:                                | PAB EL 49              |
| Alarm/Trip Set Points:                           | NONE                   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A                    |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A                    |
| Instrument Failure Mode:                         | N/A                    |
| Temperature Compensation<br>For DP Transmitters: |                        |
| Level Reference Leg:                             | N/A                    |
| Unique System Desc:                              | N/A                    |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | CTMNT TEMP   |
| Point ID:  | TC1416   |
| Plant Spec Point Desc.:                          | CONTAINMENT AVERAGE TEMP   |
| Generic/Cond Desc.:                              | CONTAINMENT TEMPERATURE  |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | DEGF   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 40.0   |
| Maximum Instr Range:                             | 400.0  |
| Zero Point Reference:                            | N/A  |
| Reference Point Notes:                           | N/A  |
| PROC or SENS:                                    | P  |
| Number of Sensors:                               | 5  |
| How Processed:                                   | AVERAGE  |
| Sensor Locations:                                | CTMNT CRANE WALL ABOVE INLET TO FCU  |
| Alarm/Trip Set Points:                           | NONE   |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | THIS POINT IS A SINGLE SIGNAL INPUT TO THE<br>COMPUTER WHICH REPRESENTS THE AVERAGE<br>OF 5 RTD SIGNALS. |

# DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | H <sub>2</sub> CONC   |
| Point ID:  | HCMCA   |
| Plant Spec Point Desc.:                          | CONTAINMENT H <sub>2</sub> CONCENTRATION  |
| Generic/Cond Desc.:                              | CONTAINMENT HYDROGEN CONC   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.00  |
| Maximum Instr Range:                             | 10.00   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | EL 41 PIPE PENET AREA PAB   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | ANALYZER USES A DIFFUSION LIMITED<br>ELECTROCHEMICAL CELL TO MEASURE<br>GASEOUS HYDROGEN IN SAMPLE FROM<br>CNTNMNT RECIRC FAN UNITS PLENUM<br>CHAMBERS. |

## DATA POINT LIBRARY REFERENCE FILE

|  |   |
|--|---|
| Date:  | 11/12/92  |
| Reactor Unit:                                    | IP3   |
| Data Feeder:                                     | N/A   |
| NRC ERDS Parameter:                              | H <sub>2</sub> CONC   |
| Point ID:  | HCMCB   |
| Plant Spec Point Desc.:                          | CONTAINMENT H <sub>2</sub> CONCENTRATION  |
| Generic/Cond Desc.:                              | CONTAINMENT HYDROGEN CONC   |
| Analog/Digital:                                  | A   |
| Engr Units/Dig States:                           | PCT   |
| Engr Units Conversion:                           | N/A   |
| Minimum Instr Range:                             | 0.00  |
| Maximum Instr Range:                             | 10.00   |
| Zero Point Reference:                            | N/A   |
| Reference Point Notes:                           | N/A   |
| PROC or SENS:                                    | S   |
| Number of Sensors:                               | N/A   |
| How Processed:                                   | SEE SYS DESC.   |
| Sensor Locations:                                | EL 41 PIPE PENET AREA PA3   |
| Alarm/Trip Set Points:                           | NONE  |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A   |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A   |
| Instrument Failure Mode:                         | N/A   |
| Temperature Compensation<br>For DP Transmitters: |   |
| Level Reference Leg:                             | N/A   |
| Unique System Desc:                              | ANALYZER USES A DIFFUSION LIMITED<br>ELECTROCHEMICAL CELL TO MEASURE<br>GASEOUS HYDROGEN. |

## DATA POINT LIBRARY REFERENCE FILE

|  |  |
|--|--|
| Date:  | 11/12/92   |
| Reactor Unit:                                    | IP3  |
| Data Feeder:                                     | N/A  |
| NRC ERDS Parameter:                              | BWST LEVEL                                       |
| Point ID:  | LT920  |
| Plant Spec Point Desc.:                          | RWST LEVEL                                       |
| Generic/Cond Desc.:                              | BORATED WATER STORAGE TANK LEVEL                 |
| Analog/Digital:                                  | A  |
| Engr Units/Dig States:                           | FT   |
| Engr Units Conversion:                           | N/A  |
| Minimum Instr Range:                             | 0.0  |
| Maximum Instr Range:                             | 40.0   |
| Zero Point Reference:                            | TNKBOT   |
| Reference Point Notes:                           | 13902 GAL REMAIN AT ZERO POINT                   |
| PROC or SENS:                                    | S  |
| Number of Sensors:                               | N/A  |
| How Processed:                                   | N/A  |
| Sensor Locations:                                | RWST   |
| Alarm/Trip Set Points:                           | LO AT 13.0                                       |
| NI Detector Power Supply<br>Cut-off Power Level: | N/A  |
| NI Detector Power Supply<br>Turn-on Power Level: | N/A  |
| Instrument Failure Mode:                         | N/A  |
| Temperature Compensation<br>For DP Transmitters: |  |
| Level Reference Leg:                             | N/A  |
| Unique System Desc:                              | INSTRUMENT IS A DIRECT READING PRESSURE<br>XMTR. |